

AMITY BUSINESS REVIEW

Vol. 23, No. 2, July-December 2022

Bi-Annual, Double-Blind, Peer-Reviewed & Refereed Journal of

Amity Business School

ISSN: 0972-2343

ASI-SCORE: 1.3

Indian Citation Index

Chief Patron	:	Dr. Ashok K Chauhan
Patron	:	Dr. Atul Chauhan
Desk Advisor	:	Dr. Balvinder Shukla
Editor-in-Chief	:	Dr. Sanjeev Bansal
Editor	:	Dr. Amit Kumar Pandey

Board of Editors

DR. ABDUL AZIZ ANSARI

Jamia Millia Islamia, New Delhi

DR. J.K. SHARMA

Board of Editors

PROF. GARIMA GUPTA

University of Delhi

DR. S.K. LAROIYA

Formerly University of Delhi

DR. SANDEEP KUMAR GARG

University of Delhi

PROF. MAHESH SHARMA

SBSC, University of Delhi

DR. DHARMENDRA

Guru Jhambeshwar University, Hisar

PROF. AWADHESH KUMAR TIWARI

Dean, Commerce and Management, Deen Dayal Upadhyaya Gorakhpur University, U.P

DR. TRIVENI SINGH

SP Cyber Crime, Uttar Pradesh Police

PROF. S.K. GARG

Pro Vice Chancellor, Delhi Technical University

PROF. DR AJAY KUMAR SINGH

Vice Chancellor, Sri Sri University, Cuttack
Delhi School of Economics, Delhi University

DR. SANJAY SAPROO

CEO, Respiratory Inc. USA

DR. DILIP KUMAR BANDHOPADHYAY

Former Vice Chancellor, GGSIP

PROF. DR SUDHIR KUMAR SHUKLA

HOD Commerce, Mahatma Gandhi Kashi Vidyapith, Varanasi

DR. N.K. AHUJA

Vice Chancellor, Subharti University, Meerut

PROF. JAVED AKHTAR

Aligarh Muslim University, Aligarh

PROF. T.K. CHATTERJEE

IMT Nagpur

PROF. A.H. ANSARI

Director CMS, Jamia Milia Islamia

PROF. JAGDEESH

Dean Management, Amity University, Mumbai

Doc. Dring. ELENA HORSKA

Slovak University of Agriculture, NITRA, Slovak Republic

MR. SANTOSH K SRIVASTAVA

INDOIL, MONTNEY Ltd. Calgary, Canada

DR. T. K. SINGHAL

Symbiosis International University, Pune

Message from Editor in Chief

Research is important to us and for society, because it facilitates learning, increases the researcher's awareness, provides a platform to corporates, and helps to exercise the researcher's mind. A person could have an ocean of knowledge it does not mean that he/she is a good researcher. Research needs passion and a passionate person can contribute research for the benefit of society. To have a great understanding of Invention, innovation, and then further to research is a requirement of the 21st century.

ABR aims to provide the most reliable platform for current development in the field of Management, Commerce, and economics and facilitate the peer-to-peer exchange of thought, ideas, and intellectual sources. All manuscripts have gone through a rigorous and rapid peer-review process, which interprets benefits such as publication extensive propagation, high visibility, quality citations, and high impacts.

Dr. Sanjeev Bansal
Editor-in-Chief

Message from Editor

Research and innovation is the requirement of any country across the world. The aim of any research work is to provide support to future researchers and contribute to society. Authors are seeking to publish their research papers in a suitable journal of repute. Amity Business Review always motivates researchers to contribute their intellectual work for the benefit of the research fraternity. Our aim is to reduce the turnaround time of the publication and enhance the quality of the research papers. Based on the reputation of the journal, we are receiving tremendous responses from the authors. Therefore, it is requested to the authors, read the aim and scope of the journal before sending the research papers. Our main objective will be to strengthen the boundaries of the journal, strengthen the reviewer database, and motivate potential authors to contribute to the journal. In parallel, we all should join hands in preventing plagiarism, duplicate articles, and unreliable research.

We welcome you again to the platform of ABR.

Dr. Amit Kumar Pandey
Editor

Table of Content

1.	A Bibliometric Analysis of Research Related to HRM In Fourth Industrial Revolution Reported Over the Period 2014 to 2021 - Deepa & Rekha Dhingra	1
2.	Role of B-Schools and improvement of Management Education through National Education Policy – 2020 - Dr. Aseervatham Achary	11
3.	Efficiency of Working Capital Management of Maharatna Companies in Indian Oil Sector: An Empirical Assessment - Mr Rupesh Yadav & Dr Debasish Sur	16
4.	Financial Performance Analysis of Selected IT Companies in India: Special Reference with Tata Consultancy Services - Mr. Rathindra Nath Jana & Dr. Sunil Kumar Yadav	24
5.	Understanding the Impact of Organic Facebook Marketing on the Consumer Engagement of New Business Entities in India - Tooba Rahman Khan	32
6.	Growth of Self-Help Groups: An approach towards Women's Empowerment - Saubhagya Singh & Prof. Sudhir Kumar Shukla	39
7.	Impact Of Taxation On Micro, Small And Medium-Sized Businesses In India - Satvik Mishra & Prof. Sudhir Kumar Shukla	50

A Bibliometric Analysis of Research Related to HRM In Fourth Industrial Revolution Reported Over the Period 2014 to 2021

Deepa

Research Scholar,
Department of Commerce,
Maharshi Dayanand University, Rohtak, Haryana, India

Rekha Dhingra

Assistant Professor,
Department of Commerce,
Maharshi Dayanand University, Rohtak, Haryana, India

Abstract

Digitalization transforms the workplace and style of doing work in a variety of industries. Industry 4.0, often known as the fourth industrial revolution, changed how people work, develop, manage, control, hire, and interface with one another. The aim of this article is to study the country-wise distribution, volume, and evolution of HRM in industry 4.0 by recognizing key publications, journals, and keywords and emphasizing trends by analyzing literature and intellectual structure in the research of HRM in industry 4.0. To attain the goal of this research, a bibliometric analysis is conducted. The findings reveal that the available studies on HRM in industry 4.0 are relatively small. This article aims to provide insights for studies on the influence of industry 4.0 on human resources and its management in the digital age's evolution, including businesses looking to become more productive.

Keywords - Artificial intelligence, industry 4.0, internet of things, human resource, HRM

Introduction

Industry 4.0 emerged in the manufacturing and service sector due to the advancement of digitalization and robots (Matt et al., 2020). The use of digitalization to interconnect the physical and cybernetic environment is referred to as these phenomena. Artificial intelligence (AI), big data, cloud, and cyber-physical systems have all produced change in the workforce and have been dubbed a socio-technical revolution (Liu & Xu, 2017). Despite the revolution in work processes

brought about by technology, digital transformation necessitates inherent human capabilities to ensure usability and efficiency in implementing digital technologies (Fareri et al., 2020). After identifying the significance of HR in the success of digitalization, understanding the vision of digital technology in terms of delivering improvements to elements of human resource management is essential (Cimini et al., 2020). In the fourth industrial revolution, there is a need for improved human resource management called HRM 4.0 and smart HR. It is a combination of traditional HRM and technology developed

from industry 4.0. therefore, there is a need for developed HRM to train their employee to handle the new tool and technology to increase turnover (Kumar, 2018). However, various research study the industry 4.0 and its impact on HRM in different firms related to different countries and industries (Cimini et al., 2020; Fareri et al., 2020; Kumar, 2018; Liu & Xu, 2017; Matt et al., 2020), so there is a need to study the country-wise distribution, volume and evolution of HRM in industry 4.0 by recognizing key publications, journals, and keywords and emphasizing trends by analyzing literature and intellectual structure, in the research of HRM in industry 4.0 our goal in conducting this study to identify the gap in the existing literature.

Methods

Technique used

Various researchers used this analysis to study the disciplines, tendencies in journals and countries (Donthu et al., 2020; Qamar & Samad, 2022; Jotabá et al., 2022; Margherita & Bua, 2021; Mathushan & Gamage, 2022; Muhuri et al., 2019; Farrukh et al., 2021). In this study, we used performance analysis and science mapping to analyse the retrieved studies. Domain structure and dynamics are visualized by science mapping, while performance analysis examines collaboration and effectiveness in citations and publications (Gao et al., 2021). We conduct the following research to meet the goal of our study.

- Keyword co-occurrence analysis.
- Bibliographic coupling.
- Citation and co-citation analysis.

One of the most prominent ways of investigating the link between bibliographic

data is co-citation analysis. If two documents are mentioned together in a third document, it is assumed that they have a common literature stream (Small, 1973). Bibliographic coupling is an analysis that shows that the two research share common literature; bibliographic occurs when two researchers use the third study in their study. The number of shared references between two manuscripts determines the degree of similarity. Furthermore, co-occurrence is a term that relates to the use of similar keywords in close vicinity as well as the frequency in which they occur. (Donthu et al., 2021).

Search protocol

Data for this bibliometric analysis were retrieved from the Scopus database. That is the most significant source of bibliographic information in the publications. Many previous researchers (Farrukh et al., 2021; Qamar & Samad, 2022; Donthu et al., 2020) used this database for their bibliometric analyses. Search string related to this analysis was used as (*TITLE-ABS-KEY ((“Human resource management” OR “human resource “AND “industry 4.0”))*). The result showed 443 studies from the year 2014 to 2022. However, we did not consider 2022; thus, the remaining 401 studies were related to 2014 to 2021. Furthermore, we filtered these 401 studies and included only 138 studies related to the business, management and accounting disciplines. Moreover, we analysed those studies that were published in the English language. Our final database consists of 135 manuscripts, including articles, conference papers, reviews, book chapters, and notes. We thoroughly read the titles, abstracts, and keywords of all 135 documents to verify that all of the articles and research retrieved in our study related to HRM in

industry 4.0. *Software* We analyse the extracted data from Scopus with the help of Vos viewer (van Eck & Waltman, 2010). This software is easy to use and effective in mapping the retrieved studies. Various researchers (Farrukh et al., 2021; Leung et al., 2017; Noor et al., 2020) used this software to analyse the data.

Results

Publication trend

A total number of 135 documents resulted from the search strategy. Table 1 and Figure 1 illustrate that research on HRM in industry 4.0 has risen exponentially since 2018. According to the findings, 2021 is the most productive year, with 56 articles and 258 citations. The current business needs firms to change their focus to managing their people according to the industry's requirements, which could explain the fast expansion in the number of research on human resource management in industry 4.0.

Table 1: Publication and Citation Trends

Year	NP	NC
2021	56	258
2020	40	377
2019	19	226
2018	13	345
2017	4	35
2016	3	4
2015	0	0
2014	0	0
Total	135	1245

Notes: NP: Number of papers; NC: Number of citations

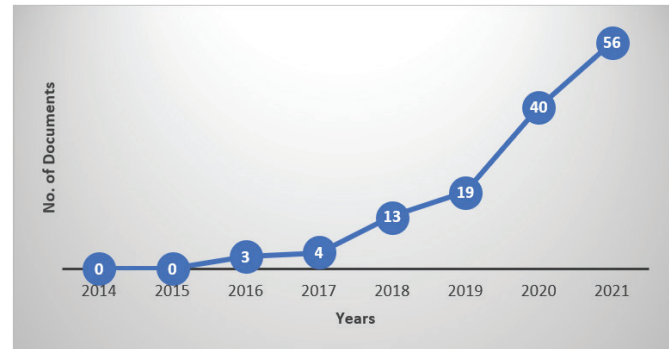


Figure 1: Visualisation of Retrieved Documents Per Year

Origin of publications

The majority of papers published on HRM in Industry 4.0 are written in the English language, and only a few texts are written in German. We choose to analyse only those published studies which are published in the English language. Although studies on HRM in industry 4.0 came from 51 countries and areas around the world. The output of the top 13 contributing nations with at least five documents on HRM in Industry 4.0 is shown in Table 2.

Table 2: Top Collaborating Countries and Regions

Rank	Country	NP	NC	C/P
1.	India	18	225	12.5
2.	South Africa	13	107	8.23
3.	United Kingdom	9	141	16
4.	France	7	113	16.14
5.	Turkey	7	76	10.8
6.	Brazil	6	131	21.8
7.	Czech Republic	7	28	4
8.	Germany	10	157	15.7
9.	Russia	6	15	2.5
10.	Vietnam	5	30	6
11.	Italy	11	160	14.5

12.	Indonesia	8	13	1.6
13.	Slovakia	5	20	4

Notes: NP: Number of Papers; NC: Number of Citations; C/P: Citations per Publication

When two studies frequently cite the third publication, bibliographic coupling occurs. Although in the context of countries, when two documents from separate countries cite the study of a third country in their research. This shows how different countries utilise the same literature in their publications.

Figure 2 shows the result of the bibliographic coupling of countries in the research of HRM in industry 4.0; each circle represents a country, with the thickness of the circles indicating how much each country contributed: the greater the size, the more significant the contribution of countries. Figure 2 represents 20 countries out of 51 countries consisting a minimum document of a country is three, and the minimum number of citations of a country is 3. There are 4 clusters composed of red, green, blue and yellow; the cluster's colour represents countries with the same colour cluster share similar literature. The red cluster is the largest cluster, including South Africa, India, France, Turkey, Brazil, Spain, and Germany. However, yellow is the smallest one consisting of the Czech Republic, Russian Federation, Slovakia, and Vietnam.

Figure 3 represents the co-authorship network among countries with a minimum of 3 documents. Out of 51 countries, 20 countries met this criterion, but the link between them is not strong, and the Vos viewer eliminate the eight countries. Table 3 shows the number of documents of one country with another. Out of 12 countries,

France and India worked together on four papers. Furthermore, Table 4 depicts that the United Kingdom is the most collaborated country having co-authorship with six countries (South Africa, India, France, Italy, Croatia, and Portugal).

The most productive universities

This section looks into the author's participation in conducting research on HRM in industry 4.0 from educational establishments throughout the world. Table 5 represents the organisation that participated with a minimum of two documents between 2021 to 2014. The analysis reveals only five institutions with a minimum of two papers.

Co-citation analysis of retrieved documents

Co-citation occurs when two articles by two separate authors are concurrently referenced by third documents (Donthu et al., 2021). Figure 4 represents two clusters with two different colours of the co-citation network of authors having at least 20 citations. The researchers in the red colour cluster were commonly cited, demonstrating the similarity of their publications. Similarly, the publications in the green cluster have a strong co-citations network.

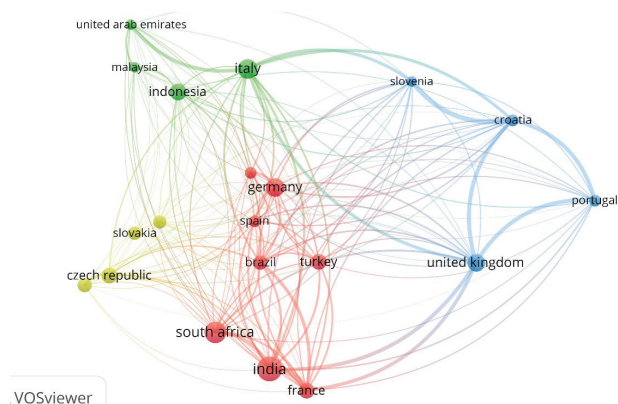


Figure 2: Visualisation of Bibliographic Coupling of Countries

Table 3: Frequency of Co-Authorship Among Countries

From	To	Frequency
Malaysia	Indonesia	1
Malaysia	United Arab Emirates	1
Italy	United Arab Emirates	2
Italy	Slovenia	1
Italy	Croatia	1
Italy	United Kingdom	1
Croatia	Slovenia	3
Croatia	Portugal	1
Croatia	United Kingdom	1
United Kingdom	South Africa	1
United Kingdom	India	1
United Kingdom	France	1
United Kingdom	Portugal	1
South Africa	India	1
India	France	4
France	Brazil	1

the growing body of literature on HRM in Industry 4.0. The field has grown tremendously since its initial publication in the Scopus database. In order to determine which publications are the most essential in the topic of HRM in Industry 4.0, we have compiled a list of the most cited publications on this topic (Table 7)

Table 4: Top Collaborated Countries

Country	link	Link strength
India	3	6
South Africa	2	2
United Kingdom	6	6
France	3	6
Brazil	1	1
Italy	4	5
United Arab Emirates	2	3
Indonesia	1	1
Malaysia	2	2
Croatia	4	6
Slovenia	2	4
Portugal	2	2

Table 5: The Most Prolific Universities

Institute	Country	Citation	Documents
Cardiff university	United Kingdom	17	2
Neoma business school	France	5	2
PSG Institute of management	India	3	2
University of Johannesburg	South Africa	0	2
Walter Sisulu university	South Africa	1	2

Figure 3: Visualisation of Co-authorship Among Countries

The most cited publications

Research on HRM in Industry 4.0 has changed dramatically over the years. This is due to

Table 6. Top Productive Sources

Rank	Source title	N/P	T/C
1.	Innovations and challenges in human resource management for hr 4.0	4	0
2.	International journal of manpower	5	10
3.	International journal of production research	4	65
4.	Journal of manufacturing technology management	3	46
5.	Problems and perspectives in management	3	18
6.	Proceedings of the international conference on industrial engineering and operations management	4	13
7.	South Asian journal of human resource management	3	17
8.	Total quality management journal	3	25

Notes: N/P: Number of publications; T/C: Total citations

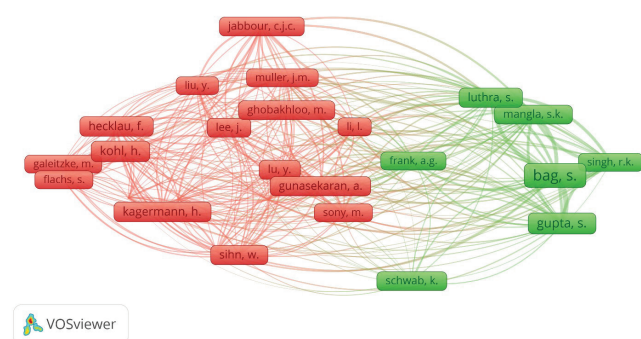


Figure 4: Visualisation of Co-citation Network of Retrieved Documents

Table 7: Top 10 Most Cited Publications

Rank	Publication	Source title	Citation
1.	Schneider (2018)	Review of management science	130
2.	Sivathanu & Pillai (2018)	Human resource management international digest	103
3.	Liboni et al. (2019)	Supply chain management	92
4.	Pejic-Bach et al. (2020)	International journal of information management	68
5.	Kazancoglu & Ozkan-Ozen (2018)	Journal of enterprise information management Journal of management development	64
6.	Whysall et al. (2019)	International journal of production research	63
7.	Calzavara et al. (2020)	Journal of cleaner production Journal of manufacturing technology	62
8.	Bag et al. (2021)	Systematic research and behavioural science	55
9.	Cimini et al. (2021)		39
10.	Jerman et al. (2020)		38

keyword co-occurrence analysis

Figure 6 represents the co-occurrence of keywords by density visualisation with the help of aVos-viewer. We use the form of analysis as “co-occurrence of keywords” and the unit of analysis as “all keywords”. The density visualisation visualises the density values with different colours such as yellow, green, and blue. The result reveals that industry 4.0 is the most frequently used word that is followed by human resource management. This analysis depicts that in the 4th industrial revolution, the role of HRM doesn't decrease.



Figure 5: Density Visualization of Keywords

Conclusion

A lot of attention has been gained by the concept of HRM in industry 4.0 nowadays from researchers, academicians and practitioners. The purpose of the bibliometric analysis is to determine the main research trends in a given subject or in any publications. It's an effective method to get information on a certain study area for a specified time period. This study analysed the publication retrieved from the Scopus database from 2014 to 2021. This study gives information about the leading universities that collaborated in the research of HRM in industry 4.0. Furthermore,

most productive publications and journals in this research domain. The result reveals that the yearly output of the research in the last three years has drastically grown. The most productive university is Cardiff university to conducts research on HRM in industry 4.0 in the United Kingdom. The most cited paper is “Managerial challenges of Industry 4.0: an empirically backed research agenda for a nascent field”. The international journal of manpower is the top journal with five documents with ten citations.

This study presents an overview of HRM in industry 4.0. to find out the research development. This study helps the practitioners and researchers to guide the new research in the field of HRM in industry 4.0 and gives first-hand information in formulating research questions. Moreover, we identified some gaps in previous research that will be helpful for the practitioners and academicians in conducting research in the future.

Research gaps	Research needs
Methodologies	Mixed methodologies should be adopted to provide a holistic view to the research domain.
Contexts	A comparative study of developed and developing countries is needed to identify the challenges and new insights.

Limitation

Despite its importance, the study contains some flaws. First, the Scopus database was used to acquire the required information; publications from other databases, such as PubMed and Web of Science, were excluded. As a result, the findings are not generalised. Second, this analysis only consists of the English language publications. Third, this is

a bibliometric analysis there is a need to conduct a systematic qualitative review by integrating the result from other databases for an in-depth understanding of the domain.

References

- Bag, S., Yadav, G., Dhamija, P., & Kataria, K. K. (2021). Key resources for industry 4.0 adoption and its effect on sustainable production and circular economy: An empirical study. *Journal of Cleaner Production*, 281. <https://doi.org/10.1016/j.jclepro.2020.125233>
- Calzavara, M., Battini, D., Bogataj, D., Sgarbossa, F., & Zennaro, I. (2020). Ageing workforce management in manufacturing systems: state of the art and future research agenda. *International Journal of Production Research*, 58(3). <https://doi.org/10.1080/00207543.2019.1600759>
- Cimini, C., Boffelli, A., Lagorio, A., Kalchschmidt, M., & Pinto, R. (2021). How do industry 4.0 technologies influence organisational change? An empirical analysis of Italian SMEs. *Journal of Manufacturing Technology Management*, 32(3). <https://doi.org/10.1108/JMTM-04-2019-0135>
- Cimini, C., Pirola, F., Pinto, R., & Cavalieri, S. (2020). A human-in-the-loop manufacturing control architecture for the next generation of production systems. *Journal of Manufacturing Systems*, 54. <https://doi.org/10.1016/j.jmsy.2020.01.002>
- Donthu, N., Kumar, S., Mukherjee, D., Pandey, N., & Lim, W. M. (2021). How to conduct a bibliometric analysis: An overview and guidelines. *Journal of Business Research*, 133. <https://doi.org/10.1016/j.jbusres.2021.04.070>
- Donthu, N., Kumar, S., & Pattnaik, D. (2020). Forty-five years of Journal of Business Research: A bibliometric analysis. *Journal of Business Research*, 109. <https://doi.org/10.1016/j.jbusres.2019.10.039>
- Fareri, S., Fantoni, G., Chiarello, F., Coli, E., & Binda, A. (2020). Estimating Industry 4.0 impact on job profiles and skills using text mining. *Computers in Industry*, 118. <https://doi.org/10.1016/j.compind.2020.103222>
- Farrukh, M., Raza, A., Ansari, N. Y., & Bhutta, U. S. (2021). A bibliometric reflection on the history of green human resource management research. *Management Research Review*. <https://doi.org/10.1108/MRR-09-2020-0585>
- Gao, P., Meng, F., Mata, M. N., Martins, J. M., Iqbal, S., Correia, A. B., Dantas, R. M., Waheed, A., Xavier Rita, J., & Farrukh, M. (2021). Trends and future research in electronic marketing: A bibliometric analysis of twenty years. *Journal of Theoretical and Applied Electronic Commerce Research*, 16(5). <https://doi.org/10.3390/jtaer16050094>
- Jerman, A., Pejić Bach, M., & Aleksić, A. (2020). Transformation towards smart factory system: Examining new job profiles and competencies. *Systems Research and Behavioral Science*, 37(2). <https://doi.org/10.1002/sres.2657>
- Jotabá, M. N., Fernandes, C. I., Gunkel, M., & Kraus, S. (2022). Innovation and human resource management: a systematic literature review. *European Journal of Innovation Management*, 25(6), 1–18. <https://doi.org/10.1108/EJIM-07-2021-0330>
- Kazancoglu, Y., & Ozkan-Ozen, Y. D. (2018). Analyzing Workforce 4.0 in the Fourth Indus-

- trial Revolution and proposing a road map from operations management perspective with fuzzy DEMATEL. *Journal of Enterprise Information Management*, 31(6). <https://doi.org/10.1108/JEIM-01-2017-0015>
- Kumar, A. (2018). HRM 4.0: High on Expectations. *International Journal of Enhanced Research in Educational Development*, 6(1).
 - Leung, X. Y., Sun, J., & Bai, B. (2017). Bibliometrics of social media research: A co-citation and co-word analysis. *International Journal of Hospitality Management*, 66. <https://doi.org/10.1016/j.ijhm.2017.06.012>
 - Liboni, L. B., Cezarino, L. O., Jabbour, C. J. C., Oliveira, B. G., & Stefanelli, N. O. (2019). Smart industry and the pathways to HRM 4.0: implications for SCM. In *Supply Chain Management* (Vol. 24, Issue 1). <https://doi.org/10.1108/SCM-03-2018-0150>
 - Liu, Y., & Xu, X. (2017). Industry 4.0 and cloud manufacturing: A comparative analysis. *Journal of Manufacturing Science and Engineering, Transactions of the ASME*, 139(3). <https://doi.org/10.1115/1.4034667>
 - Margherita, E. G., & Bua, I. (2021). The Role of Human Resource Practices for the Development of Operator 4.0 in Industry 4.0 Organisations: A Literature Review and a Research Agenda. *Businesses*, 1(1), 18–33. <https://doi.org/10.3390/businesses1010002>
 - Mathushan, P., & Gamage, A. S. (2022). Human Resource Management as a Catalyst for Firm Innovation: A Bibliometric Review. *Journal of Business and Technology*, 6(1), 42. <https://doi.org/10.4038/jbt.v6i1.61>
 - Matt, D. T., Orzes, G., Rauch, E., & Dallasega, P. (2020). Urban production – A socially sustainable factory concept to overcome shortcomings of qualified workers in smart SMEs. *Computers and Industrial Engineering*, 139. <https://doi.org/10.1016/j.cie.2018.08.035>
 - Muhuri, P. K., Shukla, A. K., & Abraham, A. (2019). Industry 4.0: A bibliometric analysis and detailed overview. *Engineering Applications of Artificial Intelligence*, 78. <https://doi.org/10.1016/j.engappai.2018.11.007>
 - Noor, S., Guo, Y., Shah, S. H. H., Saqib Nawaz, M., & Butt, A. S. (2020). Bibliometric analysis of social media as a platform for knowledge management. *International Journal of Knowledge Management*, 16(3). <https://doi.org/10.4018/IJKM.2020070103>
 - Pejic-Bach, M., Bertoncel, T., Meško, M., & Krstić, Ž. (2020). Text mining of industry 4.0 job advertisements. *International Journal of Information Management*, 50. <https://doi.org/10.1016/j.ijinfomgt.2019.07.014>
 - Qamar, Y., & Samad, T. A. (2022). Human resource analytics: a review and bibliometric analysis. In *Personnel Review* (Vol. 51, Issue 1). <https://doi.org/10.1108/PR-04-2020-0247>
 - Schneider, P. (2018). Managerial challenges of Industry 4.0: an empirically backed research agenda for a nascent field. In *Review of Managerial Science* (Vol. 12, Issue 3). <https://doi.org/10.1007/s11846-018-0283-2>
 - Sivathanu, B., & Pillai, R. (2018). Smart HR 4.0 – how industry 4.0 is disrupting HR. In *Human Resource Management International Digest* (Vol. 26, Issue 4). <https://doi.org/10.1108/HRMID-04-2018-0059>
 - Small, H. (1973). Co-citation in the scientific

literature: A new measure of the relationship between two documents. *Journal of the American Society for Information Science*, 24(4). <https://doi.org/10.1002/asi.4630240406>

- van Eck, N. J., & Waltman, L. (2010). Software survey: VOSviewer, a computer program for bibliometric mapping. *Scientometrics*, 84(2). <https://doi.org/10.1007/s11192-009-0146-3>
- Whysall, Z., Owtram, M., & Brittain, S. (2019). The new talent management challenges of Industry 4.0. *Journal of Management Development*, 38(2). <https://doi.org/10.1108/JMD-06-2018-0181>.

Role of B-Schools and improvement of Management Education through National Education Policy – 2020

Dr. Aseervatham Achary

Associate Professor of Business Administration

Aksheyaa College of Arts & Science, Chengalpattu, Tamil Nadu.

Abstract

India's growth in recent years has been led by the services sector. The most noticeable aspect has been the recent big boom in the BPO/KPO sector. This offshoring trend is certain to continue and India faces the challenge of generating an appropriate supply response to retain its existing advantage. It should be noted that we nearly spent \$4 billion annually to send our children abroad for higher-emerged technical training while there is no reason for us not to emerge as a global hub for higher education and technical training. The challenge, therefore, is to expand capacities in higher education to keep ahead of the curve of rising domestic and global demand. A business - school has three stakeholders: students, parents, and teachers. And, while a corporate would also assess its service quality a school to needs to evaluate its service quality.

Introduction

Recruiters from B schools in India have noticed a fundamental change in the outlook of an MBA graduate. Now an MBA appearing for a campus interview does not seriously believe he is a potential CEO in the next 8 or 10 years. He is lacking in this spirit of risk-taking and entrepreneurship – or fire in the belly. And this is not due to any newfound humility on his part about his lack of experience and its value vis-a-vis untested paper qualification. Rather he just looks upon his MBA as a passport to secure a job at a comfortable level of living – not as a token to prove his mettle.

Management education helps businesses in the following ways:

- Carrying out research for advancing operational and organizational efficiency and effectiveness.
- Providing an active forum for testing new ideas for commercialization.
- Systematically understanding market needs and helping with better-targeted products and services.

However, today's management education seems to be lacking in providing any of these qualities along with the degree to its pass outs.

Expenditure in Higher Educational Institutions

The National Education Policy, 2020 calls for public investment on education to 6% of GDP. India's education budget has never touched this number yet. It was 2.8% for FY 2019-20, was 3.1% for FY 2020-21. For the FY 2022-23, government has provided Rs. 40,810.34 Crore for Higher Education. The thrust area has been imparting Digital Education by way of establishing a Digital University, focus of skill development and vocational education through Skill Hub Initiative and e-Learning in Regional Languages. A special focus area has been created in the Budget which focuses on agriculture industry and urban planning industry.

Role of Accreditation

Currently, no Indian B-school has international accreditation from the Association to Advance Collegiate Schools of Business (A.A.C.S.B.) or the European Quality Improvement System (E.Q.U.I.S.). The I.S.B. is currently just getting underway with the A.A.C.S.B. It is a long process but the I.S.B. is on track to be the first A.A.C.S.B.-accredited B-school in India. However, very recently, the Association of M.B.A.s (A.M.B.A.) in Britain, making it the first B-school to receive international accreditation, has accredited Management Development Institute (M.D.I.) Gurugram. Still, I.I.M. at Ahmedabad, Bangalore, and Kolkata consistently has been ranked among the top by almost all surveys. Presently, Indian B-schools are ranked in India and Asia-Pacific, but when compared to global rankings, they fail to appear in the top 100 global B-schools in the ranking surveys of Business Week, Financial Times, and Forbes. Even Chinese B-schools figure among the first 40 in these surveys. There is a strong feeling that the I.I.M. is a highly coveted brand and

its M.B.A. program is overrated, especially that of the I.I.M.A (Van Damme, D. 2004).

How business education lost its way?

In less than 50 years, 'Management' has emerged as a vibrant area of professional education. Half a million candidates compete annually for the 1,00,000 seats. With demand for management education on the rise, its qualitative growth needs serious attention. This should be the real agenda for the HRD Ministry. Establishing an All-India Management Council, which can take a comprehensive view on the development of management education, should be the HRD Ministry's target. It would be best to put on hold the ad hoc decisions made so far.

Indian Business schools are now on the wrong track. For many years, MBA programs enjoyed rising respectability in the academia and growing prestige in the business world. Their admission was ever more selective, the pay packages of graduates ever more dazzling. Today, however, MBA programs face intense criticism for failing to impart useful skills failing to prepare leaders, failing to instill norms of ethical behavior – and even failing to lead graduates to good corporate jobs. These criticisms come from industry and academician like deans from some American universities, Mr. Dipak Jain from Kellogg School of Management. One outspoken critic, McGill University's Prof. Henry Mintzberg, says that the main culprit is a less-than-relevant MBA curriculum.

The actual cause of today's crisis in management education is far broader in scope and can be traced to a dramatic shift in the culture of business schools. During past several decades, many B schools have quietly adopted an inappropriate

and ultimately self-defeating model of academic excellence.

By looking in the history in 1959 there was enormous demand for professional managers in a post war economy, the Ford and Carnegie foundations recommended ways to give business schools respectable academic underpinnings and offered grant money toward achieving that end. Driven by conscience and cash top tier universities began to treat their business schools a seriously look (Turri, M. 2020).

The peer pressure at B school forces their spirit and ethos to focus on the annual placement week. The USP of many of these institutions, which target engineering graduates, is that an MBA give them an edge in the job market and along with an added pressure is to “make hay while the sun shines” with the MBA degree. They do not rigorously screen the applicants at the time of admission on whether they have the mettle to navigate uncertainties and take appropriate risks (Romanowski, M. H. 2022)..

The second factor is the motivation and aspiration level of students. They do not seek admission to acquire the competencies necessary for a challenging career, take risks and grow professionally, but for ‘life ban gaya’ attitude after admission. Thus, neither the institutions nor the students have entrepreneurial values as their focus in the curriculum transaction for an MBA degree (T. T. H. 2018).

The third factor is pre-MBA coaching institutes. They have reduced the preparations for the MBA Program to cracking and cramming. They try to out-guess the paper setter and “coach” their candidates through the group discussion and interview process. They have reduced securing an

MBA admission to something akin to preparing for athletic events at the Olympics with the help of sports scientists and dietitians – though not, thank God, anything resembling steroid drugs.

Business Education can register sustained growth only by focusing on such areas as development of competent faculty, promotion of basic and applied research, encouraging B-schools to meet sectoral demands, making corporate fund and strengthening management education, and encouraging B-Schools to excel globally. All this requires a holistic approach. The Government should not meddle in areas where it is short on expertise. It may be prudent to establish an All-India Management Council with the sole purpose of enhancing the quality of management education. The All-India Council of Technical Education, which also looks after management education, may not be able to do full justice to the discipline. Management is a multi-faculty discipline; AICTE treats it as a single subject, spending only 4 per cent of its revenue on management education. One cannot blame the AICTE, which sees technical education, not management, as its core.

Changing Paradigm

Now in the era of reverse brain drain, IIT graduates increasingly prefer to return or remain in the country. Bengaluru, today, has 150,000 software engineers compared to 130,000 in Silicon Valley. Similarly, IBM cut its jobs in the US and Europe but recruited more in India.

In another surprise move, in just two years, the Indian R&D Centers of Bell Laboratories, the world’s largest research organization, filed more patents than the US Labs. In August 2006, India announced 1312 applications for drug patents,

a record second only to the US. It is 25 percent higher than Germany which is third in the ranking, and ahead of Britain, Japan, etc. India today is definitely at par with the knowledge sectors of the top economies of the world. Extensive fundamental and applied research is being undertaken here. The world's biggest multinational companies are not only opening their backroom offices but also their R&D centers in India. This trend is apparent not just in software development but in other sectors as well such as the financial sector, medical sector, biotech and others. By the mid-1990s itself, almost 180 of Fortune 500 companies were outsourcing to India. World-famous names like Citicorp, Honeywell, Motorola, Sprint, Oracle, Digital Equipment, Verizon, Huges, Duet Technologies, Cisco Systems, Texas Instruments, Computer Associates, Pentafor, Eco Soft, British Telecom, SAP, Philips, Siemens, Yahoo, Google, Accenture, Sun Microsystems, Ericsson, IBM, 12 Technologies, HP, Intel, Microsoft, Nortel, etc. have all set up R&D facilities in India or have tied up with Indian companies or academic or research institutions. The main reason for such a huge investment in India is due to cost advantage for higher research is huge. An Indian chip design engineer costs Rs. 13.5 lakh a year compared to Rs 67 – 90 lakh in the U.S (Aleksandrova, Z. A. 2016).

Proactive action

Management Education must develop the skills that would enable the students to take decisions on the basis of limited information marked by uncertainties. Focus must be to specialize students in pharmaceuticals, construction, or social sectors like health, rural development, education, arts management, etc. There is a need

for a comprehensive design of sector programme in consultation with sector experts Eaton, (J. S. 2012).

There needs to be a regulatory body like SEBI or TRAI to certify and management must come under the preview of these bodies. These include faculty representation and independent members, all institutes must be rated, and funding should come not only from the government but fees and consultancy may be good sources of earning. Case study, summer training, projects, class study and self-study, viva, industry interface, and guest faculty need to be the method of study (Finkin, M. W. 1994).

Conclusion

Certain critical issues face Indian B-schools in their quest to mould students using a holistic and fully integrated approach based on academic rigor, building character, and nurturing values and a curriculum for meeting industry expectations and the external environment. Among them, the I.S.B. has greater autonomy and flexibility because it is in the private sector and can pursue the goal of being the first world-class Indian B-school compared to the I.I.M.'s, which is in the government's domain. The I.I.M. face frequent interference in their governance and autonomy matters, which throws a wrench in their functions, impedes rapid growth, and creates barriers to raising the level of India's intellectual capital in the new era of the 21st century. Only by raising the level of intellectual capital, Management Institutes can achieve their dream of being world-class, institutions by encouraging:

Faculty commitment to research and teaching excellence; not one or the other; a committed professional staff who understand higher education; quality of students admitted; financial

resources, and leadership of the dean/director. If any one of these is missing, becoming a recognized excellent institution is not on the cards.

The implementation of National Education Policy – 2020 is going on at fast pace. It has been proposed that AICTE will be subsumed into Higher Education Council of India (HECI), the umbrella body of Higher Education with Statutory Powers. Hope the HECI takes care of Management Education seriously and provides for better environment to create and sustain world level B-Schools in India itself.

References

- Turner, A. J., Isaac, R. E., & Coates, D. (2001). The neprilysin (NEP) family of zinc metallo-endopeptidases: genomics and function. *Bio-essays*, 23(3), 261-269.
- Van Damme, D. (2004). VIII. Standards and indicators in institutional and programme accreditation in higher education: A conceptual framework and a proposal. *Indicators for Institutional and Programme Accreditation in Higher/Tertiary Education*, NNESCO-CEPES, Studies in Higher Education, Bucharest, 125-157.
- Andreani, M., Russo, D., Salini, S., & Turri, M. (2020). Shadows over accreditation in higher education: Some quantitative evidence. *Higher Education*, 79(4), 691-709.
- Romanowski, M. H. (2022). The idolatry of accreditation in higher education: enhancing our understanding. *Quality in Higher Education*, 28(2), 153-167.
- Nguyen, H. C., & Ta, T. T. H. (2018). Exploring the impact of accreditation on higher education in developing countries: a Vietnamese view. *Tertiary Education and Management*, 24(2), 154-167.
- Eaton, J. S. (2012). The future of accreditation. *Planning for higher education*, 40(3), 8.
- Finkin, M. W. (1994). The unfolding tendency in the federal relationship to private accreditation in higher education. *Law and Contemporary Problems*, 57(4), 89-120.
- Aleksandrov, A. Y., Barabanova, S. V., Vereshchak, S. B., Ivanova, O. A., & Aleksandrova, Z. A. (2016). Revisiting the legal consequences of international accreditation of higher education programs in the Russian Federation. *J. Advanced Res. L. & Econ.*, 7, 202.

Efficiency of Working Capital Management of Maharatna Companies in Indian Oil Sector: An Empirical Assessment

Research Paper

Mr Rupesh Yadav

Research Scholar, Ph.D Programme

Department of Commerce

The University of Burdwan

Burdwan -713104, West Bengal

E-mail: hirupeshyadav@gmail.com

M: +91- 9800630021

Dr Debasish Sur

Professor

Department of Commerce

The University of Burdwan

Burdwan -713104, West Bengal

E-mail: debasishsur@yahoo.co.in

M: +91- 9432884673

Abstract

The oil sector, one of the eight essential industries in India, makes a significant contribution towards developing the economy. Due to changes brought by the liberalization of economy, a number of oil companies in India which had grown exponentially over the years in a virtually non-competitive environment started facing increasingly severe competition. Therefore, a paradigm changes in Indian oil sector also become inevitable to meet the new challenges. The companies operating in this sector forced to reorient their strategies for managing their working capital (WC). Some of them have been able to adopt themselves to the new situation while other could not so reorient. In this backdrop, the present paper attempts to analyse the efficiency of managing WC of Maharatna oil companies during the period 2006-07 to 2020-21. The efficiency of Working Capital Management (WCM) of the companies under study has been analysed using Bhattacharya Model (1995). While tackling the issue relevant statistical tools and techniques have been applied at appropriate places.

Keywords - Indian oil sector; Working Capital, Working Capital Management, Bhattacharya Model, Working Capital Management Efficiency.

Introduction:

Central Public Sector Enterprises (CPSEs) have been making notable contribution towards accelerating economic growth, infrastructure development and fostering healthy market competition in India since their inception. The CPSEs in India are run by the Department of Public Enterprises of the Ministry of Heavy Industries and Public Enterprises, Government of India. The Government grants the status of Maharatna, Navratna and Miniratna to certain CPSEs based on the size of the profit made by them and accordingly greater autonomy in operations is granted to them. The Maharatna category was first introduced in the year 2009 and the other two have been in function since 1997. The oil and gas industry has been playing a vital role in the progress of human civilization. It is one of the India's eight essential industries, and it makes a significant contribution towards developing the economy. Due to changes brought by the liberalization of economy, a large number of companies in India which had grown exponentially over the years in a virtually non-competitive environment started facing increasingly severe competition (Jafar & Sur, 2006). Therefore, a paradigm changes in Indian oil sector also became inevitable to meet the new challenges. The companies operating in this sector were forced to reorient their strategies for managing their WC. Some of them were able to adapt themselves to the new situation while other could not so reorient. In this backdrop, the present paper attempts to analyse the efficiency of managing WC of Maharatna oil companies during the period 2006-07 to 2020-21.

II. Literature Review & Research Gap

Some relevant studies on the issues addressed in the present paper are reviewed below:

Maheshwari (2014) in his study measured the efficiency of WCM and firm performance of the top four companies belonging to the Indian steel sector during the period 2007-08 to 2012-13. The ratios, namely ROCE, assets turnover and profit margins of the selected companies were used as measures of firm performance while receivables collection period, inventory conversion cycle, payables deferral period, cash conversion cycle, current ratio and quick ratios adopted as measures of efficiency of WCM during the period under study. The study showed that the overall performances of all the selected steel companies were quite satisfactory during the study period. Out of these selected companies Tata Steel Ltd was able to show impressive profit margin while SAIL fetched the highest average return on capital employed. The study also revealed that cash conversion cycle of Tata Steel Ltd was found to be very short indicating efficiency in the management of WC of the company.

Samiloglu and Akgun (2016) in their study examined the relationship between WCM and profitability of 120 manufacturing firms listed on Istanbul Stock Exchange in Turkey for the period 2002-03 to 2011-12. The Panel data and multiple linear regression models were applied in this study to assess the relationship between WCM and firm profitability. The study revealed a significant negative relationship between account receivable period and profitability whereas a significant positive association between cash conversion cycle and profitability was observed.

Batth et. al. (2018) conducted a study to analyse the efficiency of WCM as well as firm performance of top five Indian steel companies during the period 2008-09 to 2012-13. The study

showed that out of all the selected companies, Tata Steel Ltd reflected impressive profits margin while SAIL indicated the highest average return on capital employed. Another notable outcome of the study was that the cash conversion cycle was found to be short only in case of Tata Steel Ltd as compared to the other companies under study which reflects that the company was able to manage its WC efficiently during the period under study

Yadav and Sur (2021) in their study analysed the efficiency of WCM of Maharatna CPSEs during the period 2004-05 to 2018-19. The objectives of the study were to analyse the liquidity and efficiency of WCM of Maharatna CPSEs using some selected ratios, to evaluate the relationship between the liquidity and value generating capability of these CPSEs and to assess the working capital financing pattern adopted by the Maharatna CPSEs. The liquidity of the Maharatna CPSEs was analysed using two basic liquidity ratios, namely current ratio and quick ratio. The efficiency of WCM of the Maharatna CPSEs was assessed by applying four selected efficiency indicators, such as working capital turnover, inventory turnover ratio, debtor turnover ratio and cash turnover ratio. At the time of evaluating the relationship between the liquidity and value generating capability of the Maharatna CPSEs, Spearman's rank correlation coefficient was used and in order to examine whether the extent of the said relationship was significant or not, t-test was applied. The working capital financing pattern adopted by the Maharatna CPSEs was analysed using the proportions of short term and long-term funds. Based on the liquidity ratios used in the analysis, the study concluded that only BHEL among the ten Maharatna CPSEs was able to adopt significant positive liquidity trend whereas a significant increasing trend in overall efficiency

of managing working capital was observed in both CIL and NTPC. The analysis of Spearman's rank correlation coefficient revealed strong evidence of positive relationship between liquidity and value generating capability in BHEL, ONGC and SAIL only. Another notable outcome of the study was that BHEL established itself as a risk-averse by utilizing almost half of its long-term funds to finance its working capital during the period under study.

Aldubhani et.al. (2022) in their study attempted to analyse the impact of WCM on profitability of selected companies in Qatar for the period 2014-15 to 2018-19. In this study 10 manufacturing companies listed on Qatar Stock Exchange were chosen as the sample companies. While making analysis accounts receivable, inventory, accounts payable and cash conversion cycle were used as measures of working capital management whereas profitability was measured by operating profit margin, return on assets, return on capital employed and return on equity. In this study at the time of measuring the impact of WCM on profitability descriptive statistics, such as the minimum, maximum, mean and standard deviation values of the dependent variables (operating profit margin, return on assets, return on capital employed and return on equity), independent variables (average collection period, inventory turnover ratio, average payment period and cash conversion cycle) and control variables (firm size, sales growth, debt to total assets ratio) were analysed, Pearson's correlation coefficient was used to explore the strength of the relationship between dependent, independent and control variables, variance inflation factor was used to check the multicollinearity between the independent variables and a linear regression

analysis was performed to determine the essential component of working capital which contributed more to forecast the firm's profitability. The study revealed that accounts receivable management had a negative effect on operating profit margin which was found to be statistically significant indicating that a shorter period of collecting money from customer increases the profitability of companies. The study also showed that inventory management had a significant positive effect on return on assets which implies that higher the efficiency of inventory management the higher is the firm profitability. Similarly, management of accounts payable showed a significant positive effect on operating profit margin and return on capital employed reflecting that the company can earn more profits by taking long time to pay off its creditors' bills whereas cash conversion cycle revealed a significant negative effect on operating profit margin and return on assets which witnesses that the company can enhance its profitability by reducing the cash conversion cycle.

A good number of studies on the analysis of various aspect of WCM were carried out in India and abroad during the last few decades while a considerable number of studies on the WCM relating to CPSEs as well as companies belonging to private sector were also made in India and abroad during the post-liberalization era. However, a few studies on the efficiency of WCM of the Maharatna CPSEs were conducted in India. Moreover, the issues associated with the analysis of the efficiency of WCM of Maharatna oil companies were addressed with due importance in the recent past. In order to bridge the gap, the present study was carried out.

III. Objectives

The present study had the following objectives:

To study the performance index of WCM of the Maharatna oil companies.

To evaluate the WC utilisation index of the companies under study.

To analyse the efficiency index of WCM of the Maharatna oil companies.

IV. Methodology

Selection of Sample: The present study was conducted by taking five companies belonging to the Maharatna category of CPSEs. They are (i) Bharat Petroleum Corporation Ltd (BPCL) (ii) Indian Oil Corporation Ltd. (IOCL) (iii) Hindustan Petroleum Corporation Ltd. (HPCL) (iv) Gas Authority of India Ltd. (GAIL) (v) Oil and Natural Gas Corporation. (ONGC)

Collection of Data: The data of the selected companies for the period 2006-07 to 2020-21 used in this study were collected from secondary sources, i.e. 'Capitaline Corporate Database' published by Capital Market Publishers India Pvt. Ltd., Mumbai.

Analysis of Data: While measuring the efficiency of WCM of the companies under study the Efficiency Index of WCM (EIWCM) as developed by Bhattacharya (1995) was applied. According to the Bhattacharya Model, EIWCM represents the product of Performance Index of WCM (PIWCM) and Working Capital Utilisation Index (UIWCM), i.e. $EIWCM = PIWCM \times UIWCM$. This formula was followed in the present study to arrive at the EIWCM of the selected companies. In this study PIWCM of each of the companies was ascertained by applying the following formula:

$$\text{Performance Index (PI}_{\text{WCM}}) = \frac{I_s \sum_{i=1}^N \frac{W_{i(t-1)}}{W_{it}}}{N}$$

$$\text{where } I_s = \text{Sales index} = \frac{St}{St-1}$$

Wi= Individual group of current assets

N= Number of current asset group

i = 1, 2, 3....., N.

Similarly, UIWCM of each of the selected companies was measured in this study using the following formula:

$$\text{Working capital utilisation index (UI}_{\text{WCM}}) = \frac{A_{t-1}}{A_t}$$

where A= Current assets/Sales.

In this study, the current assets group of each of the companies under study was divided into seven different components, namely debtor, store and spares, goods-in-transit, other inventory, advances to suppliers, cash and other current assets.

For the purpose of analysing the performance index of WCM, WC utilization index and efficiency index of WC, simple statistical tools like arithmetic mean and consistency coefficient (i.e. ratio of arithmetic mean to standard deviation), statistical techniques like linear trend analysis, and statistical tests like t-test were used at appropriate places.

V. Empirical Results and Discussion

Table 1

Year	WCM Performance Index				
	BPCL	IOCL	HPCL	GAIL	ONGC
2006-07	0.77	0.27	0.67	0.63	0.42
2007-08	0.68	0.43	0.66	0.54	0.14
2008-09	1.14	0.95	1.24	0.66	2.45
2009-10	0.86	0.82	1.15	1.39	5.17
2010-11	1.58	0.64	0.85	0.75	0.88
2011-12	0.53	0.84	0.53	1.10	1.39
2012-13	0.86	0.85	1.06	4.44	1.02
2013-14	2.11	0.80	0.82	0.66	0.77
2014-15	6.13	21.15	14.28	3.10	4.25
2015-16	1.01	1.03	1.20	0.73	8.58
2016-17	4.77	1.27	0.73	0.93	5.75
2017-18	0.67	1.19	0.59	0.83	8.79
2018-19	0.75	0.65	2.83	0.47	2.72
2019-20	1.29	1.15	0.94	2.72	27.02
2020-21	1.25	0.98	1.17	1.56	0.47
Average	1.63	2.20	1.92	1.37	4.65
CC	1.00	0.42	0.55	1.18	0.68
Slope	0.72	0.114	0.9	0.053	0.749
t-value	0.727	0.351	0.42	0.757	2.031*
Rank based on average	4	2	3	5	1
Rank based on CC	2	5	4	1	3
Sum of Ranks	6	7	7	6	4
Final Rank	2.5	3.5	3.5	2.5	1

**Significant at 5 per cent level

*Significant at 10 per cent level

Performance index of WCM (PI_{WCM}): It indicates the average value of the performance indices of the different components of current assets. This index measures the overall performance of a company in managing the components of its current assets. If the value of PI_{WCM} exceeds 1, then it implies that the performance of the company in managing its current assets is considered satisfactory. So, the higher the value of PI_{WCM} , the better is the performance of current assets of the company.

In Table I, an attempt was made to analyse the performance of WCM of selected companies using PI_{WCM} . This table shows that the values of PI_{WCM} in both BPCL and HPCL were greater than one in seven years out of fifteen years under study whereas

the same values exceeded one in five years, six years, ten years and four years in IOCL, GAIL and ONGC respectively. It is also observed that in IOCL and ONGC the PI_{WCM} values in most of the years of the second half of the study period were higher than one.

The mean PI_{WCM} was the highest in ONGC (4.65) and it was followed by IOCL (2.20), HPCL (1.92), BPCL (1.63) and GAIL (1.37) respectively in that order whereas the consistency coefficient (CC) was the maximum in GAIL (1.18) followed by BPCL (1.00), ONGC (0.68), HPCL (0.55) and IOCL (0.42) respectively in that order. Based on both the average and consistency aspects of PI_{WCM} , ONGC captured the top-most position and it was followed by GAIL and BPCL (both stood on the same point) and IOCL and HPCL (both stood on the same point) during the period under study. Table I also discloses that the slopes of the trend line of PI_{WCM} was positive only in ONGC which was found to be statistically significant whereas the slopes of the trend lines of PI_{WCM} in BPCL, IOCL, HPCL and GAIL were positive but not found to be statistically significant.

Table-II

Year	WCM Utilization Index				
	BPCL	IOCL	HPCL	GAIL	ONGC
2006-07	1.24	1.21	1.18	1.00	1.98
2007-08	0.78	1.02	0.62	0.84	0.12
2008-09	1.58	0.28	1.50	1.18	4.29
2009-10	0.59	1.39	0.72	0.91	1.00
2010-11	1.53	0.71	1.34	2.01	0.87
2011-12	0.92	0.87	0.95	1.25	2.11
2012-13	1.22	1.16	1.05	1.65	1.27
2013-14	0.98	0.96	1.13	0.72	0.99
2014-15	1.84	0.97	1.94	1.17	0.95
2015-16	0.93	2.32	0.97	1.00	1.24
2016-17	0.88	0.88	1.01	0.96	0.99
2017-18	0.94	0.82	1.14	1.03	1.36
2018-19	1.08	1.09	0.82	0.62	1.17
2019-20	1.08	1.02	1.41	1.58	0.08
2020-21	0.69	1.14	0.66	0.88	6.17
Average	1.09	1.06	1.10	1.12	1.64
CC	3.15	2.44	3.14	2.99	1.03
Slope	-0.16	0.16	-0.002	-0.01	0.047
t-value	0.759	0.608	0.112	0.442	0.482
Ranke based on average	4	5	3	2	1
Rank based on CC	1	4	2	3	5
Sum of Ranks	5	9	5	5	6
Final Rank	2	5	2	2	4
**Significant at 5 per cent level					
*Significant at 10 per cent level					

Working Capital Utilisation Index (U_{IWC}): It measures the degree of WC which utilised by a company to generate its sales revenue. A value of U_{IWC} greater than one is desirable. The higher the value of U_{IWC} , the higher is the company's ability to generate sales revenue by utilizing its current assets. In Table II, an effort was made to analyse the utilization of WC of the companies under study using U_{IWC} . This table depicts that the values of U_{IWC} were greater than one in seven years of the fifteen years under study in BPCL, GAIL and ONGC while the values of this index were more than one in eight years and nine years in IOCL and HPCL respectively.

The mean $U_{I_{WCM}}$ was the highest in ONGC (1.64) and it was followed by GAIL (1.12), HPCL (1.10), BPCL (1.09) and IOCL (1.06) respectively in that order while the CC of $U_{I_{WCM}}$ was the maximum in BPCL (3.15) followed by HPCL (3.14), GAIL (2.99), IOCL (2.44) and ONGC (1.03) respectively in that order. Based on both the average and consistency aspects of $U_{I_{WCM}}$ BPCL, HPCL and GAIL all these three companies captured the top most position followed by ONGC and HPCL respectively. Table II also shows that the slopes of the trend lines of $U_{I_{WCM}}$ in IOCL and ONGC were positive but not found to be statistically significant during the period under study.

Table-III

Year	WCM Efficiency Index				
	BPCL	IOCL	HPCL	GAIL	ONGC
2006-07	0.95	0.33	0.79	0.63	0.82
2007-08	0.53	0.44	0.41	0.45	0.02
2008-09	1.79	0.26	1.87	0.77	10.50
2009-10	0.51	1.14	0.82	1.26	5.19
2010-11	2.41	0.46	1.15	1.50	0.77
2011-12	0.49	0.73	0.50	1.37	2.94
2012-13	1.05	0.98	1.11	7.34	1.29
2013-14	2.08	0.77	0.93	0.48	0.76
2014-15	11.30	20.53	27.68	3.63	4.02
2015-16	0.94	2.39	1.17	0.74	10.64
2016-17	4.21	1.13	0.73	0.89	5.69
2017-18	0.63	0.97	0.67	0.86	11.92
2018-19	0.81	0.71	2.33	0.29	3.18
2019-20	1.39	1.17	1.33	4.30	2.25
2020-21	0.87	1.11	0.78	1.37	2.92
Average	2.00	2.21	2.82	1.73	4.19
CC	0.73	0.43	0.41	0.89	1.08
Slope	0.06	0.13	0.121	0.062	0.183
t-value	0.351	0.413	0.283	0.528	0.774
Rank based on average	4	3	2	5	1
Rank based on CC	3	4	5	2	1
Sum of Ranks	7	7	7	7	2
Final Rank	3.5	3.5	3.5	3.5	1
**Significant at 5 per cent level					
*Significant at 10 per cent level					

Efficiency Index of WCM (EI_{WCM}): It measures the efficiency of managing WC of a company. It is the product of PI_{WCM} and $U_{I_{WCM}}$. The proportionate rise

in current assets is more than the proportionate with the increase in sales, the costs associated with the company also go up, both in terms of blockage of additional capital and the associated cost of capital. A company cannot be said to have an efficient WCM if the proportionate increase in current assets is greater than the proportionate increase in sales revenue (Bhattacharya, 1997). The higher the value of EI_{WCM} , the higher is the efficiency of managing WC of the company.

In Table III, it was attempted to analyse the efficiency of WCM of the selected companies by applying EI_{WCM} . This table discloses that the values of EI_{WCM} of BPCL varied between 0.49 (2011-12) to 4.21 (2016-17). On an average, it was 2.00 and its CC was 0.73. The linear trend line fitted to the EI_{WCM} series of BPCL exhibits an upward trend and the slope of this line was not found to be statistically significant. Similarly, the EI_{WCM} values of IOCL ranged between 0.26 (2008-09) and 20.53 (2014-15). The average and CC of EI_{WCM} of company were 2.21 and 0.43 respectively. The straight line fitted to the EI_{WCM} series of IOCL shows an upward trend which was not found to be statistically significant. The EI_{WCM} values of HPCL, GAIL and ONGC fluctuated between 0.41 (2007-08) and 27.68 (2014-15), between 0.29 (2018-19) and 7.34 (2012-13) and between 0.02 (2007-08) and 11.92 (2017-18) respectively. The mean values of EI_{WCM} these four companies were 2.82, 1.73 and 4.19 respectively and the CC values were 0.41, 0.89 and 1.08 respectively. The linear trend equations fitted to EI_{WCM} series of HPCL, GAIL and ONGC disclose upward trend. Table III also shows that in respect of combined score ascertained on the

basis of both the average and CC of EI_{WCM} ONGC captured the top-most position and it was followed by BPCL, IOCL, HPCL and GAIL were stood on the same point during the period under study.

VI. Conclusion:

- I. ONGC established itself as the best performer among the selected companies in respect of performance index of WCM followed by BPCL and GAIL while IOCL and HPCL were placed on the last bench in this respect during the period under study. However, strong evidence of upward trend in the performance of ONGC in managing the different components of current assets was noticed during the period under study.
- II. BPCL, HPCL and GAIL were recognized as the best performer among the selected companies under study in respect of efficient utilization of current assets whereas IOCL was placed in the last rank during the study period.
- III. ONGC proved itself as the best performer among the six Maharatna oil companies in respect of efficiency in managing WC and it was followed by BPCL, IOCL, HPCL and GAIL respectively in that order during the study period.

Implications: The present study will provide necessary inputs to the concerned policy makers to design initiatives and actions based on what the Maharatna oil CPSEs do and where they are now in terms of their WCM practices. The major outcomes derived from the study will also help the policy makers to formulate appropriate policies for converting the inefficiencies stemmed from WCM

into efficiencies in future.

References:

- [1] Samiloglu, F., & Akgün, A. İ. (2016). The relationship between working capital management and profitability: Evidence from Turkey. *Business and Economics Research Journal*, 7(2), 1.
- [2] Batth, V., Nayak, B., & Pasumarti, S. S. (2018). The study of financial performance of Indian public sector undertakings. *Global Journal of Finance and Management*, 10(1), 21-43.
- [3] Maheshwari, M. (2014). Measuring efficiency and performance of selected Indian steel companies in the context of working capital management. *Pacific Business Review International*, 6(11), 18-23.
- [4] Aldubhani, M. A., Wang, J., Gong, T., & Maudhah, R. A. (2022). Impact of working capital management on profitability: evidence from listed companies in Qatar. *Journal of Money and Business*.
- [5] Yadav, R., & Sur, D. (2021). Efficiency in Working Capital Management of Maharashtra Central Public Sector Enterprises in India: An Empirical Analysis. *Research Bulletin*. 47(1&2),67-80.

Financial Performance Analysis of Selected IT Companies in India: Special Reference with Tata Consultancy Services

Mr. Rathindra Nath Jana

Research Scholar,

Mansarovar Global University, Bhopal, M.P, India

Email: janarathindra87@gmail.com

Dr. Sunil Kumar Yadav

Assistant Professor, Department of Commerce

Egra Sarada Shashi Bhusan College,

Egra, Purba Medinipur, West Bengal, India, 721429

Email: hisunilyadav@gmail.com

Abstract

Indian software enterprises today have major positions in the global IT market as a result of India's transformation over the past 10 years into an IT powerhouse for foreign tech firms. India is currently the leading supplier of goods and services to the IT industry worldwide. E-commerce, cloud computing, and online purchasing are all fostering the IT sector's expansion. IT sector grown at a rate of 10 per cent in the year 2019-2020. According to a study by the trade group NASSCOM and the multinational consulting firm McKinsey, India's technology services sector has the potential to generate a revenue \$300–350 billion annually by 2025 if it is able to take benefit from the quickly growing business prospects offered by emerging technologies such as cyber security, artificial intelligence (AI), and the cloud. Financial performance analysis is needed to find the answers to a variety of shareholder questions, including the firm's ability to service debt, its earning potential, the effectiveness of its management strategies, its financial strengths and weaknesses, its liquidity position, the level of operating and financial risk, and many more. In light of this scenario, the identified research attempts to analyze the financial performance of Tata Consultancy Services (TCS) from 2006 to 2021.

Keywords - IT Industry, Artificial Intelligence, Tata Consultancy Services, Financial Performance.

Introduction:

The age we live in now is the age of information technology (IT). India is expected to be the centre of international interest in the information-technology-driven 21st century. India is a developing country with a wide range of chances

for growth and development in every industry, including information technology. Software and hardware products, IT services, IT enabled services (ITES), and e-commerce, also referred to as “online business,” are all part of information technology (IT). All types of businesses today require IT-based services to increase productivity, business

convenience, promote efficient growth and development, and manage all activities in the most economical way. The IT sector not only helped the country's economy flourish, but it also made vital services instantly accessible to every member of society. Due to the growth of IT infrastructure by the big IT businesses in India and overseas, we currently have access to services like health care, educational information, consumer rights, and all other daily services. For a developing country like India, where unemployment is a huge issue, the IT industry serves as the backbone by generating millions of jobs annually. The expansion and development of the IT industry will encourage us to match China's progress in every field and assist us in snatching up the global market. As a result, the socioeconomic standing of Indians will increase. India's business sector is developing because of the development of IT firms. India is currently the leading global destination for IT industry outsourcing. The exponential growth of the Indian IT industry over the past several years, which spurred economic growth, has altered the world's perception of the country's potential as a storehouse of knowledge and skills. The government of India's policy of removing import taxes on IT products has accelerated the development of this industry. Other measures, like the formation of technological parks, EOUs (export-oriented units), SEZs (special economic zones), and FDI, helped this sector rise to the top of the global IT business. Between 1998 and 2019, the IT sector's share of India's GDP rose from 1.2% to over 10%. In 2019, this industry generated 180 billion dollars in total income, of which 48 billion were generated locally and 99 billion were exported. The sector also showed a growth of 13 per cent. In 2020, 4.36 million people got job in India's IT industry. India sells two thirds of its IT services to the United States. Indian

software companies now play key roles in the global IT market as India over the past 10 years has evolved into an IT superpower for foreign software companies. Online services such as E-shopping, cloud computing, and e-commerce has played a significant role in accelerating the growth of Indian IT industry. The IT sector has grown by 10% in the 2019–2020 fiscal year.

The COVID-19 virus has engulfed the entire world and had a significant adverse impact on economy, the Indian IT industry faced this challenge and still it has the ability to rebound and achieve positive trends in very short period of time. Multinational firms purchasing IT-ITES from the Indian IT companies made up about 55% of the global service sourcing market (US\$ 200-250 billion) in 2019–20. The IT industry's market size increased dramatically between 2008 and 2009, going from 67 billion US dollars to 191 billion US dollars in 2019–20. It is projected that the total revenue will remain steady in coming years and it will reach to 350 billion USD by 2025. The most fascinating aspect of India's IT industry is that while it expands in terms of market share, it also steadily increases the country's GDP, which play a key role in overall growth and development of the nation.

How effectively a company can use its resources to generate income is determined by its financial performance. The idea is also applied as a general measure of an organization's long-term financial stability. Financial performance analysis, on the other hand, is a procedure that assesses the relationship between different financial statement components in order to gain a better understanding of a firm's financial condition and performance. A company is answerable to a diverse group

of stakeholders, which includes employees, management, various creditors, investors and bondholders. Tracking a company's financial success is something that each group is interested in doing. Financial performance analysis is necessary to find answers to a variety of inquiries from those stakeholders, such as the firm's ability to service debt, its earning potential, the effectiveness of its management policies, its financial strengths and weaknesses, its liquidity position, the level of operational and financial risk, and others.

Background of TCS:

TCS, an Indian multinational IT and consulting company which operates its operation in more one hundred and fifty locations and in 46 countries, was incorporated in 1968 by Tata group. At present it is one of the largest software and consulting firm where more than 6 lakh people are employed. Its annual turn over is 25 billion USD as on 2022. Initially it was involved in providing software to its sister concerns, banks, provident fund organization as per their requirements but later on it expand its operation in foreign market too. TCS' development of integrated heterogeneous computer networks led to the release of The Falcon (Fast Access Local Computer Network) in 1984. This was done ahead of time for commercial goods that would eventually become leaders in their respective industries. TCS started trading publicly in 2004 on the Bombay Stock Exchange and National Stock Exchange (NSE). TCS offers a variety of services at the moment, including business consulting, IT, BPO (business process outsourcing), infrastructure, and engineering. The company has operations in Asia, the Middle East, Europe, and America. The company's headquarters are in Mumbai, India. The largest employer in the planet, TCS currently

employs more than 6 lakh people in both India and other countries.

Review of literature:

Judith Priya et al (2018) undertook a study to use valuation ratios to examine the potential of both Tata Consultancy Services (TCS) and Infosys. The analysis came to the conclusion that Tata Consultancy Services' (TCS) generated more value than Infosys'.

Venkatachalam K et al (2016) conducted a study to examine TCS's working capital, liquidity, solvency, and profitability trends during the course of the study's ten-year study period, from 2005–2006 to 2014–2015. The appropriate statistical and accounting tools and methodologies were used. According to the research, TCS's short- and long-term solvency positions were correctly maintained, which improved its trend in terms of liquidity and profitability.

Deeksha Suneja et al (2016) conducted a study to identify the impact of Corporate Social Responsibility (CSR) for evaluating the corporate excellence of four IT businesses, TCS, WIPRO, Infosys, and Tech Mahindra. The impact of CSR on share price per share as well as earnings per share, profit after taxes, and CRS were all examined by the researchers. According to the report, all companies raised their expenditure on CSR initiatives in 2015 compared to the year before, and this spending had a favourable effect on the company's earnings.

Vineet Singh (2016) did a study that demonstrated that TCS's Return on Equity was superior than that of Wipro's Return on Equity and that TCS's Return on Investment was superior to Wipro's Return on Investment. In comparison

to Wipro, the survey also showed that TCS had a stronger position in terms of profitability.

Shenbagam et. al (2015) An examination of Tata Consultancy Services' using financial ratios in terms of profitability and asset management effectiveness was conducted in the study. According to the current report, between 2011 and 2015, there was consistently high profitability and an absolute liquidity ratio. The company's return on net worth also demonstrated constant growth.

Hema A.S (2014) conducted a study to examine Tata Consultancy Services Ltd.'s financial performance. The study showed that TCS's liquidity position was good during the course of the study period in both the short and long terms. The business used its cash and all of its assets to increase earnings.

Objectives

In this study, the financial performance of TCS from 2006–2007 through 2020–2021 is examined. The following are more precise objectives:

- (i) To evaluate the company's financial performance using a few well chosen financial metrics.
- (ii) To investigate how the chosen company's profitability is impacted by liquidity and solvency.
- (iii) To determine the elements that significantly influenced the company's ability to generate value.

Methodology:

Collection of Data: The information about the chosen company for the years 2006–2007

through 2020–2021 that was used in this study was gathered from secondary sources, including the company's annual reports, official website, books and journals, and online resources.

Data analysis: It is generally acknowledged that financial statements or income statements merely display values and do not offer comprehensive information about the performance of the business entity. Only by careful investigation of the data present in the company's financial statement could in-depth results be produced. In this study, an evaluation of TCS's financial performance has been made. We are aware that efficiency ratios, like the current ratio (CR), which was used to measure liquidity, and the working capital turnover ratio (WCTR) and fixed assets turnover ratio (FATR), which were used to evaluate the effectiveness of managing working capital and fixed assets, respectively, are used to assess how well different assets are managed. Five profitability metrics, including the gross profit ratio (GPR), net profit ratio (NPR), return on total assets (ROTA), return on net worth (RONW), and earnings per share (EPS), were used in this study to assess the company's profitability.

Current Ratio (CR): The current ratio (CR), a liquidity metric, evaluates a company's ability to pay down its current liabilities. The greater the CR, the more readily available funds the corporation has to meet its immediate liabilities. In Table I, an effort was made to examine the CR and liquidity status of the chosen organisation. According to Table I, TCS's CR ranged from a minimum of 1.49 in 2009–2010 to a maximum of 6.40 in 2016–2017. It was, on average, 3.01. A rising trend that was judged to be statistically significant at the 1% level for the study period was revealed by the linear trend

line fitted to the CR series.

Working Capital Turnover Ratio (WCTR): This ratio aids in assessing the effectiveness with which the company uses its working capital. The efficiency of managing working capital increases with WCTR ratio. According to Table I, the WCTR for TCS varied from 6.63 in 2010–2011 to 1.60 in 2016–2017. During the research period, the company's average WCTR was 3.72. The linear trend line fitted to the WCTR series revealed a falling trend in TCS's working capital management during the study period, which was demonstrated to be statistically significant at the 1% level.

Fixed Assets Turnover Ratio (FATR): This efficiency ratio demonstrates how well a company uses its fixed assets to produce sales revenue. The higher is the FATR, more efficiently the company is able to manage its fixed assets. According to Table I, the FATR for TCS ranges from 6.23 in 2009–2010 to 11.74 in 2018–2019. For the research period, the company's mean FATR was 7.62. At the 1% level of significance, the straight line fitted to the FATR sample shows a rising trend that is statistically significant.

Gross Profit Ratio (GRP): This ratio calculates the company's net profit margin, which is the amount of revenue left over after all direct expenses have been paid. This ratio is founded on the idea that a business should generate enough profit per rupee of net sales, expressed as a percentage. A higher GPR shows that the corporation has successfully handled its core business operations. A relatively low GPR is unquestionably a warning indicator, necessitating a thorough investigation to determine what is to blame and the appropriate course of action. According to Table I, TCS's GPR

ranges from 25.63% in 2007–2008 to 31.69% in 2013–2014. It was, on average, 27.59%. The trend line fitted to the GPR data does show an upward trend, however it was not found to be statistically significant during the research period.

Net Profit Ratio (NPR): This ratio measures how much net income or profit is generated as a percentage of revenue. It also measures the overall efficiency of production, administration, selling, distribution and pricing etc. A higher NPR would ensure adequate return to the owners as well as firms. On the other hand a low NPR has the opposite implication. It also a danger motion for all stakeholder of the company. Table I indicate that the NPR of TCS lies between 20.96% in 2008–2009 to 28.56% in 2013–2014 and on an average it was 25.39% during the study period. A rising trend that was expressed by the straight line fitted to the NPR series during the research period was not determined to be statistically significant.

Return on Total Assets (ROTA): Investors can determine from this ratio how well the business converts the capital it invests into net income. The better the ROTA, the more profit the company may make with a given investment. The ROTA of TCS increased from 30.89% in 2008–2009 to 46.80% in 2013–2014, with an average of 39.38%, according to Table I. Despite the trend line fitted to the ROTA data showing an upward tendency, it was found that across the research period, it was not statistically significant.

Return on Net Worth (RONW): This ratio indicates how effectively the corporation is using shareholder capital. It is the relationship between profit after tax and fund invested by the owners in the business. A high RONW reveals that the owners' funds have been utilized by the company

in more efficient manner whereas a low RONW implies an opposite meaning. Table I indicate that RONW of TCS fluctuated from 30.31% in 2016-2017 to 46.62% in 2006-2007. On an average it was 39.38% during the period under study. The company's RONW series slop indicates a negative trend, but it was not determined to be statistically significant during the course of the investigation.

Earnings per Share (EPS): This ratio reveals the profitability of a firm on per-share basis. A greater EPS typically means that the equity shareholder will receive a larger return. According to Table I, TCS's EPS ranged from Rs. 28.71 in 2009–2010 to Rs. 131.15 in 2017–2018, with Rs. 75.50 serving as the research period's mean figure. The EPS series has a highly positive trend that is statistically significant at the 1% level, according to the linear trend equation fitted to the data.

Return on Capital Employed (ROCE): This ratio shows how well the company is utilizing its invested fund to generate more and more profit for the stakeholders. The higher value of ROCE implies the grater is the companies' capability to generate return by using its capital. Table I demonstrates that the ROCE of TCS is varied between 34.56% in 2008-2009 to 52.79% in 2019-2020 and average it was 42.04%. A rising trend that was found to be statistically significant at the 5% level of significance in the liner trend equation fitted to the ROCE series was observed.

A thorough rank test was conducted in Table II with the goal of better determining the financial performance of TCS under investigation. In this assessment, ranking was used to generate a composite score that incorporated all the values of chosen performance (financial) indicators, providing a more thorough assessment of financial

performance. The ultimate financial performance rankings, which were determined using the average of each year's individual rankings based on the selected ratios, were determined using the guiding premise that the better the financial performance, the lower the composite score, and vice versa (Sur, 2012). The company achieved the highest ranking in terms of financial performance in 2013–2014, according to this table. It was followed by the following years in that order: 2011–2012, 2019–2020, 2015–2016, 2018–2019, 2006–2007, 2014–2015, 2020–21, 2012–2013, 2017–2018, 2016–2017, 2010–2011, 2007–2008, 2009–2010, and 2008–2009.

Additionally in Table I In order to ascertain whether there was any consistency in the selected financial performance indicators of TCS during the study period, Kendall's coefficient of concordance was calculated. The computed value of W was tested using the Chi-square. Table I shows that the computed value of W was 0.213, which was deemed statistically significant at a level of 5%. It reveals that the company's selected performance indicator dimensions were very homogeneous during the study period.

An analysis of the degree of correlation between ROCE and WCTR and FATR was attempted in Table III. Although it is ideally desired that ROCE and WCTR and ROCE and FATR have a positive association, the analysis shows a negligible negative correlation between ROCE and WCTR, which does not show any trend, as well as a positive correlation coefficient between ROCE and FATR, It likewise failed to show statistical significance. It implies that the company's working capital and fixed asset management failed to establish themselves as substantial contributors to

its wealth generation during the research period. Although it is known in theory that working capital and effective fixed asset management act as aid in generating value for the business, the picture is not clear in this study.

Conclusion:

The current study demonstrated that only FATR and EPS showed statistically significant rising trends over the study period among the 10 performance measures of TCS that were chosen. According to the analysis of the composite score based on the chosen performance metrics used in the study, TCS had the best financial performance in the year 2018–2019, while the business had the lowest performance in the year 2004–2005. Another important finding of the study was that there was noticeable consistency in the company's ability to create value during the study period in terms of its liquidity, profitability, and working capital management effectiveness. The study also showed that there was no discernible positive or negative association between ROCE and WCTR or between ROCE and FATR over the course of the trial. It implies that the management of the company's working capital and fixed assets did not become substantial contributors to its wealth generation during the research period.

References:

- Alfalah, A. A., Muneer, S., & Hussain, M. (2022). An empirical investigation of firm performance through corporate governance and information technology investment with mediating role of corporate social responsibility: Evidence from Saudi Arabia telecommunication sector. *Frontiers in Psychology*, 13.
- Chiarello, T. C., Pletsch, C. S., da Silva, A., & da Silva, T. P. (2014). Financial performance, intangible assets and value creation in Brazilian and Chilean information technology companies. *Revistagalega de economía: Publicación Interdisciplinaria da Faculdade de Ciencias Económicas e Empresariais*, 23(4), 73-88.
- Egorova, A. A., Grishunin, S. V., & Karminsky, A. M. (2022). The Impact of ESG factors on the performance of Information Technology Companies. *Procedia Computer Science*, 199, 339-345.
- Ghali, B. A. A., & Habeeb, L. M. (2018). The relationship between information technology and strategic knowledge management and their impact on the financial performance of Iraqi companies. *Academy of Strategic Management Journal*, 17(5), 1-19.
- Goto, M. (2010). Financial performance analysis of US and world telecommunications companies: Importance of Information Technology in the telecommunications industry after the AT&T breakup and the NTT divestiture. *Decision Support Systems*, 48(3), 447-456.
- Hannon, A., Al-Sartawi, A., Musleh, M. A., & Khalid, A. A. (2021). Relationship between financial technology and financial performance. In *The Big Data-Driven Digital Economy: Artificial and Computational Intelligence* (pp. 337-344).
- A., Pawar, A., Rossi, M., & Rasal, D. (2020). Analysing the financial state of selected Indian information technology companies: the assessment towards foreseeing the future of industry. *International Journal of Intellectual Property Management*.
- Liang, T. P., You, J. J., & Liu, C. C. (2010).

A resource-based perspective on information technology and firm performance: a meta analysis. Industrial Management & Data Systems.

- Müller, O., Fay, M., & VomBrocke, J. (2018). The effect of big data and analytics on firm performance: An econometric analysis considering industry characteristics. *Journal of Management Information Systems*, 35(2), 488-509.
- Rathi, M., & Goyal, K. A. (2020). Financial Performance Analysis of Tata Consultancy Services Limited (A case study). *Productivity*, 60(4).
- Singh, K., & Sur, D. (2020). Analysing profitability and its determinants in Maharatna enterprises in India: a panel data approach. *International Journal of Business and Globalisation*, 25(3), 278-295.
- Sur, D., & Chakraborty, K. (2015). Financial performance of Maharatna central public sector enterprises in India: a case study of BHEL. *AshEse Journal of Business Management*, 1(2), 10-16.
- Sur, D., & Yadav, S. K. (2014). Trends in asset management efficiency in Maharatna central public sector enterprises: a cross-sectional analysis. *The Journal of Institute of Public Enterprise*, 37(3&4), 78-90.
- Yadav, R., & Yadav, R. (2019). Profitability trends in Hindustan Unilever limited-a study. *International Journal of Research in Social Sciences*, 9(12), 316-323.

Table: I Financial Performance Indicators

Year	CR	WCT R	FAT R	GPR	NPR	ROT A	RONW	EPS	ROCE
2006-2007	1.99	5.7	6.74	27.3	25.14	45.86	46.62	38.39	46.22
2007-2008	2.04	4.97	6.55	25.63	24.32	39.24	41.34	46.07	40.49
2008-2009	1.87	5.22	6.68	25.98	20.96	30.89	35.18	47.99	34.56
2009-2010	1.49	6.5	6.23	27.8	24.38	31.09	37.41	28.71	36.98
2010-2011	1.72	6.63	6.51	28.16	25.85	35.9	38.86	38.61	38.05
2011-2012	1.87	5.04	7.11	27.56	28.24	44.33	44.33	55.95	43.17
2012-2013	2.43	3.5	7.05	27.94	26.4	40.64	39.38	65.22	38.35
2013-2014	2.84	2.87	7.21	31.69	28.56	46.8	41.93	94.15	40.74
2014-2015	2.46	3.07	6.87	26.78	26.17	39.81	42.4	98.31	41.32
2015-2016	4.72	2.04	8	29.8	26.87	41.78	35.49	117.11	34.9
2016-2017	6.4	1.6	8.66	27.52	25.51	35.97	30.31	120.04	38.05
2017-2018	4.85	1.8	9.11	26.86	25.92	35.32	33.27	131.15	41.5
2018-2019	4.18	2.05	11.74	26.99	24.4	42.72	38.1	79.34	50.71
2019-2020	3.3	2.38	7.77	26.39	25.33	41.07	44.72	88.64	52.79
2020-2021	2.92	2.49	8.04	27.4	22.77	39.3	41.39	82.78	52.75
Minimum	1.49	1.6	6.23	25.63	20.96	30.89	30.31	28.71	34.56
Maximum	6.4	6.63	11.74	31.69	28.56	46.8	46.62	131.15	52.79
Average	3.01	3.72	7.62	27.59	25.39	39.38	39.38	75.50	42.04
SD	1.43	1.77	1.41	1.51	1.93	4.81	4.53	32.69	6.02
CV	2.11	2.10	5.40	18.32	13.15	8.18	8.70	2.31	6.99
Slope	0.21	-0.336	0.219	0.028	0.032	0.126	-0.209	5.473	0.731
t-Value	3.15	5.789*	3.47*	0.305	0.264	0.427	0.762	4.073*	2.334*
	7**	*	*					*	

Kendall's coefficient of concordance among the selected financial indicators (W) is 0.213 and Chi-square value is 26.397 (Significant at 5% level)

Source: Authors Calculation
*Significant at 5% level (1.761), ** Significant at 1% level (2.624)

Table: II Rank of Financial Performance Indicators

Rank of CR	Rank of WCTR	Rank of FATR	Rank of GPR	Rank of NPR	Rank of ROTA	Rank of RONW	Rank of EPS	Rank of ROCE	Sum of Rank	Final Rank
11	3	11	9	10	2	1	14	4	65	6
10	6	13	15	13	10	7	12	9	95	13
13	4	12	14	15	15	13	11	15	112	15
15	2	15	5	12	14	11	15	13	102	14
14	1	14	3	7	12	9	13	11	84	12
12	5	8	6	2	3	3	10	5	54	2
9	7	9	4	4	7	8	9	10	67	9
7	9	7	1	1	1	5	5	8	44	1
8	8	10	12	5	8	4	4	7	66	7
3	13	5	2	3	5	12	3	14	60	4
1	15	3	7	8	11	15	2	11	73	11
2	14	2	11	6	13	14	1	6	69	10
4	12	1	10	11	4	10	8	3	63	5
5	11	6	13	9	6	2	6	1	59	3
6	10	4	8	14	9	6	7	2	66	7

Source: Authors Calculation

Table: III Correlation between ROCE with WCTR and FATR

Correlation Coefficient (CC)	Between ROCE and WCTR	Between ROCE and FATR
Pearson's CC	-0.316	0.448
Kendall's CC	-0.172	0.321
Spearman's CC	-0.243	0.452

Understanding the Impact of Organic Facebook Marketing on the Consumer Engagement of New Business Entities in India

(Research Paper based on an experiment conducted in the real business environment)

Tooba Rahman Khan

M.Com Graduate,

Department of Commerce, D.A.V College,

Chhatrapati Shahu Ji Maharaj University, Kanpur.

Email: t00barahmankhan@gmail.com

About the Author: the author of the paper, Tooba is a Masters in Commerce (specialization in Marketing and E-Commerce) from D.A.V. College, C.S.J.M University, Kanpur. She has keen interest in understanding how the marketing mechanism works on social media platforms like Facebook, Instagram, Twitter and LinkedIn. After completing her post-graduation, she conducted a three-month long experiment on facebook business page of three newly set-up business entities, in the real environment to understand how impactful is organic facebook marketing for new business entities in India. This paper gives a detailed study of the same.

Abstract

Social media has a benefit over traditional media. It helps business entities build a brand in easier and cost-effective ways. However, it must be noted that based on the monetary investment on social media marketing campaigns, it can be classified into organic (or non-paid and free flowing) and non-organic (or paid and controlled) marketing. While evaluating the effectiveness of both the types remain of strategic importance to marketers and social media analyst, this paper focus on the organic aspect only.

In the paper, we have analysed the effectiveness of organic social media marketing in helping a new business entity build its brand. A three-month long research experiment was conducted on three newly set-up business entities namely- Cafeshala (a café in Gorakhpur, Uttar Pradesh), N. A Fashion (a retail business held by an entrepreneur in Kanpur) and a We Care Health Clinic and Diagnostic Centre (a polyclinic in the Kanpur city), in the real business environment. It focused on understanding the impact of organic facebook marketing strategies on the consumer engagement (interpersonal relationship between a consumer and a brand) of the three business entities, throughout the span of the experiment.

The study is based on both theoretical and empirical methods. While the theoretical part helped the author in understanding the fundamentals of social media marketing and in formulating organic social media marketing strategies for the business's facebook page. The empirical or the quantitative approach helped the author in evaluating the outcome of these strategies on consumer engagement of the business entities, respectively.

Observations recorded throughout the span of the experiment show that while it is not easy to seek consumer attention via organic marketing on facebook business page, if done in the right way, it can help new business entities boost their consumer engagement and earn consumer's loyalty in a successfully.

Keywords - Social Media Marketing, Facebook Marketing, Organic Marketing, Marketing Strategies, Consumer Engagement.

Introduction:

In marketing, consumer engagement is the measure of a brand's interaction with its customers across all touchpoints throughout their lifecycle. It is the interpersonal relationship between a consumer and the brand. Studies have proved that consistently engaging with the customers on a variety of channels not only helps a business build its brand but also add value beyond just transactional relationship.

A significant growth in the total number of internet users in the previous decade has made this easier. Businesses have adapted new models that not only help them reach to their target consumers and sell them products online but also build a connection with them, understand their changing demand and accordingly design new products to satisfy their needs.

Social media platforms like Facebook, Instagram, Twitter etc business play a vital role here. While the total number of social media users worldwide have reached 3.81 billion (48.3% of the global population) in year 2020, the number is anticipated to cross 4.41 billion by 2025. It is the best time to use the power of social media to engage with the target consumers and market goods and services accordingly.

Facebook being the oldest of the relevant social media platforms has the longest list of users.

As of 2020, it has 2.6 billion monthly active users worldwide. The number is anticipated to grow over years. Apart from helping the users build an online community, it gives business organisations a space to establish its brand.

Facebook page is a great free marketing for the same purpose. These pages let business identify themselves— not just through listing product offerings and services, but also by sharing links, images, and posts on a customizable page to give a better sense of a business's personality and character. It offers a great advertising platform where you can promote your products to the targeted audience both via organic and paid campaigns. Engaging post, sending personalized text, consumer interaction via facebook groups, interactive question and answer stories, facebook live conversations, facebook watch, collaboration with prominent influencers etc are tools to operate a successful organic marketing strategy. If done rightly, it can help business expand its organic reach.

Organic reach refers to the number of people who had an unpaid post from your page enter their screen. For personal pages, organic reach is pretty easy. However, the same cannot be said for a facebook business page. Facebook prefers to show paid content over the non-paid ones, making organic marketing a tough job. Most businesses give up on organic facebook marketing. But there is a good chance that your target audience is logging into their facebook profiles on an everyday

basis. Theoretically, if strategically used, organic facebook marketing can help a new business with low marketing budget expand its consumer engagement effectively. In this experiment, we study the implication of such strategies on three new business entities in the real business environment and conclude if organic facebook marketing is worth the efforts

Research Question:

This paper is based on a research experiment that aims to understand how impactful is organic facebook marketing on consumer engagement for new business entities in India.

Method/ Approach:

In the experiment, we adopt the two-theoretical and empirical approach. The theoretical approach helps us analyse the actual situation of organic marketing on the business's facebook page and accordingly design strategies for the same. In the empirical part, we use a quantitative method, namely the data collected from facebook insights and survey questionnaires to find out the effectiveness of organic facebook marketing on consumer engagement of new business entities.

Theoretical Approach: This approach focusses on the factors that influence the organic facebook marketing of a business. These should be taken into consideration while formulating social media marketing strategies for a business's facebook page.

- **Nature of the Business:** it refers to the type of business activities the entity is dealing in, namely- production, distribution, wholesale, retail, service sector, etc. Business entities should analyse the nature of their business be-

fore sketching an organic facebook marketing strategy for their business. Refer to Table A1: Nature of the Business Entities for more details on the same.

- **Nature of the Product:** it refers the key characteristics of the product dealt by the business. It should be noted that the term product here covers both goods and services. A business entity must understand the prime offerings their product has to make to the consumer to satisfy their needs. Refer to Table A2: Nature of the Products sold by the Business Entities for more details on the same.
- **Target Audience:** target audience refers to the part of the total facebook users whom your organic facebook marketing campaign is intending to target. It is based on factors like the age group, sex, taste and preferences, geographical factors etc of the facebook users. Refer to Table A3: Target Audience of the Business Entities for more details on the same.

It should be noted that based on the above-mentioned factors, we formulated a set of three different organic marketing strategies for facebook page of the concerning business entities, namely- Cafeshala (a café and lounge in Gorakhpur city), N.A Fashions (an online retail business held by an entrepreneur in Kanpur) and We Care Health Clinic and Diagnostic Centre (a polyclinic in Kanpur City). Each strategy was designed with the help of a professional social media strategist and were executed in the real business environment to the best of the ability for three consecutive months.

Empirical Approach: In this approach we adapt the quantitative aspects to evaluate how impactful the organic facebook marketing strategies were. Here, we analyse the data collected from

facebook insights and the survey questionnaire.

- Facebook Insights: it refers to the data pertaining to the total number of facebook followers on the business page, organic reach, facebook impression, total page likes etc.
 - Facebook Followers: it refers to the part of the facebook users who have opted-in to follow your facebook page or profile. They will receive an update of your new facebook post and feeds on their timeline. A smart facebook strategy aims that a business's facebook followers should be same as their target audience.
 - Page Reach: according to facebook, post reach is the total number of facebook users who saw the business's posts at least once in new feeds. While the users who view a paid post on their screen is paid reach, the one who view the non-paid post are the organic reach. It can be viral or non-viral. Since our study is based on organic facebook marketing, we tend to boost the organic reach.
 - Page Views: occasionally called page impression is the count of the total number of times a page is viewed on a website or the facebook mobile application over a given period of time. It is a good parameter to evaluate consumer engagement with a particular facebook page.
 - Page Likes: it refers to the total number of likes a facebook page attributes to the ads. It is an indication that the followers are showing support to the page and prefer seeing more content in future.

It should be noted that facebook insights

were analysed throughout the span of the experiment to help the business evaluate the rise or fall in the consumer engagement. Data collected for the three different business entities, namely- Cafeshala (a café and lounge in Gorakhpur city), N.A Fashions (an online retail business held by an entrepreneur in Kanpur) and We Care Health Clinic and Diagnostic Centre (a polyclinic in Kanpur City) at the starting point (S.P) and end point (E.P) of the experiment are given below in Table 4: Facebook Insights for the three Business Entities.

- Survey Questionnaire: an offline survey questionnaire was conducted in the span of the experiment to understand what percentage of the new customers learnt about the concerning business entity via its facebook page. It gave us a better understanding of how well is organic facebook marketing helping the new business grow. Tabular representation of the data collected during the survey is given in the Table 5: Survey Questionnaire
 - Out of the 217 survey forms filled by the customers in business 1 (Cafeshala), 59 customers (23%) selected facebook page/group in answer to the question "how did you learn about Cafeshala?". Refer to Survey Report for Business 1 for better understanding.
 - Out of the 98 survey forms filled by the customers in business 2 (N.A Fashions), 37 customers (38%) selected facebook page/group in answer to the question "how did you learn about N.A Fashions?". Refer to Survey Report for Business 2 for better understanding.
 - Out of the 183 survey forms filled by the customers in business 3 (We Care

Polyclinic), 61 customers (33%) selected facebook page/group in answer to the question “how did you learn about We Care Health Clinic and Diagnostic Centre?”. Refer to Survey Report for Business 3 for better understanding.

Limitations:

Strategies designed for organic social media marketing of the facebook page of the three business entities were implemented to the best of the abilities. However, it was noted that in the first few weeks of the experiment, businesses failed to abide by the guidelines. While Cafeshala (business 1) opted to boost two of their post via facebook paid campaign, We Care Health Clinic and Diagnostic Centre (business 3) did not record the change in the consumer engagement for the first week.

To counter these problems, the author evaluated the impact of the two paid post uploaded by Cafeshala (business 1) on the consumer engagement (mostly post reach, post views and post like) and took it into consideration throughout the experiment. Post likes were deduced from the total page likes at the end of the experiment for evaluating a more accurate consumer engagement.

In case of We Care Health Clinic and Diagnostic Centre (business 3), facebook insights were examined from a week after the actual experiment had started and continued for three months since then.

Result and Conclusion:

Based on the findings derived from the empirical approach in the experiment, we can safely conclude that organic facebook marketing has not only shown a positive change in the number

of facebook followers and facebook impression (page views) but also helped new business entities, namely- Cafeshala (a café and lounge in Gorakhpur city), N.A Fashions (an online retail business held by an entrepreneur in Kanpur) and We Care Health Clinic and Diagnostic Centre (a polyclinic in Kanpur City) boost their consumer engagement over the span of the experiment. The graph Change in the Consumer Engagement over the span of the experiment gives a clear picture of the rise in the consumer engagement of the three business entities over the span of the experiment, i.e.: from starting point S.P till the end point E.P. Organic facebook marketing is clearly a smart marketing tool.

Other theoretical studies proof that regular facebook users who engage with a brands online content show more interest to their organic content. Organic post not only builds an emotional connection between the consumer and the business but also helps the business gain consumer's loyalty in a longer run.

Hence, the paper concludes that organic facebook marketing is helpful for a business that focus on a long-term goal. For new business entity, a strategically planned facebook page can not only help the business build its identity and sell products to the target customers but also understand them and establish an interpersonal relation in a long run. It helps the business gain consumer's loyalty both towards the brand and the product line.

References:

- Aydin, G. (2020). Social media engagement and organic post effectiveness: A roadmap for increasing the effectiveness of social media use in hospitality industry. *Journal of Hospitality Marketing & Management*, 29(1), 1-21.

- Chawla, Y., & Chodak, G. (2020). Social media marketing: Organic promotions of web-links on Facebook (No. WORMS/20/03). Department of Operations Research and Business Intelligence, Wroclaw University of Science and Technology.
- Felix, R., Rauschnabel, P. A., & Hinsch, C. (2017). Elements of strategic social media marketing: A holistic framework. *Journal of Business Research*, 70, 118-126.
- Hollebeek, L. D., Glynn, M. S. & Brodie, R. J. 2014. Consumer brand engagement in social media: Conceptualization, scale development and validation. *Journal of Interactive Marketing*, 28, 149-165.
- Nguyen Phuong Huyen, V. (2020). The effect of organic marketing on customer engagement in Social media Channel: Facebook.
- Read, W., Robertson, N., McQuilken, L., & Ferdous, A. S. (2019). Consumer engagement on Twitter: perceptions of the brand matter. *European Journal of Marketing*.

Tables:

1. Table A1: Nature of the Business Entities

	Business 1 (Cafeshala)	Business 2 (N.A Fashions)	Business 3 (We care Health Clinic and Diagnostic Centre)
Nature of the business	hospitality sector (café and lounge)	retail store	hospitality sector (health sector)

2. Table A2: Nature of the Products sold by the Business Entities

	Business 1 (Cafeshala)	Business 2 (N.A Fashions)	Business 3 (We care Health Clinic and Diagnostic Centre)
Nature of the product	food and drinks	Female clothing	service (medical assistance to patients)

3. Table A3: Target Audience of the Business Entities

	Business 1 (Cafeshala)	Business 2 (N.A Fashions)	Business 3 (We care Health Clinic and Diagnostic Centre)
Age Group (in years)	18- 30 (youth)	15-50	All age groups
Gender	Male, female and others.	Female	Male, Female and others
Place of Living	Gorakhpur city	Kanpur city	Kanpur city
Income	Average	Average	Average
Hobbies and Interest	Dining out	Fashion and Clothing	Health care, Fitness.
Medical Status	Healthy	Not Applicable	Active health concerns.

4. Table 4: Facebook Insights for the three Business Entities

Business 1 (Cafeshala)		
	S. P	E. P
Followers	1094	3321
Page Reach	187	371
Page Views	34	91
Page Likes	1082	2891

Business 2 (N.A Fashions)		
	S. P	E. P
Followers	132	487
Page Reach	37	71
Page Views	9	31
Page Likes	130	369

Business 3 (We Care Health Clinic and Diagnostic Centre)		
	S. P	E. P
Followers	179	589
Page Reach	49	89
Page Views	7	20
Page Likes	176	387

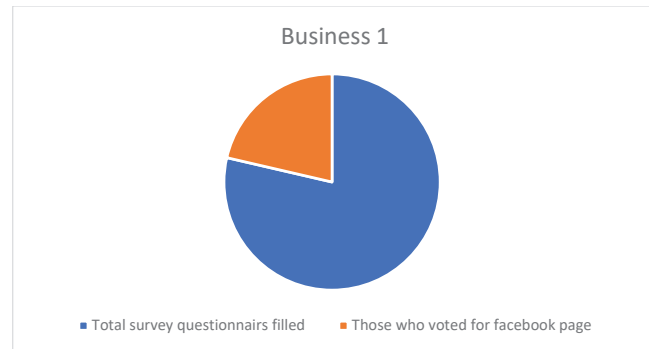
5. Table 5: Survey Questionnaire

	Business 1 (Cafeshala)	Business 2 (N.A Fashions)	Business 3 (We care Health Clinic and Diagnostic Centre)
Total Survey Questionnaire answered	217	98	183
Those who voted for the facebook page	59	37	61

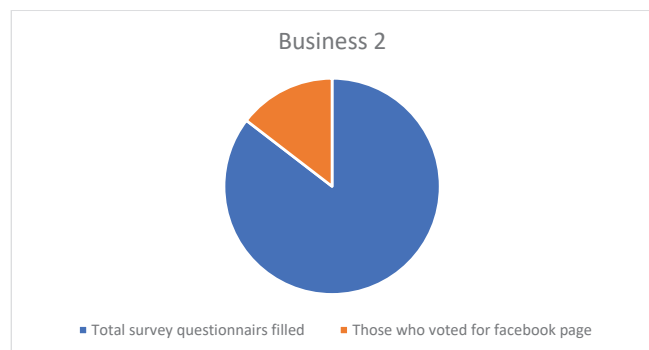
Graphs:

1. Survey Questionnaire:

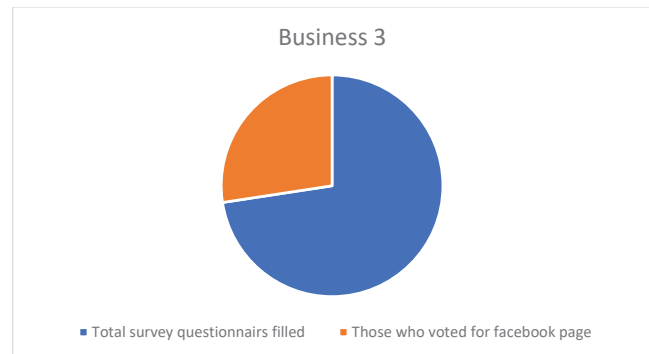
i. Survey Report for Business 1



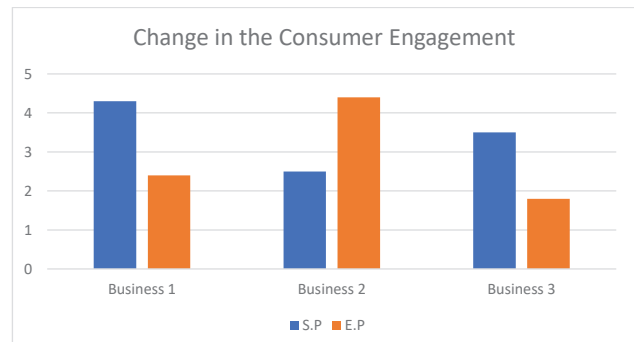
ii. Survey Report for Business 2



iii. Survey Report for Business 3



2. Change in the Consumer Engagement over the span of the experiment



Growth of Self-Help Groups: An approach towards Women's Empowerment

Saubhagya Singh

Research Scholar,

Department of Commerce,

M.G. Kashi Vidyapith, Varanasi U.P., India (221002)

Email: saubhagyasingh72@gmail.com

Prof. Sudhir Kumar Shukla

Ex- Head,

Department of Commerce,

M.G. Kashi Vidyapith, Varanasi, U.P., India (221002)

Email: shivmgkvp@gmail.com

Abstract

In the context of a woman's development, empowerment is a strategy for recognizing, engaging, and eliminating barriers from her path so that she can have more control over her life and environment. It is a diverse, active process that should help women reach their full potential and strength in every aspect of life. India hopes for a time when Indian women are self-sufficient and autonomous. It is unfortunate that women's actual and potential social roles have been neglected for generations due to inertia, ignorance, and conservatism, preventing them from making their proper contribution to societal progress. Additionally, they are denied their due status and access to developmental resources and services, which adds to their marginalize, as a result of inaccurate and/or incomplete information regarding their contributions to family and society. Women must be given more power by expanding their awareness, education, abilities, and technology use, which will aid in the society's overall development. Self Help Groups (SHGs) are an idea that is proving to be a useful tool for the empowerment of women. SHG is a group of rural poor people, mostly women, that provides microcredit for people to start their own businesses. A workable solution for empowering women is the development of entrepreneurial skills and income-generating ventures. It generates income and offers flexible working hours in accordance with the needs of housewives. The current goal is financial independence. Engaging in income-generating activities contributes to women's overall empowerment. This particular research was carried out with the special aim of investigating the empowerment of women through entrepreneurial activities of self-help groups.

Keywords: Empowerment, Self-Help Groups, Social Development, Rural Development

Introduction

“Empowerment of women leads to the development of a good family, good society and, ultimately, a good nation.” – Dr A.P.J. Abdul Kalam

Swami Vivekananda in one of his discourses had observed that “there is no chance of the welfare of the world unless the condition of women is improved. The ability of a bird to fly with one wing is not possible. “. His study casts a terrifying light on the natural potential of women, whom is born with great traits like competence, compassion, conviction, passion, drive, resilience, resolution, and the ability for social contact. They can stress their contribution as an important tool for the future sustainable development of the world’s society and the economy. Due to gender-based discrimination and social norms, disproportionate participation in unpaid work, and unequal access to education, health care, property, financial services, and other services, girls and women who make up half of the global population continue to face barriers to engaging in economic and business activities.

Self-Help Groups are described as “a homogenous group of rural poor people voluntarily created to save whatever amount they can readily save Out of their wages” by the National Bank for Agricultural & Rural Development (NABARD). They mutually agree to contribute to a group fund that will be used to lend money to members for working capital and unforeseen borrowing needs. Sense of community is the best spirit of the society, Self-help groups aim to remove poverty, raise their level in social life and solve their problems in rural India, As the credit linkage concept spreads throughout India today, women in the nation are being moulded, fostered, and supported in their efforts to eradicate poverty. For the lower strata or

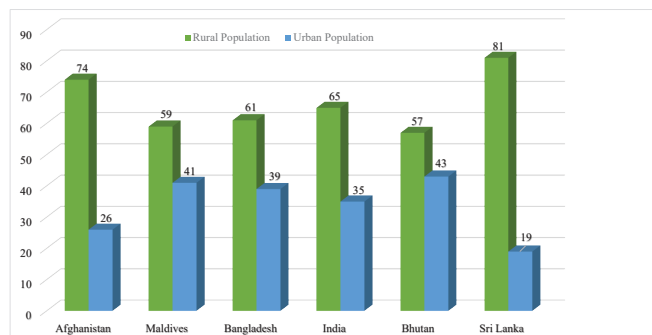
poor women of the society so that they can stand on their own feet, however, successful operation of such group projects seems like a dream in the scenario of poor women, Self Help Group is a living organization whose sole goal is economic development However, in the present context SHG credit linkage model is being operated across the country (Priyadarshi 2022). And through these efforts are being made to get loans which aim at forming and nurturing women self-help groups across the country with the agenda of poverty alleviation. Rural development is one of the main pillars of the country’s progress or the class is backward, even after seven decades of the country’s independence, other aspects of development The government have an important role in developing the self-help groups in India with collaboration to the corresponding state government for this purpose self-help development fund are used for resulting this issue related to imbalances and variances in the state wise self-help groups linking program with particular focus in the backward reigns of the corresponding state. “Mahatma Gandhi had said the soul of the country is in our villages”(R Gupta 2022).

According to International Labor Organization, women are typically underrepresented in power and decision-making role, received unequal pay for equal work. They often faced legal and other barriers that affect their opportunities at work.

1 Women make up 48 percent of the Indian population but have not benefitted equally compared to majority of men’s population. India has the lowest female labour force participation rates in comparison to the world. Less than one-third of women population are working or actively

looking for a job. Among them 15 years or older than 15 are working or desired to work.

Figure 1: Urban and Rural Population of certain Asian countries



Source: From World Bank Annual Report 2021;

From the above graph it is clear that the participation of rural people is more than half of overall population in countries like Afghanistan, Maldives, Bangladesh, India, Bhutan, Sri Lanka. In Sri Lanka, the gap between urban and rural population is lowest i.e., 19%. Afghanistan on second position with the gap of 26%, in India 65% population lives in rural area. Bhutan being the lowest with a gap of 43%.

Literature Review

Singh, S., Kaur, S. (2019) also examined the SHGs programme of the Peoples Education and Development Organization and made an effort to gauge its social and economic effects on SHG members' households. They saw that participants in the SHGs programme were more engaged in decision-making and knowledgeable about numerous organizations and programmes. The members also receive information on the various credit options and noted that there are signs of rising household income, food security, and level of living.

Brody et al. (2017) produced the first comprehensive analysis of the effects of SHGs on various aspects of women's empowerment, which included 11 qualitative and 23 quantitative impact studies. The study reports favorable effects aside from the psychological aspect. Furthermore, it states that "the included evaluations usually did not include appropriate information concerning the specifics of the actions that were carried out by the SHGs." Therefore, it is still uncertain which SHG model is the most efficient. (15). In fact, the SHG concept is very diverse and can be centered on mutual support among its voluntarily participating members in the political, social, legal, or economic spheres.

Dr. Mahavir N. Sadavarte (2017) Nearly 49% of India's entire population is made up of women. The growth of every society and nation depends on the empowerment of rural women. Because it is crucial to the advancement of women in rural areas, the author has concentrated on "Self Help Groups and Comprehensive Empowerment of Women in Rural Areas." The current topic also has connections to business, economics, sociology, human science, human rights, and social welfare.

Sastry, B. V. H. K., Rao, S. S., Devi, S. A. (2016) Current Issues and Concerns with Micro Finance, Self-Help Groups, and Women's Empowerment, Women's empowerment in rural areas, with a focus on microfinance institutions, NGOs, and self-help groups Development of Women - Empowerment, Government's Role in the Growth of Women Entrepreneurs in India,

Rajendran M.S, William T.A and Raja D.V.(2013) According to their study, "Microfinance

and Women's Empowerment through SHGs in the Kanyakumari District," Published in Volume 3, Issue 5 of the Indian Streams Research Journal. The article's focus is on Kanyakumari District SHGs' role in empowering women through microloans. Primary and secondary data were used to create this article. These studies examine how microfinance is becoming a potent instrument for empowering the target community to become self-sufficient. Women's empowerment, independence, and sustainability are hot topics everywhere in the world. This article has talked about family income, expenditure, and group savings. Conclusion: It is clear from the research that women are empowered through self-help groups and a variety of financial activities, including saving, borrowing, budgeting, and rotating monies. Due to many motivational programs and schemes run by SHGs, women are becoming more independent and self-reliant.

Geethanjali R and Prabhakar K.(2013) research was done on the "Economic Development of Women through Self-Help Groups in YSR District, Andhra Pradesh, India." The establishment of self-help groups, women's entrepreneurship, and the economic empowerment of women when they join self-help groups in YSR district, Andhra Pradesh, India, are the main topics of their research articles. The articles' primary goals are to profile the self-help group participants in the YSR Kadapa District. Based on primary and secondary sources, this research article. The group savings, sangha fund rotation, bank loan, loan repayment, social and community action initiatives have all been covered in this article. In their publications, analysis is centered on the sociopolitical effects of the self-

help group program before and after on several facets of women's lives. According to the paper's conclusion, women's engagement in self-help groups has undoubtedly had a significant impact on the way that disadvantaged women live their lives and on how empowered they are as individuals, family members, community members, and members of society as a whole. This essay made the case that women should continue to be interested in their own self-empowerment and be ready to deal with any issues that may arise in their enterprises.

Suja. S (2012)⁸ His discussion paper, "Women Empowerment Through Self-Help Groups: An Evaluation Study," was published. Volume 6, Issue 3 of Sona Global Management Review was released. The articles' primary goals are to understand the relationship between demographic characteristics and empowerment during the post-SHG period. This essay is based on a survey. This essay makes an effort to quantify women's empowerment. The goal of this study paper is to provide all the answers. It addresses all of the signs of women's empowerment throughout the process. In their article, the authors also analyze SHG members' attitudes on women's empowerment and women's empowerment through self-help groups with regard to SHG members in Tamil Nadu's Salem District. These articles examined member profiles and changes in their financial circumstances, including their assets, individual income, savings, loans, families, and income. This study used an opinion survey to gauge how far women's empowerment has progressed. The performance of SHGs is not taken into account because this essay solely focuses on the empowerment components. This study made

the case that the members needed to be trained in business operations.

Objectives

- To study the growth of Self-Help Groups in emergence of Indian economy.
- Role of Self-Help Groups (SHGs) Programmes in Empowering Women
- To analyse the trends of Self-Help Groups.
- To find the Role of Self-Help Groups in women empowerment.
- To find out the challenges faced by women working in Self-Help Groups.
- To study the growth of Self-Help Groups in emergence of Indian economy.

Table no. 2: Amount sanctioned and disbursed for Self-Help Groups

Year	Total Self-Help Groups	Total Sanctioned Amount	Total Disbursement		Total Outstanding	
			Amount	Percentage	Amount	Percentage
2017-18	2752936	10640940	4425609	41.59	6215331	58.41
2018-19	3144221	13949323	6145697	44.06	7803626	55.94
2019-20	3421516	16404429	7090325	76.12	9314104	56.78
2020-21	4778244	20178465	8462538	41.94	11715927	58.06
2021-22	4288977	27044321	12033219	44.49	15011102	55.51
Value in Lakhs (INR.)						

Source: National Rural Livelihoods Mission (NRLM), Bank Linkage⁹

The expenditure amount sanctioned and disbursed by the government is shown in the above table. In the F.Y. 2017-18, 41.59% of total sanctioned amount i.e. Rs.10640940 were disbursed which has been

increased Y-O-Y basis. The total sanctioned amount in FY 2019-20 was Rs.16404429 that was 76.12% of total sanctioned amount which is highest in disbursement. In FY 2021-22, the total sanctioned amount was Rs.27044321 and the disbursed amount was the Rs.12033219. In percent it was 44.49 of the sanctioned amounts.

Table no. 3: Data of Self-Help Groups regarding set target and achievement.

Value in Lakhs (INR.)			
Year	Total Self-Help Groups Target	Total Self-Help Groups Achieved	Percentage Of Achieved
2017-18	2065191	2752936	133.30
2018-19	3102598	3144221	101
2019-20	3092721	3421516	110.63
2020-21	3227730	4778244	148.04
2021-22	3731110	4288977	114.95

Source: National Rural Livelihoods Mission (NRLM), Bank Linkage⁹

In the year 2017-18, the target was to make Rs. 2065191 lakhs Self-Help Groups. However, total Rs.2752936 lakhs Self-Help Groups were actually made. Therefore, the total achieved Self-Help Groups was 133.30% of the target set. Similarly in F.Y. 2018-19 the actual achieved Self-Help Groups was 101% of the target set. The reason for decline in the actual percentage from F.Y.2017-18 to 2018-19 was the covid19 pandemic. The percentage of achieved Self-Help Groups to the targeted Self-Help Groups in the F.Y 2020-21 and 2021-22 was 148.04% and 114.95% respectively.

• Role of Self-Help Groups (SHGs) Programmes in Empowering Women

Recognizing the huge potential of SHGs and offering small loans (without collateral), as well as other services (such as capacity building, training,

product marketing, and micro insurance), in order to satisfy the expanding credit needs of enormous sections of Indians who continued to rely on informal lenders. The Reserve Bank of India (RBI) made the choice to create a favourable environment for the orderly development of SHGs in the nation. To that end, it allowed SHGs to open savings bank accounts with banks in the year 1993 and instructed banks to include financing of SHGs in their lending to the underprivileged sections of society. The RBI issued policy directions to lenders in the year 2000 stating that any lending provided to individual Self-help groups borrowers either directly or through an intermediary would be regarded a priority sector loan. Banks were urged to provide their branches strong incentive to finance the SHGs and to let the SHGs control their own group dynamics. As a result, the Self-Help Group-Bank Linkage Program (SHG-BLP) officially entered the mainstream. The National Bank for Agriculture and Rural Development (NABARD) played a significant role in the formation of SHGs in the year 1992 using a partnership model between SHGs, banks, and NGOs. NABARD also coordinated the efforts of these organisations' agencies to provide financial and technical support to SHGs as well as the implementation of GOI schemes based on SHGs.

View from Above: Self-Help Group Programs

SHG - Bank Linkage Programme (SHG-BLP)

As noted earlier, NABARD launched this initiative for SHGs in the year 1992. With the RBI's permission, these SHGs took a job with banks in the year 1993. Self-Help Groups (SHGs), the core of India's microfinance movement, are often informal groups of 15 to 20 members, mostly women, who pay modest donations to a savings pool. An SHG can link to a bank, which opens a savings bank account

for the SHG and offers loans up to four times the group's funds, after saving regularly for six months, making small loans, and keeping a record. The SHG can then lend to its members, helping them in building their capacity and engaging in various income-generating activities. SHG-focus BLP's is on the advancement of women (M.Yadav 2021).

Swarnjayanti Gram Swarozgar Yojana (SGSY)

SGSY is a programme that GOI introduced in rural areas in the year 1999 with a goal on promoting self-employment and uniting both poor men and women into self-help groups. Its activities include training, credit, technology, infrastructure, and marketing. Commercial banks, Regional Rural Banks, and Cooperative Banks are tasked with carrying out the project, which is supported by the federal government and the states. The program's goal is to lift every assisted family out of poverty within three years by providing them assets that can generate an income through a mix of bank credit and government money.

Swarn Jayanti Sahari Rozgar Yojana (SJSRY)

SJSRY is a centrally sponsored scheme that was established in the year 1999 to help the underemployed and unemployed in urban areas find gainful employment either through assisting in the formation of smaller firms or by giving pay jobs.

Micro-Enterprise Development Programme (MEDP)

In order to strengthen the capacities of SHG members through appropriate skill upgradation in current or new livelihood activities in agriculture and non-agriculture, as well as to enlarge their knowledge of enterprise management, business

dynamics, and rural markets, NABARD introduced MEDP in 2006. It made the decision in the year 2007 to aid SHG Federations by providing financial support for training, capacity-building, and exposure trips.

National Rural Livelihood Mission (NRLM)

10With an initial budget of \$5.1 billion, the Ministry of Rural Development, GOI, began NRLM by reforming SGSY on April 1, 2013. The world's largest effort to help the poor improve their quality of life is this programme. The World Bank has given a credit worth \$1 billion. This project's main goal was to establish SHG groups and assist them in beginning entrepreneurial ventures. In category I districts, NABARD is implementing the Interest Subvention Scheme for women SHGs under the NRLM for RRBs and cooperative banks.

National Urban Livelihood Mission (NULM)

By reforming SJSRY, NULM was introduced in the year September 2013 and put into practise in all district headquarters and cities with a population of a lakh or more. Its goal is to end urban household poverty by giving them chances for gainful self-employment and skilled wage work, which would enhance their life quality significantly and allow them to create institutes for the underprivileged at the grass-roots level.

Livelihood and Enterprise Development Programme (LEDP)

NABARD developed a thorough and all-encompassing strategy for the sustainable Livelihood and Enterprise Development Program (LEDP) in the year December 2015 and launched it as a pilot programme³. The overall goals of LEDP

are to identify sustainable livelihood activities using a participatory approach, to strengthen the capacities of SHG members by identifying skill gaps and appropriate skill upgradation, to raise SHG members' income levels by improving/acquiring skills to engage in livelihood activities with bank credit support, to strengthen SHG members' capacity for managing their enterprise, business development, and marketing, and to provide mentoring. Additionally, LEDP plans to promote livelihoods through both on- and off-farm activities.

- **To find the role of Self-Help Groups in women empowerment.**

Give them access to economic activity, and they will have access to power and self-confidence to which they have previously been strangers, said Mahatma Gandhi in Young India. "In our hamlets, millions of women are aware of what unemployment entails" (1930).¹¹

Despite the multifaceted growth India has subsequently experienced, over a century has passed, and his concerns are still pertinent today. Despite making up about half of India's 1.2 billion population, women are mainly excluded from economic activity and decision-making, as well as from having access to resources for health, nutrition, education, etc. Low female labour force participation rates—India recorded a meagre 22.3% in the year 2021 compared to 30.3% in the year 1990—reflect this exclusion and discrimination.¹²

Economically weaker groups have experienced a severe loss of jobs and income in the context of the growing priority being given to innovation, technology, and self-sustenance, especially in a post-covid period. Even while

women have the potential to help with household economics, they frequently lack the agency to take part in decisions regarding sources of income, which often puts their families perilously close to poverty. Female engagement in the economy is still essential to India's standing in the world, especially since the nation is on the verge of a significant shift in terms of changing employment prospects, urbanisation, and innovation. Even though there are 432 million working women worldwide, 343 million do not have formal jobs that are compensated. There are an estimated 324 millions of them who are not in the labour force, and an additional 19 million who are but are not employed. As a result, the formal economy either fails to take into consideration the nature of women's employment or women are prevented from accessing formal employment because of existing socio-cultural complications. Even though we live in a deeply patriarchal culture, women's access to chances and economic advancement are constrained in compared to men's, due to the prevalent tradition of female home responsibility and social stigma.

- **To find out the challenges faced by women working in Self-Help Groups.**

Members/Participants ignorance

Even while the authorities take steps to educate the group members about the programmes that are advantageous to them, the majority of the group is still uninformed of the support programmes that are available to them.

Insufficient Training Facilities

The SHG members are not provided with sufficient training opportunities in order to compete with strong units in the areas of product selection, product quality, production procedures, managerial

aptitude, packing, and other technical skills.

Issues Associated with Raw Materials

Typically, each SHG buys raw materials from the vendors on an individual basis. Since they buy raw materials in lesser quantities, they might not be able to benefit from discounts or other large-scale procurement advantages like credit facilities. Additionally, there is no organised mechanism in place to gather raw materials in large numbers and effectively maintain them. There is no connection to significant raw material sources. The majority of SHGs are unaware of the key raw material suppliers' terms and conditions. All of these factors raise the price of raw materials.

Issues with marketing

The SHGs' functioning in the area of marketing is crucial. However, they encounter several issues when promoting their own products.

These are the main issues with marketing that need to be addressed.

- A lack of adequate orders
- There is no connection with marketing agencies.
- The absence of sufficient sales promotion strategies.
- The lack of a long-term market for SHGs' goods.
- Lack of an appropriate brand name.
- Poor or ugly packaging system.
- Poor product quality brought on by the use of old technology a small market
- Vigorous rivalry from other important providers.

- i. The absence of a clearly defined and cohesive marketing distribution route

Lack of Unity and Stability, Particularly Among Women SHGs

In the instance of SHGs where women are the majority, it is discovered that there is no stability of the units because many married women are unable to associate with the group because of their relocation. In addition, the women members lack harmony for private reasons.¹³

Ineffective financial management

Additionally, it has been discovered that in certain units, the profits from the business are not properly reinvested, and the money is instead used for other domestic and personal expenses, such as weddings and home building.

Inadequate line department support

The group members must approach the line officers to ask for help and support. The line officers, however, do not assist the SHGs. This will undermine the plans' primary goal.

Insufficient financial support

It has been discovered that the majority of SHGs do not receive enough financial support from the relevant agencies to cover their actual needs. Even the needs of labour costs are not being met by the financial authorities' inadequate subsidies.

Conclusion

Without the active participation of women in economic and social activities, no nation can attain its top levels of growth and prosperity so over long term. In spite of ranking 140 out of 156

countries, India continues to have a niggardly low level of women's empowerment and is still the third-worst performer in South Asia. In the early 1990s, the RBI took policy action to create a favourable environment for the orderly development of SHGs in the nation in light of their enormous potential to improve the economic status of women. This policy initiative aimed to empower women and increase their income-generating capacities. Through their business endeavours, Self Help Groups (SHGs) have been successful in empowering rural women. The income, spending, and saving behaviours of rural women have risen. Due to their participation in SHGs' business and other activities, rural women have more self-confidence, self-reliance, and independence. SHG activities could incorporate reading as a core activity. SHGs could be connected to government-run literacy programmes. For the SHG members to overcome cognitive limitations and comprehend governmental policies, technical understanding, and acquire necessary skills, literacy levels may need to be raised. Rural women may be encouraged to get financing to launch their own businesses. Through self-help groups, knowledge is spread about various credit options, financial incentives, and subsidies. Given that women are less technologically literate than males, they must adopt labour-saving, drudgery-reducing, income-generating, and efficiency tools. All stages of education, beginning with elementary, could include entrepreneurship instruction and training. It might aid rural women in developing a positive sense of self, self-reliance, self-confidence, and independence.

Suggestions

10. Women should be made aware of the government activities through awareness campaigns.

11. Families and the public ought to assist women more.
12. Banks and financial institutions ought to be more lenient when giving loans to women.
13. Women should enhance their technology if they want to succeed and attain their goals.
14. NGOs could start a variety of programmes and activities to educate women and motivate them to advance in their desired fields.

Limitations

The study is limited to five years i.e. from the F.Y. 2017-18 to 2021-22. In the paper, comparison between set targets and achieved targets have been done and percentage of total disbursed amount and total outstanding amount of the total sanctioned amount have been mentioned. Thus the analysis of the growth of Self- Help Groups is limited to few parameters.

Reference

1. Priyadarshi, A., Pandey, A. K., Singh, R., & Wadhawan, S. (2022). Impact of mergers & acquisitions on job satisfaction and employee productivity in Indian banking. *Journal of Information and Optimization Sciences*, 43(6), 1443-1452.
2. Gupta, R., Pandey, A. K., & Bansal, S. (2022). Strategic Shift in Marketing Communication During COVID-19. In *Cases on Emerging Market Responses to the COVID-19 Pandemic* (pp. 40-58). IGI Global.
3. Singh, S., Kaur, S. (2019). *Empowerment of Women Through Self Help Group: Impact of Self Help Groups on Empowerment of Women in Ludhiana and Hoshiarpur District of Punjab*. Germany: LAP LAMBERT Academic Publishing.
4. Brody, C., T. D. Hoop, M. Vojtkova, R. Warnock, M. Dunbar, P. Murthy, and S. L. Dworkin. 2017. "Can Self-Help Group Programs Improve Women's Empowerment? A Systematic Review." *Journal of Development Effectiveness* 9 (1): 15–40. doi: 10.1080/19439342.2016.1206607 [Taylor & Francis Online], [Web of Science ®], [Google Scholar]
5. Dr. Mahavir N. Sadavarte. *Self Help Group and Comprehensive Empowerment of Women in Rural Area*. N.P. RUT Printer and Publisher, 2017.
6. Sastry, B. V. H. K., Rao, S. S., Devi, S. A. (2016). *Women Entrepreneurship: Financial Inclusion and Micro Financing for Self Help Groups in Andhra Pradesh*. India: BS Publications.
7. Venkatesh J and .Kala K.(2010) 'Empowerment of Rural Women All The Way through Self-Help Groups' 'Published by International Journal Of Management, Vol.1.
8. Udupi P. E., "A Study of Women Self Help Groups in Walwa Taluka District Sangli". An M. Phil Dissertation submitted to Shivaji University in 2008.
9. Suja S (2012)' 'Women Empowerment Through Self-Help Group- An Evaluative Study' 'Published by, Sona Global Management Review, Vol.6, Issue.3.
10. Yadav, M., Singh, S. K., Pandey, A. K., Achary, A., & Tiwari, S. (2021). Role of High Technology Medical Devices and Its Uses in Patient Care. *Indian Journal of Forensic Medicine & Toxicology*, 15(1).

11. https://daynrlmbl.aajeevika.gov.in/UI/Achievement/ProjectWiseAchievement_new.aspx
12. <https://www.rbi.org.in/scripts/NotificationUser.aspx?Id=11967&Mode=0>
13. <https://www.livemint.com/opinion/online-views/selfhelp-groups-play-a-big-role-in-the-empowerment-of-women-11646670524028.html>
14. <https://www.yourarticlelibrary.com/india-2/self-help-group/problems-faced-by-shgs-and-suggestion-to-minimize-it/66720>.

Impact of Taxation on Micro, Small and Medium-Sized Businesses in India

Satvik Mishra

Research Scholar,

Department of Commerce,

M.G. Kashi Vidyapith, Varanasi U.P., India (221002)

Email: mishraji.satvik@gmail.com

Prof. Sudhir Kumar Shukla

Ex- Head,

Department of Commerce,

M.G. Kashi Vidyapith, Varanasi, U.P., India (221002)

Email: shivmgkvp@gmail.com

Abstract

Micro, small, and medium-sized firms are critical to a country's economic development. In recent years, particularly in the areas of job creation, innovation, increasing people's living conditions, and financial contribution to the country's GDP development, the value of micro, small, and medium-sized businesses to economic growth in any nation cannot be overstated. Some of the major topics covered in this research paper include the challenges of a lack of financial expansive resources, entrepreneurial management skills, unqualified labour, low-quality goods production, a lack of a market for their products, infrastructure, and most importantly, a taxation policy that does not promote but rather hinders their potential for growth.

Keywords: *Micro, small and medium-sized businesses, Tax systems and kinds of taxes, The role of micro, small and medium-sized businesses, Impact of taxation, Taxation policies*

Introduction

India has a three-tiered tax structure, with taxes levied by the Central Government, State Governments and Local Authorities such as Municipal Corporations. The right to levy taxes in India is granted by the Constitution. The Constitution clearly defines distinct taxes to be collected by the centre and the states. Article 265 of the Indian Constitution states that "No tax shall be levied unless authorised by law." As a result,

every tax in India is backed by a specific supporting legislation authorised by either parliament or state legislative councils. Micro Small and medium-sized enterprises have developed as a critical part of the Indian economy, considerably contributing to job creation, innovation exports, and inclusive development. It is the backbone of the Indian economy, accounting for around 110 million employments, contributing approximately 29% of the country's GDP, and accounting for 48.1% of total exports. There are almost 63 million such

businesses in the manufacturing, service, and commerce sectors. The impact of taxation on such enterprises demonstrates that despite ostensibly egalitarian fiscal regimes, new companies face an uphill struggle. Businesses pay up to 10% more tax as a proportion of earnings than huge corporations, and the younger the firm, the more tax it pays, effectively shutting down the world's most prized start-up culture. Despite the fact that many countries grant small-scale tax relief for businesses, many face the same tax structure as major corporations. In addition to affecting a huge number of economic activities, these small to medium-sized firms, which employ a big proportion of the working population, encourage innovative and dynamic industries in practically all economies, regions, and territories.

Micro, Small, And Medium-Sized Businesses

2According to the provisions of the Micro, Small and Medium Enterprises Development (MSMED) Act, 2006, Micro, Small and Medium Enterprises (MSME) are classified into two categories:

1. **Manufacturing Enterprises-** The enterprises engaged in the manufacture or production of goods relating to any industry specified in the first schedule to the industries (Development and Regulation Act of 1951) or Employing plant and machinery in the process of value addition to the final product. The manufacturing business is characterised by its investment in equipment and machinery.
2. **Service Enterprises-** Enterprises that provide or deliver services and are characterised in terms of equipment investment.

Manufacturing Sector	
Enterprise Category	Investment in plant & machinery
Micro Enterprises	Does not exceed twenty five lakh rupees
Small Enterprises	More than twenty five lakh rupees but does not exceed five crore rupees
Medium Enterprises	More than five crore rupees but does not exceed ten crore rupees
Service Sector	
Enterprise Category	Investment in equipment
Micro Enterprises	Does not exceed ten lakh rupees:
Small Enterprises	More than ten lakh rupees but does not exceed two crore rupees
Medium Enterprises	More than two crore rupees but does not exceed five crore rupees

Enterprises may take the shape of a company, a sole proprietorship, a co-operative society, a group of people, a Hindu undivided family, or a partnership firm, among other things. Unlike in the past, the term is not restricted to the number of employees or the amount of power utilised.

An extra requirement has been added, Annual Turnover. The boundaries for micro, small, and medium-sized businesses are being raised to account for inflation and to allow corporations to reap the advantages of economies of scale.

Revised Classification applicable w.e.f 1st July 2020

Classification of Micro, Small and Medium Enterprise (MSME) sector			
Composite Criteria Investment in Plant & Machinery/equipment and Annual Turnover			
Classification	Micro	Small	Medium
Manufacturing and Service Sector Enterprises	Investment in Plant and Machinery or Equipment upto Rs.1 crore and Annual Turnover does not exceed Rs. 5 crore	Investment in Plant and Machinery or Equipment upto Rs.10 crore and Annual Turnover does not exceed Rs. 50 crore	Investment in Plant and Machinery or Equipment upto Rs.50 crore and Annual Turnover does not exceed Rs. 250 crore

*Source from Ministry of MSME

Role Of Msmes In India

- 1. Job creation-** These sectors help to create jobs by promoting the use of labour-intensive technologies, which creates a need for labour for manufacturing and production activities. Small-scale companies are beneficial in dispersing money to all segments of society across many sectors.
- 2. Make in India initiative-** The Make in India programme is fuelled by small-scale enterprises. Various small-scale companies are engaged in creating minor components for use by major industries through the government e-marketplace, and numerous programmes are being implemented under the defence procurement strategy to boost small scale industries.
- 3. Economic value-** Small scale industries account for over 40% of the economy's GDP and 45% of total exports, and these businesses are likewise export orientated, hence maintaining the balance of payment.
- 4. Optimal resource utilisation-** Small scale industries often have reduced production costs owing to the availability of local resources and minimal overhead charges. Because of the low cost of manufacturing, small scale enterprises' products such as stationery, soap, plastic and rubber goods, and so on are less expensive.
- 5. Improving skill and technical innovation-** Several institutions are teaching skills to small size firms, and technological innovation, in conjunction with long-term loans, improves value utilisation.

Figures in Rs. Crores adjusted for FISIM at current prices						
Year	Total MSME GVA	Growth (%)	Total GVA	Share of MSME in GVA (%)	All India GDP	Share of MSME in All India GDP (in %)
2014-15	3658196	-	11504279	31.80	12467959	29.34
2015-16	4059660	10.97	12574499	32.28	13771874	29.48
2016-17	4502129	10.90	13965200	32.24	15391669	29.25
2017-18	5086493	12.98	15513122	32.79	17098304	29.75
2018-19	5741765	12.88	17139962	33.50	18971237	30.27

Tax Systems And Types Of Taxes

Taxes differ in their impact on the distribution of income and wealth.

- 1. Proportional-** Proportional taxes are those in which the tax rate stays constant while the tax base varies.
- 2. Progressive-** When the tax rate rises, the amount of tax paid rises at a faster pace than the tax base does.
- 3. Regressive-** Regressive taxes are those in which the tax rate falls as the tax base grows.
- 4. Digressive-** Taxes that are moderately progressive, but not extremely steep, so that high-income earners do not pay an equitable sacrifice.

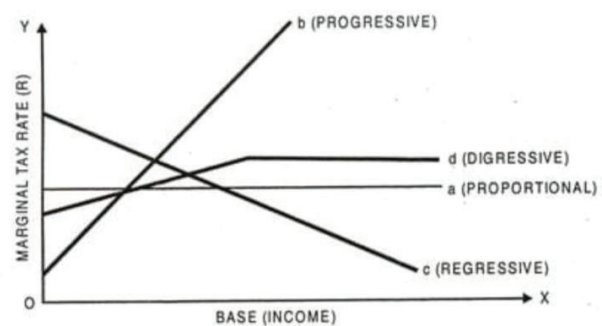


Fig. 1. Different Tax Rates.

In India, there are two kinds of taxes: Direct taxes and Indirect taxes. Direct taxes are those that are collected directly on a person's income and cannot be shifted; for example, income tax, capital gains tax, and so on. Indirect taxes, on the other hand, are levied on the price of products or

services, and the individual paying the indirect tax may transfer the incidence to another person; for example, GST, Customs Duty, and so on.

Impact Of Taxation

Taxation is a very important phenomenon because it generates revenue for the government. As micro, small, and medium-sized enterprises constitute large volume and number, taxing these enterprises is necessary to generate revenue for the government. However, to ensure growth, certain exemptions have been provided by the government since the first five-year plan. Although each tax has a unique effect, in general, taxes lead to lower salaries, smaller profit margins, and less credit for industry innovation and skill development. Taxes such as direct tax, minimum alternative tax, and value added tax are imposed at various rates and tend to reduce the profit available to the employee, resulting in less money for wages, lower spending on employee social development, a lower rate of investment in skill training, and a very low focus on technological innovation. Taxation diminishes profit margins, making capital investment in machines, salaries, and technology less probable. Saving rates are also decreased as a result of the significant amount of money foregone by taxes, which also reduces investment rates.

Indirect taxes were replaced with GST on July 1, 2017. (Goods and service tax). The introduction of GST simplified the tax framework, resulting in a number of beneficial

effects. The implementation of one registration across India improved the ease of conducting business. GST also eliminated the cascade effect, which increases the profitability of small-scale enterprises. Small-scale enterprises

benefit from the GST composition plan as well. However, GST rates are divided into slabs and are continually changing, creating disruption in small-scale enterprises.

Although many items manufactured by small businesses are now tax-free, a more complex tax framework is required. Several recent years have witnessed significant improvements in tax legislation such as single window tax filing, annual tax filing, GST, and digitization, resulting in increased efficiency for small business enterprises.

Tax Policies For Msmes

4The Union Budgets provide an insight of the numerous measures promoted by the government for the MSME sector. This year's budget includes, among other things, the interconnection of portals such as Udyam, ASEEM, and e-Shram, as well as credit programmes and blended capital facilitation via NABARD. Along with these methods, granting tax breaks is a quick, effective, and practical approach to help the MSME sector. Let us have a look at the tax advantages available to MSMEs in India.

1. Concessional tax rate- Under the Income Tax Act of 1961, some domestic manufacturing enterprises are entitled to concessional tax rates. These businesses, which fall under section 115BA of the Income Tax Act, are eligible for a tax rate of 25% rather than the standard 30%. It encompasses the MSME sector only, with a revenue of up to 400 crores as one of the requirements. These businesses are not permitted to take certain deductions, set-offs, or carry-forwards. The corporation must be formed and registered before March 1, 2016.

MSMEs may also benefit from a 22% tax

rate under Section 115BAA if certain requirements are met. Any domestic firm, including MSMEs, may take advantage of this lower tax rate by computing total revenue before deducting different deductions, depreciation, and set-offs. Under Section 115JB, these businesses are likewise excluded from paying the maximum alternative tax.

Section 115BAB allows new domestic manufacturing enterprises to choose a 15% tax rate. This section's requirement covers all of the prerequisites in section 115BAA. Aside from that, the firm requires the following:

- (a) Must be established and registered on or after October 1, 2019.
- (b) It is not eligible for deductions under Section 80-ID.
- (c) It is not permitted to operate in any other business.

2. Presumptive tax scheme- MSMEs may choose from a number of presumptive tax schemes to lower their tax obligation. All of these programmes are available subject to certain requirements being met. As an example:

- (a) Section 44AD applies to qualifying firms having a total turnover or gross receipt of less than two crores.
- (b) A presumptive taxation plan is provided for professionals under Section 44ADA.
- (c) Section 44AE is available to good carriage enterprises.

MSMEs may analyse their tax liabilities under the appropriate presumptive tax system and choose it if it is advantageous.

3. New benefits- 5The Union Budget for this

year increased tax breaks for new and qualifying businesses. During the first ten years of their incorporation, these qualifying start-ups received a three-year tax break. It was formerly accessible to qualifying start-ups founded before March 31, 2022, but it has now been extended until March 31, 2023.

As previously stated, Section 115BAB provided for a 15% tax rate for newly established domestic manufacturing enterprises. The finance minister recommended extending the deadline for the start of production or manufacture from March 31, 2023 to March 31, 2024 in this year's Union Budget.

MSMEs involved in secondary steel manufacturing will have their customs tax exemption on steel scrap extended. Through the Union Budget, the finance minister attempted to provide extra help to MSMEs secondary steel manufacturers.

In addition to tax rebates, the government has given incentives for the promotion and growth of small-scale enterprises. The following are some of the incentives provided by the Central Excise Act:

1. All Union Territories are exempt from paying sales tax. It is prolonged for a duration of five years in certain states.
2. Power is given at a 50% allotment to all industries established in regional backward regions. Some states waive the payment during the first few years of the business's operation.
3. For a period of five years, all industries established in regional backward regions are exempt from paying taxes.

4. The tax charged on products and services transported from one city to another (Octroi) has also been eliminated in the majority of states.
5. Subsidies of up to 10-15% are also offered to some businesses for investments in fixed assets. Loans are also available at a reduced interest rate.
6. The National Small Industries Corporation (NSIC) facilitates the rental of fixed assets such as equipment to industries located in underserved areas (including the SSI). Entrepreneurs and other qualified individuals from regionally backward regions pay cheaper borrowing rates than others.
7. The 1971 Transport Subsidy Scheme envisages the awarding of transport subsidies to small scale units in certain locations to the level of 75% of the transport cost of raw materials brought into and completed products transferred out of chosen areas.
3. Goods and Services Tax- To increase compliance, certain improvements have been made to the indirect tax system. GST return simplification, Aadhaar-based taxpayer authentication, electronic invoicing to assist compliance, and other measures have made GST compliance simpler for MSMEs.
4. Tax holiday expansion for start-ups- For three years, start-ups with a turnover of up to Rs 25 crores had a tax advantage of deducting 100 per cent of earnings. This has undergone significant alteration. The Rs. 25 crore ceiling has been expanded to Rs. 100 crores, making it open to larger firms as well. Furthermore, the benefit has been expanded to include three of the first ten years rather than the first seven. This reduces the tax burden for numerous new firms, encouraging them to remain longer and run faster.

Conclusion

The present taxation regime is projected to help MSMEs in the following ways: -

1. Corporation tax rate reduction- To encourage investment in small and medium-sized businesses, the corporate tax rate for new enterprises in the manufacturing sector has been decreased to 15%. The tax on existing businesses was decreased to 22%, making them one of the most appealing investment possibilities and broadening the capital funnel for MSMEs.
2. Exemption from tax audit- Previously, a firm was compelled to undergo a tax audit when its turnover exceeded Rs. 1 crore. This ceiling has been increased to Rs 5 crore, provided that

cash transactions do not exceed 5% of overall transactions. This has simplified tax compliance for a larger number of MSMEs, enabling them to concentrate on development.

Given that we rely heavily on MSMEs for employment, exports, and GDP contribution, the finance ministry is working to enable their rapid development and expansion. However, MSMEs may experience various difficulties as a result of the Indian taxation structure. The ministry is closely monitoring, evaluating, and responding to the majority of it via budgetary policies and legislative revisions.

Suggestions

1. Online registration of MSMEs should be done. It will ensure timely receipt of certificate of registration and minimal bureaucracy interface.

2. The tax rate on MSMEs should be less in order to attract more and more MSMEs and help them grow.
3. Easy tax compliance procedure should be adopted.
4. All returns should be filed electronically and input tax credit and tax liability adjustment will happen automatically based on these returns.

References

- Rajaram, Pandey, A. K., Saproo, S., & Bansal, S. (2022). A research study to understand the impact of pandemic on healthcare workers. *Journal of Information and Optimization Sciences*, 43(6), 1209-1220.
- Priyadarshi, A., Pandey, A. K., Singh, R., & Wadhawan, S. (2022). Impact of mergers & acquisitions on job satisfaction and employee productivity in Indian banking. *Journal of Information and Optimization Sciences*, 43(6), 1443-1452.
- Shukla, S., Pandey, A. K., & Shukla, S. K. (2016). Corporate Social Responsibility Practices in India: a Study of Top Fast Moving Consumer Goods Companies. *Indira Management Review*, 10(1), 29-37.
- Gupta, R., Shastri, M., Pandey, A. K., & Bhandwal, M. (2021). Pandemic 2020, Challenges, and Measures for Post Revival. In *Advances in Interdisciplinary Engineering: Select Proceedings of FLAME 2020* (pp. 529-537). Springer Singapore.
- Rajaram, A. K. P., Saproo, S., & Bansal, S. (2020). A Revolution in Health Care Sector Through Data Sciences. *Prof.(Dr) RK Sharma*, 20(4), 469.
- <https://www.ibef.org/blogs/msme-sector-imperative-to-lift-indian-economy>
- <https://msme.gov.in/know-about-msme>
- <https://msme.gov.in/sites/default/files/MSME-ANNUAL-REPORT-ENGLISH%202020-21.pdf>
- <https://www.financialexpress.com/budget/msme-eodb-budget-2022-govt-to-interlink-udyam-e-shram-ncs-aseem-portals-to-support-msmes-2422640/>
- <https://www.indiabudget.gov.in/economicsurvey/>
- <https://udyamimitra.in/page/Subsidy-Schemes>
- Desai, Vasant- Management of Small-Scale Industries
- Govt. of India, GST-MSME Sector, Department of Revenue, Ministry of Finance.
- Mehrotra, H.C & Goyal, S.P -Taxation Law & Accounts
- Micro, Small and Medium Enterprises (MSMEs)- Indian Institute of Banking & Finance.
