



Gavesana

Journal of Management

Editorial

Corporate Restructuring In India

Ms. Sreeja.J
Dr. G. Alex Rajesh

Entrepreneurial Development of Rural Women in Hisar:
Trainings on Making Wooden Beads Handicrafts

Ms. Ekta Melkani
Ms. Ekta Kapri
Ms. Naaz Bano
Dr. Kiran Singh

Consolidation and Acquisition of Nationalized Banks and
Their Effects on Profitability and Shareholder Value – A
Holistic Purview

Ms. Jeyaprabha

Pioneering Food Delivery in the Aftermath of a Global
Pandemic- A Case Study of Zomato and Swiggy

Ms. Mahnoor Sahrash
Ms. Anushka Kamashani

A Sustainable Supply Chain Management through TQM
A state of the art literature review

Dr. K SR Sarma

A Study of Latest Trends in Indian Rural Markets Scenario

Dr. Yugandhar Vangaveti
Dr. Nageswara Rao Iragaraju
Mr. B. Lakshmipathi
Ms. P. Neelima

The Impact of Covid-19 on Online Shopping of Consumers
and The Factors Influencing Online Purchase Intention

Ms. Manasa N
Dr. G Alex Rajesh

The Journey of OORVI HOLY WASTE and now
Exploring the Chemistry of its component and pigments for
Potential Applications

Ms. Shuchi Tiwari
Ms. Maya Vivek
Mr. Minal Dalmia
Mr. Anand Kishore Kola

Contents		
Articles	Authors	Page No.
Corporate Restructuring In India	Ms. Sreeja.J Dr. G. Alex Rajesh	1
Entrepreneurial Development of Rural Women in Hisar: Trainings on Making Wooden Beads Handicrafts	Ms. Ekta Melkani Ms. Ekta Kapri Ms. Naaz Bano Dr. Kiran Singh	8
Consolidation and Acquisition of Nationalized Banks and Their Effects on Profitability and Shareholder Value – A Holistic Purview	Ms. Jeyaprabha	17
Pioneering Food Delivery in the Aftermath of a Global Pandemic- A Case Study of Zomato and Swiggy	Ms. Mahnoor Sahrash Ms. Anushka Kamashani	34
A Sustainable Supply Chain Management through TQM A state of the art literature review	Dr. K SR Sarma	43
A Study of Latest Trends in Indian Rural Markets Scenario	Dr. Yugandhar Vangaveti Dr. Nageswara Rao Iragaraju Mr. B. Lakshmipathi Ms. P. Neelima	51
The Impact of Covid-19 on Online Shopping of Consumers and The Factors Influencing Online Purchase Intention	Ms. Manasa N Dr. G Alex Rajesh	57
The Journey of OORVI HOLY WASTE and now Exploring the Chemistry of its component and pigments for Potential Applications	Ms. Shuchi Tiwari Ms. Maya Vivek Mr. Minal Dalmia Mr. Anand Kishore Kola	62

ISSN No. : 0975-4547

Regn. No. : 108534/2010

Gavesana

Journal of Management

Editor : Dr. Ch. S. Durga Prasad

Assistant Editor : Mr. Raghu Mantha

Editorial Board

Prof. A. V. Subba Rao, Economist and Business Analyst.

Prof. V. M. Tummala, Professor in Production/Operations Management, Eastern Michigan University, USA.

Prof. Sanjith Sengupta, Professor in Marketing, San Francisco State University, San Francisco, California, USA.

Prof. V. Nagadevara, Former Dean IIM-Bangalore.

Prof. R. Siva Prasad, Nipissing University Canada.

Prof. G. Anjaneya Swamy, Dean Pondicherry University.

Prof. Sarvanan, Central University Tamilnadu.

Prof. V. Venkaiah, Former Vice Chancellor, Dr.B.R. Ambedkar Open University, Hyderabad.

Prof. S. R. Subba Rao, Professor, Bhavan's Vivekananda College, Secunderabad.

About the Journal

The Gavesana Journal of Management is a bi-annual refereed journal of the Vignana Jyothi Institute of Management. Its objective is to disseminate knowledge of contemporary issues related to management and development. The journal seeks to serve as a platform for intellectuals to share the rapid strides made in contemporary research. The Research Journal has been registered with the Registrar of Newspapers for India (RNI)

vide No. 108534/2010 dated 1/3/2011.

Disclaimer

The views, opinion, data, information, contents etc., appearing in the articles are the sole contribution of the author(s). The Editor, Assistant Editor, the Editorial Board, the Advisory Board and the sponsoring institutions disclaim the consequences of the views expressed in the articles.

EDITORIAL

Human Resource function (HR), in any organization, has to be that of a strategic or business partner, by developing the talent in the entity through job rotation, job enrichment etc., involving expert teams, business leaders and line management. Such a partnership is a long-term relationship to achieve objectives common to the partners, as also the organization's financial success. In the process, the HR employees, as partners, should perform their assigned roles, and also support the activities of those in other functional areas. This needs a strategic plan which dovetails the HR Vision and Mission into that of the organization.

HR, as a Strategic Partner - increases employee productivity and thus the organization's profitability; enhances competency and talent management; uses the technology and knowledge to formulate, implement and review strategies; copes with the changes in the business environment arising from unforeseen business situations, and globalization; and serves the internal and external customers well. This is done through efficient and effective delivery of human resource services. For this, the HR needs to spend more time in the organization's planning, design and development. It must become part of the business team, involved in planning at the highest level. HR Managers and HR professionals are strategically suited to provide the necessary leadership in change management, which is a challenging task.

The Human Resource Information System (HRIS) has to be effectively used to handle daily administrative HR tasks. Employees can make use of the self-service facility online, to support business strategy development and implementation, which saves time and costs. There should be an HR Head who understands well the strategic partnership/relationship between organizational strategy and human resources. He should be an expert in all HR functions. Someone from within the organization can be groomed for this role.

Research has shown that the HR function will be effective in achieving the business objectives when it assumes the role of a strategic business partner. The top management should ensure this. The administrative reactive approach in people management can no longer support the organization in a competitive business environment. If the HR function is decentralized fully, the line managers and supervisors will eventually put the blame on HR when problems arise. If this happens, it interferes with the effective use of line managers' and supervisors' time in the operations of the organization on daily basis. The line managers and supervisors need to be supported to make them more proficient in managing their subordinates in the performance of daily tasks. Complete participation of HR people in strategy development and implementation promotes HR as a strategic partner. The HR Manager and HR professionals should contribute to business decisions; develop business acumen to understand how a profitable business is run; be customer-centric; and learn how to link HR practices to the organizational business strategy.

The expectations from HR as Strategic Partner include: recruiting the right employees; align corporate values to the recruitment strategy; well-developed competencies of the workforce, and their relevance to organizational core business; participative culture where HR initiatives fully support the overall strategic plan; discard ineffective HR practices that do not contribute to the success of your organization. HR management requires continuous improvement i.e., Kaizen to ensure and retain its relevance as strategic partner. For this, capable and committed people are needed at every level, supported by senior management. Change has to be managed well to avoid or minimize disruption in the organization's activities, and for its success.

The effectiveness of the HR people as a strategic partner is also dependent upon the corporate policies and practices, structure, types of activities carried out, location, effective communication, leadership and motivating employees to keep moving in the right direction as per plan. Every aspect of HR has to be reviewed in the process of implementing the necessary changes and reorganization. Having the right is crucial to help them succeed and engage their full attention with the view to ensure HR truly becomes strategic partner. The HR Scorecard shows whether the organization is making good progress on making HR as strategic partner. The competitive advantage of the organization can be enhanced by aligning the HR strategies to the overall business plan. To ensure that HR truly becomes a strategic business partner, adequate financial backing is necessary. One needs to take measures to eliminate or minimize risks to HR, and it should be ensured that HR plays a meaningful role and not necessarily a major role, particularly during financial crises. It cannot also be a trial and error approach.

In fact, in a business landscape that is changing fast, there is an imminent need for HR to be an active strategic partner. By aligning itself with strategic plans of the business, it needs to foster a stronger relation between the executive team and the workforce. Externally, it can make valuable contribution to branding and the tone of communication. By leveraging customised, more personalised metrics and deep analytics, it can vastly improve organizational learning, training and improve decision making. Consequently, the human capital program will lend more impact, thereby encouraging and enhancing collaboration between various functions across the organization. HR can no longer be just a functional arm, a distant participant, but will have to assume the role of strategic partner, integral to organizational well-being and growth.

Dr. Ch. S. Durga Prasad

Corporate Restructuring In India

Sreeja.J* and Dr. G. Alex Rajesh**

Abstract

Restructuring can be defined as an organization or employer makes crucial changes to its financial or operational function. Corporate restructuring is a mode of action taken with the aid of using company entity to improve its capital structure or its operations significantly. Mostly, company restructuring is occurring whilst a company entity is experiencing significant issues and is in monetary Risk. A company restructuring differs from mergers and acquisitions as there may be no sale of one enterprise to next enterprise and it's also differing from dispossession, and it consist of promoting of a part of an organisations

During the beyond decade, corporate restructuring has extensively become a staple of enterprise and a common reality throughout India. The main important reasons for corporate restructurings are monetary distress and Company growth. According to Indian Ministry of corporate affairs described as “a tool of reviving sick units”. So here we can able to analysis and identify why corporate restructuring is important in Companies.

Key Words: Corporate Restructuring, Monetary Distress, Capital Structure, Economic Threats, Company Growth,

1.0 Introduction

Corporate restructuring is a systematic way of changing a corporation's structure, its operations, and management function. Restructuring can be neither elective nor non elective. Elective restructuring are started by the company them self and usually involve financial problem. Usually Non elective restructuring are ordering by courts under penury laws. Due to this “a tool for rescue/saving sick units”- which was described by Indian Ministry of cooperate Affairs.

As there is less sale of one business to next, a restructuring is always different from

M&A. divestitures is also one of the difference, and the Major Role of this involves selling off each parts of an organization.

When the company need to alter their capital structure, they are usually start off rethinking about the structure. To become competitive, organisations are making many alteration. Restructuring mea ns it can be the chance or it may be the solution to the problem which is facing by each organization.

Financial distress and Cooperate Growth are the important causes for company's rationalization.

IMCA defines company restructuring as “a device for reviving/saving unwell units.” If the company has become unprofitable, it may need to restructure in order to minimize losses until better management can make it profitable again.

1.1 Corporate Restructuring Characteristics Consists of

- Balance Sheet of the company can polish up (Which means from the by disposing of the unprofitable division from its core business).
- Staff depletion (by cutting down or selling off the portion which is unprofitable).
- Cooperate Management functions can change.
- Brands/patent rights can be disposed due to underutilized assets.
- Technical support and payroll management can be outsourced by any efficient 3rd party.

*Ph.D. Scholar, Department of management, CMS Institute of Management Studies, Coimbatore, Tamil Nadu

**Professor, Sri Venkateshwara Institute of IT and Management, Coimbatore, Tamil Nadu

- Some operations such as manufacturing or production can move to lower-cost locations.
- Marketing, sales, and distribution functions can be recognized.
- For reducing the overhead, labor contract can be renegotiate.
- Debts can be reschedule or refinance to minimize the interest payments.
- Company can conduct a public relations campaign for consumer awareness.

1.2 Qualities of Corporate Restructuring

- To work on the financial record of the organization (by casting of the unrewarding division from its core business).
- Staff reduction (due to closing down or unloading the unfruitful portion).
- It is helpful for corporate organization to change.
- Disposing of the underutilized assets, alike to brands/patent rights.
- Outsourcing its assignments, as an example, specific support and money the board to a more useful untouchable.
- Shifting of exercises, such as, moving of gathering assignments to less expensive area.
- Exhibiting, arrangements, and assignment can reorganize.
- For diminishing overhead, can re-negotiate labor arrangements.
- To restricting the interest portions, the commitment can be reschedule or reevaluate.
- Can conduct a promoting activities wherever to reposition the organization with its buyers.

2.0 Review of Literature

According to Peter .F. Drucker, (International Conference on Technology and Business Management, March 26-28,2012) the guidance guru, the prominent change in corporate culture and the techniques which is using for conducting the business, is the tactical intercession and relationship based not on possession, but on collaboration. He additionally determine that there isn't only a surge in alliances however a national and international restructuring of organization with inside the form of association and cooperation.

According to a modern survey with the aid of using the worldwide consulting major, Booz, Allen and Hamilton, organization restructuring by the mean of strategic alliance is spreading in each business areas or enterprises and is turning in to an important operator of better growth. The Enterprise restructuring in phrases of variety of strategic alliances in the national and international level. An example is, there are more than 20,000 new association have been formed in the U.S during the year between 1987 and 1992, in comparison with 5100 among 1980 and 1987 and 750 all through the 1970s. The enterprise additionally predicts that in the subsequent 5 years, the cost of alliances is projected to wide area between dollar 30 trillion to dollae50 trillion. The survey additionally famous that greater than 20% of the income generated from the pinnacle 2,000 United States and European organisations now comes from proposals, with a great deal greater expected within side the near to imminent future.

According to a study by the Harvard business school 2011 an organization restructuring has authorize thousands of employer around the world to react more quickly and effectively to latest opportunities and unpredictable pressures thereby re-establishing their competitive benefit

According to the 2008 boston consulting group bcg new global challengers report top companies from rapidly

developing economies such as India china russia mexico and brazil are changing the world and challenging the dominance of establishing multinational players across the world in 2006 they completed 72 outbound acquisitions up from 21 in 2000 the average size of these transactions grew from 156 million in 2001 to 981 million in 2006 of the 100 companies on bcgs list 41 are from china 20 from India and 13 from brazil with the rest coming from other rapidly developing economies

Ashwini Puri (2008) proposed that company reorganization in India has been delay and costly. Due to loss of favorable regulatory environment, a complicated tax framework, courtroom docket approaches and an infinite list of compliance problems disrupt the methods and impair most powerful realignment of asset, people etc.. Through restructuring.

Dr. Partap Singh M&A in India: Mergers and Acquisitions: Some problems & Trends the amount of deals extremely picked up within the year 1999 with total of 1453 deals as compared to solely 172 deals in 1998. The years 2000, 2007 and 2008 have seen as diminished with in the deals by twenty two, two and twenty four percentage accordingly because of the reason of worldwide credit score disasters. M&A has a lowering trend from the year 2000 to 2008. The traits in Indian M&A, which recorded a fast growth among 2003 and 2007 registering a compounded annual extension rate of 95% at \$70 billion. Though it dipped following the national and international disaster of 2008 simplest to get better quickly to hit a clean top of \$50 billion via way of means of 2010.

Prashant Kale and Harbir Singh (2004) of their articles on M&A among 1982 and 2002 concluded that in the starting years of financial liberalization, Indian organisations failed to create enough fees from acquisition, as compared to Multi-National Companies.

2.1 Objectives of the Study

- To Study and pick out Corporate or company Restructuring in India
- To understand the major aspects to be considered in corporate restructuring strategies.
- To Study the Various problems associated with the method of Corporate Restructuring.
- To give remedial measures for come out from the issues of Corporate Restructuring in India.

2.2 Why we need Corporate Restructuring

Company reorganization is re-organizing a company's operation to improve its potency and profitableness. Restructuring can be a techniques of adjusting the industries structure in order to achieve the organizational strategic goal. It's about dramatic changes in a cooperation.

The strategy chosen depend on the purpose or organization long term goal. And therefore a variety of strategy can put in to action on different firms. The main objective of Corporate Restructuring are as, different goals at different times for different firms and the one common aim in any restructuring effort is to terminate the demerits and to combine the merits.

The on top of the statement is correct in each aspect. The various requirement for carrying out an enterprise are as follows:

1. Attention in core competency, operational teamwork, expense or price reduction and effective allotment of administrative potentiality.
2. Balanced usage of accessible basic forms and resources.
3. Economies of scale through growth and to take advantages of Indian and foreign markets.
4. Renewal and Revival and reformation of a unwell unit through altering losses of the unwell unit with income or gain of a wholesome firm.
5. Receiving steady delivery of raw products and get entry to scientific study and technological growth.

6. Company transformation with the aid of using suitable blend of mortgage and fairness price range to lessen the price of servicing and enhance go back on capital employed.
7. Upgrade company's overall performance to obtain benefits and income by acquiring the absolute changes brought out by technology of information.

2.3 Important features to Be examine In Corporate Restructuring Strategies

- 1) Lawful and jurisdictional Problems
- 2) Accounting and financial point of view
- 3) Individual and societal participation
- 4) Evaluation and funding
- 5) Tariff and Stamp attentiveness point of view
- 6) Rivalry point of view

2.4 The Several types of business restructurings are as follows

External elements that makes contribution to insolvency include bad market conditions, loss of liquid asset, the opposite reaction by creditors or customers with related to products bought with the aid of using the company, adjustments in running expenses, loss in the cost of belongings held with the aid of using the corporation, and downfall in standard monetary condition.

The following are few responses to companies which are experiencing monetary distress, according to India's Ministry of Corporate Affairs:

Mergers

This is the concept where 2 or greater business materials are consolidated either via immersion or admixture or by forming another association. The connection of 2 or further business rudiments is by and large done by the merchandising of protection between the securing and the objective association.

Demergers

Under this company reconstructing techniques, one or another business are joined right in to a single enterprise to get the benefit of combined energy rising out of this kind of combination.

Reverse Merger

In this Mode, the unrecorded public association have the good time to change over into a recorded public association, without fixing on Initial Public deal. In this course of action, the privately-owned commercial enterprises acquire a most shareholding in the public companies with its very own name.

Divestment

Right when a commercial elements sells out or trades an asset or assistant, it is known as “divesture”.

Amalgamation or Incorporation:

In this System, the purchasing firms assumes usually legal responsibility for the goal enterprise. It is in any other case referred to as the Acquisition.

Venture

Under this Method, a material is formed by one or more enterprise to accept monetary verification together. The part created is thoughts as the Joint Venture. Both the gatherings consent to make a contribution in percentage as consented to shape additional element and moreover share the costs, incomes, and manipulate of the enterprise.

Strategic Union

In this Method, one or more elements go into a concurrence to combine with one every other, to achieve some certain distance whereas heretofore going regarding as autonomous enterprise.

2.5 Problems in Implementing Corporate Restructuring Program In India Are

In spite of vast restructuring enjoy to be had with Indian businesses, implementation of restructuring software remains sluggish and frequently notably will increase price and attempt than initially anticipated.

1. Managing consensus in the promoter organization and occasionally among promoters and control is bulky job. Conflicting stakeholders' angle is absolutely one such aspect and green mechanism for equitable balancing of pastimes needed.
2. Arriving at consensus amongst and with the institutional traders and creditors is time ingesting procedure that slows down the restructuring software.
3. Inadequate prematurely making plans and assessment mainly referring to tax, and regulatory legal guidelines and different implementation troubles were referred to as forces retarding the velocity of restructuring attempt.

Inadequacy of financial ruin and foreclosures legal guidelines and the shortage of facilitating surroundings for debt restructuring are adversely affecting restructuring exercises. Stamp obligation regulations, capital profits of unabsorbed depreciation and commercial enterprise losses notably growth transaction costs, introduce uncertainty and impose restrictive covenants at the businesses engaged in restructuring software.

4. Another primary problem referring to any restructuring software is promoters' situation to preserve their manage over organization businesses whilst mobilizing the sources required for growth. An avoidable direction that promoters have occasionally taken within the beyond is to leverage indexed organization businesses to finance their holdings.

Separation of promoter wealth from the wealth of public owned businesses is vital for suitable company governance and shareholders' price enhancement.

3.0 Suggestions

The above dialogue leads us to signify that conflicting stakeholders' attitude actually constitutes one such aspect and green mechanism for equitable balancing of uncertainty additionally want to be addressed. There is likewise want to create permitting surroundings for commercial enterprise restructuring.

The following measures are cautioned for enhancing implementation of restructuring program

1. Accelerate legislative adjustments that permit extra flexibility in downsizing, transferring location, effecting closure and consolidation of operations;
2. Implement tax reforms to make restructuring much less pricey and to permit marketers to leverage personal sources in a tax powerful manner.

3. Accelerate law that allows creditors to make recoveries without prolonged courtroom docket procedures (Bankruptcy and foreclosures laws);
4. Improve company governance to foster fairness in balancing stakeholder interests.
6. A supportive criminal, regulatory, and accounting surroundings is to be created for a hit company restructuring. Important criminal components of restructuring encompass foreclosures standards, overseas funding regulations and mergers and acquisition policies.
7. Restructuring making plans ought to encompass accomplishing right due diligence, powerful communicate at some point of the mixing, devoted and able leadership; pace with the mixing plan is included helps the achievement of Corporate Restructuring.

4.0 Conclusion

Corporate Restructuring has turn out to be very famous through the years in particular over the last most of the years thanks to fast modifications which have taken vicinity with inside the commercial enterprise environment. Restructuring can recognition on simple strengths, operational synergy & different powerful allocation of managerial abilities and infrastructure too. It can allows for Consolidation and economies of scale via way of means of enlargement and diversion to take advantage of prolonged home and international markets. Its Revival and rehabilitation of a ill unit via way of means of adjusting losses of the ill unit with earnings of a healthful company. Capital restructuring via way of means of a appropriate aggregate of mortgage and fairness finances to lower the price of servicing and enhance go back on capital employed. It also can enhance company overall performance to convey it on par with competition via way of means of espousing the new variation introduced out via way of means of statistics automation.

References

- CA Sanjeev Kumar Gupta & Dr. Sambhit Kumar Mishra) “An Overview of Mergers and Acquisition” 2012.
- CA Sanjeev Kumar Gupta & Dr. Sambhit Kumar Mishra) “An Overview of Mergers and Acquisition” 2012.
- CA Sanjeev Kumar Gupta & Dr. Sambhit Kumar Mishra) “An Overview of Mergers and Acquisition” 2012.
- CA Sanjeev Kumar Gupta & Dr. Sambhit Kumar Mishra) “An Overview of Mergers and Acquisition” 2012.
- Charles W.L.Hill, Gareth R.Jones, (2001), Third Edition, Strategic Management Theory: An Integrated Approach, Houghton Mifflin Publications, Boston,Pgs 284-310.
- Corporate Restructuring Valuation and Insolvency. (2015). New Delhi: International Print-O-Pac Limited, pp.2-3.
- Danish Khan, “American Tower Corporation looks at mergers and acquisitions to boost
- Presence in India”, ET Bureau Oct 2, 2014, 05.49AM IST; NEW DELHI.
- Drucker. P. F., (1999), Management challenges for the 21st century, Harper Business, New York, Vol. 20, Pgs 148-153.
- Face book Acquires Bangalore-Based Little Eye Labs, Mehak Chawla - Jan 8, 2014, 10.22AM IST.
- J. Fred Weston, Kwang S. Chung, Susan E .Hoag, (2008), Mergers, Restructuring and Corporate Control, Prentice-Hall of India private ltd, 3-8.

- JingluJiang and BoLiu. et. al. (2019), “The impact of debt restructuring on firm
- Investment: Evidence from China Economic Modelling, Volume 81, September 2019, Pages 325-337.
- Nag, G.C., (1999), Doctoral Thesis.: Relationship of organizational culture and technological change: A longitudinal study of Siemens (India) Ltd. Devi Ahilya University. Indore, India.
- Nag. G.C., Pathak, R.D.,(2003)., Beyond technological superiority – an empirical case | study of an MNC subsidiary, Journal of Transnational Management Development, | Macmillan India Ltd., Vol.15, Pgs 21-29.
- Nag. G.C., Pathak, R.D., (2009), Corporate restructuring, ACR, Vol. 17 (1&2).
- Pomerleano, Michael. And Shaw, William. (Eds.), (2005), Corporate restructuring: | Lesson from experience, Washington D C: World Bank. Robert H. Porter, Mergers and coordinated effects, International Journal of Industrial Organization, 24 January 2020.
- Rock, Milton Land Rock, Robert H (eds.) (1990). Corporate Restructuring: A Guide to Creating tire Premium-Value Company, New York: McGraw-Hill, pp 1-6.
- SzeKeeKoh and Robert B. Duran (2015), “Financial distress: Lifecycle and corporate restructuring Journal of Corporate Finance”, Volume 33, August 2015, Pages 19-33
- Venkiteswaran, N (1997). "Corporate Restructuring for Shareholder Value," in D1rect Taxation (With special reference to Corporate Restructuring and Real Estate Transactions), New Delhi: The Institute of Chartered Accountants of India, pp 132-159.
- Venkiteswaran, N (1997). The Coming Restructuring Wave, Working Paper No 1378, Ahmedabad: Indian Institute of Management.
- Weston, J Fred; Chung, Kwan 5 and Hoag, Susan E (1990). Mergers, Acquisitions and Corporate Control (Eastern Economy Edition), New Delhi: Prentice-Hall.

<http://icmr.icfai.org/casestudies>.

[http:// www.ril.com](http://www.ril.com)

Entrepreneurial Development of Rural Women in Hisar: Trainings on Making Wooden Beads Handicrafts

Ekta Melkani*, Ekta Kapri**, Naaz Bano*** and Dr. Kiran Singh****

Abstract

This study is concerned with the continuous efforts with rural women in Hisar, Haryana India. The trainings in the village Mangali were being imparted to build women's capacity in generating entrepreneurship ventures for themselves. The women were trained for the making of bead products adding value to the wood beads by using them to make earrings, necklaces, bracelets, anklets, dream-catchers, chandeliers, curtains, etc. Women excitedly learn about the techniques of product making and were ready to work in Self Help Groups for further productions. The training has come up to be a big achievement for the women and girls of the village to start an enterprise using local resources at home and directly sell to the market and to customers through online stores. The study details the productive knowledge gain results, shortcomings and futuristic approaches to bring the veil hidden faces of the rural women of Haryana into the light of success as empowered, confident and fearless women.

Keywords: Entrepreneurial Development; Women Empowerment; Wooden Beads; Handicrafts; Knowledge Gain; etc.

1.0 Introduction

The bead art in India goes around back to Indus valley civilization and is believed to be 5000 years old. Silver, gold, clay, ivory and wood made beads were mostly used during that age. India is one of the largest bead producers in the world and export a huge quantity of indigenous beads made in different states of India throughout the world. Beadwork is the art or craft of making things with beads. Beads can be woven together using particular threads, strung onto thread or soft, flexible wire, or adhered to a surface. With latest innovative tools in the leading industries, the artisans never fail to create refreshed beadworks using illimitable colours and whimsical designs. In India, a total of 13.31 per cent (MSME, 2018) women are involved in small scale enterprises. The micro sector with 630.52 lakh estimated enterprises accounts for more than 99% of total estimated number of MSMEs having a rural share of 51 % among all, of which 24% are female employees.

Bead making from wood, one of the small scale enterprises, is commonly practiced in North-Western part of Haryana where bead making from wood is the main source of livelihood for more than 70 per cent of the households in Mangali village. Beads made in Mangali are generally made from quality and lustrous woods such as, tulsi (holy basil), kayim (kaim), beri (jujube/ Chinese date), sheesham (rosewood), eseriya (asceria), haldi (turmeric), chandan (sandalwood), etc. Most of the family members are involved traditionally in various activities of bead making starting from collection of wood, processing and finishing and even their management in bundles and marketing; however, women's involvement in string (mala) making is exceedingly higher. The unorganized workplace at bead making enterprise reflects the drudgery of women in terms of health hazards and poor productivity (Gandhi et al, 2017).

The bead making work is done for longer durations by women. They sit continuously stringing for several hours, in home environment making hard working efforts but still not getting a deserving pay. They string about 4-8 kg of beads in a day and return back to manufacturers to sell out to outer places. Many of the processing activities are not even taken into account. Sometimes they even work for nights to complete the order given by manufacturers. The conditions of the working environment are their own risk associated with various kinds of occupational hazards they go through on a routine basis.

*, ** & *** Ph.D Scholars Department of Family Resource Management, CCS Haryana Agricultural University, Hisar.

**** Professor, Department of Family Resource Management, CCS Haryana Agricultural University, Hisar

Recently, bead making enterprise is leaving its charm because workers' efforts and labour don't pay back much to them. As they have been making only the string (mala) having 108 beads which is sold at minimal rates, hence, there is a need for making other innovative bead products which would benefit the women and utilize their untapped potential to get more benefits. Lack of knowledge and skill are the major reasons that need to be eliminated through training interventions.

1.1 Objectives of the Study

Keeping the above facts of beads, women workers and their workplace in mind, the present study has been planned with the following objectives:

- To provide interventions to improve the work and workplace of women making bead products.
- To study the impact of feasible interventions on change in women knowledge.

2.0 Research Methodology

2.1 Research Design

Training-cum-Workshops were conducted using lecture and demonstration method among 30 interested women respondents randomly selected from Surtiya Panchayat of Mangali village according to their comfort zone. A module was prepared for the schedule of training imparted at intermittent intervals to women for making wood bead products during a period of 8 months.

2.2 Data Collection

A well-structured interview schedule was developed to assess the knowledge gain among 30 respondents trained to make bead products and the acceptability score was calculated.

2.3 Data Analysis

Paired t-test (two sample mean test) is a type of hypothesis test that allows you to compare means. They are called t-tests because each t-test boils the sample data down to one number, the t-value; and gives test of significance between two samples. This test was used to measure significance knowledge gain among respondents before and after the training of bead products.

3.0 Analysis and Discussion

3.1 Training for value addition to traditional bead activities

An active group of women respondents from Surtiya Panchayat of Mangali village was interested in learning techniques to make advanced products from beads. None of the women knew that beads they have been stringing for years could be formed into something else. They started to learn the value of those unused beads, they earlier used as timber for their chulhas. The information regarding the training had been given to women while doing section I assessment survey. After a proper rapport building in the village and combining the women of interest, raw material was given to women along with tool set required to perform activities. All the raw materials and other requirements had been self-financed by the researcher.

Visits were made to village with proper planning on alternate days. Products of interest to women were discussed on day to day basis. With proper techniques and finishing training of women had been started. Women collected beads of various woods, sizes, styles and colors. Thirty women had to be trained which was not possible in a single group; hence women from different areas had been trained on different days according to their free time and interest. The raw materials and all other requirements had been put to a certain place in the village. The process of value addition to the beads had been conducted in the following manner:

3.2 Estimating the true value of beads

Before starting to make the products it was necessary to know what is the basis of these beads we were using and their real cost in the market. After collecting different bead strings and raw products made by village women and understanding their qualities, we initially tried to sell them to the customers. By selling the bead strings directly their value, requirement and even customers' knowledge about beads came to light. These wooden beads already had a place in the minds of customers in various forms. Over to that, marketing strategies were learned and awareness about the planned bead products was announced.

3.3 Identifying possibilities of products that could be produced

As these wood bead products were an altogether new idea, it was necessary to check the existing products in the market or the bead products made worldwide. It was astonishing to know that the same bead strings which are sold at the rate of Rs. 7 per string, has been bought from Mangali village and were sold at multiple times higher prices, especially in spiritual places like Haridwar, Buddhist temples, etc. All this worked as an inspirational factor to teach the women make bead products, earning money an excluding the middlemen from in-between

Plate 1: Exposure to existing bead value in market



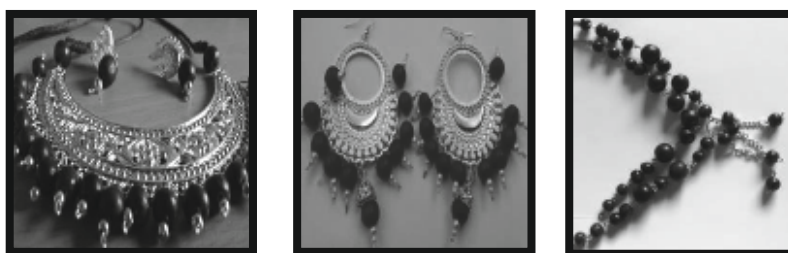
Source: Based on authors' primary data

The following categories of products had been decided to make and sell by the end of year. Each category involved different kind of raw materials hence, were to use at one time making the products. The raw materials and tools were brought for 30 women from Delhi market after market survey, accordingly to the planned products to be made. The categories of bead products were as follows:

3.3.1 Jewelry products from beads

Jewelry itself includes a wide variety of products that could be made and from different raw materials. Earrings, bracelets, necklaces, anklets, wedding sets, etc. were the basic jewelries included. These products generally use metallic raw materials like alloy wires. Three types of pliers (normal, nose and cutting plier) are used to draw the wire and make beautiful jewelry products inserting beads to them. Earrings are mostly considered and appreciated by women hence were made the focus point of the training. The soft kind of jewelleries also included tassel products that required silk threads; however they are also used with alloy materials only using beads as the properties.

Plate 2: Jewellery products training

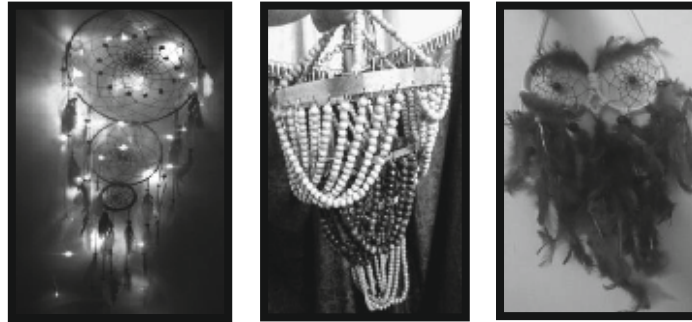


Source: Based on authors' primary data

3.3.2 Decorative and utility bead crafts for interiors

This part of training involves the use of soft materials used in crafts. There are immense possibilities for craft materials and making them using beads was a creative idea altogether. The products included dream catchers, craft bottles, wall hangings, lamp shades, curtains, chandeliers, and etc. all made using beads. The idea was breathtaking and the raw materials regarding was collected.

Plate 3: Decorative bead crafts

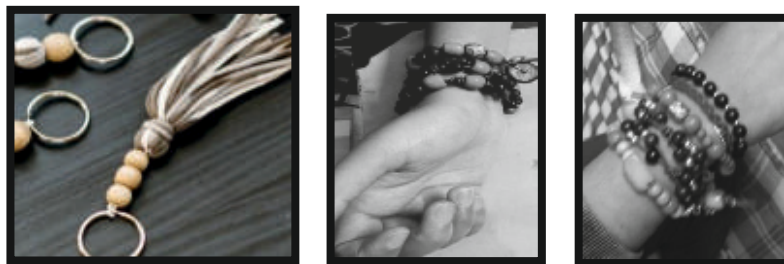


Source: Based on authors' primary data

3.3.3 Leather articles

The boho trend is most fascinating nowadays. Leather is a natural product and so are wood beads. Their combinations together make articles that are different from the league as well as go along all kind of moods and combinations. Some examples of leather articles are key chains, bracelets, anklets and other fashion articles.

Plate 4: Leather articles



Source: Based on authors' primary data

3.3.4 Waste material products of wood beads

Various products from the waste materials were made using wood beads. It even included the use of wasted wood after extraction of beads to make colorful plant vases.

Plate 5: Waste material utilization



Source: Based on authors' primary data

3.4 Managing training days

The above mentioned product ideas were strategically planned for village women to learn. After teaching particular kind of products, they were given time to practice and make products till achieving finishing and then made more products. After one month of making similar products, we used to switch to next kind of products to break the monotony and bore. The excitement of using same age old beads to form unexpected products was their source of motivation. Women paid interest in learning new things and started applying their own creativities to products that were really amazing, original and even considered for future designs. The orders had already started coming by customers on personal basis at this early stage of production, trainees were allowed to sell the products if customers were interested.

3.5 Training of tool handling and finishing of products

Not only in the case of jewelries, but other products also required proper methods to be made. The carelessness and forced completion of work could add to degraded and imperfect look of the products. Women were taught to make thing with proper measurements and complete each process with proper attention. The main points made most considerable for women were caring for the need of consumers, fineness of work, making product look appealing, using fresh and quality raw material to products and proper use of tools and movement of hands

3.6 Packaging of products made

It was observed with time that well packaged products were appealing to the eyes of customers in comparison to the open products made. Packing also added value to the selling prices of the similar products along with their protection from moisture and dust as most of the products was metallic. Proper packaging techniques were introduced with cellophane sheets to the women. The value of brand name was also explained to them which still has got to be registered with selected of women forming a self-help group.

Plate 6: Training to handle tools for production



Source: Based on authors' primary data

3.7 Marketing of products

The main objective of this training was to give women a sustainable source of income. To make women see the value of their products and recover the cost of raw materials, different platforms were chosen to sell the products. University events and stalls were the best of them, for doing promotion of products as well as for easy access to sales. The occasional stalls like Raksha bandhan fair, Diwali mela in home science, Kisan mela of CCSHAU, National seminar on women's day, etc. were selected for selling products. Women played active role in completing products before time as well as selling products to customers.

3.8 Distribution of profits

If trainee women respondents had to earn something so they could make more products with much efficiency. Based on the earnings, 5 regular women who worked to make additional products for sales and helped in selling products were given Rs. 2000 per head along with other expenses. 20 women were provided with sets of 3 tools used in molding wires for products. Raw material was provided to women to make and sell products on their own. Women were satisfied with the work and benefits and are seeing forward to increase the production and sales.

Plate 6: Training to handle tools for production

Source: Based on authors' primary data

4.0 Assessment of knowledge gain after training of respondents

Thirty respondents were given training in section II about wood bead products. They had been taught and made to work starting from handling of tools, mentioned products formation, finishing, packaging and even marketing. To measure the effectiveness of this training and workshops these women were put to knowledge, skill and symbolic adoption tests through designed checklists.

4.1 Gain in knowledge after training by respondents

The statements for knowledge analysis were categorized into five domains including concept of training, different products made, working and construction of products, marketing of products and advantages they felt after learning the techniques.

4.1.1 Concept of training provided

The major change was observed in the practice of making bead products making (rank I) that increased during the training period as all the respondents at least once tried making products themselves. Their knowledge about the importance of correct postures while working was increased (rank II) followed by a minimal increase in their attitude that bead products' value addition could help them earn better money (Table 1).

4.1.2 Bead products learned to make

Table 4.12 reveals that the biggest change occurred for the respondents were the use of waste woods after extraction of beads from it (rank I). This was followed by interior decorative crafts like dream catchers (rank III), which they found easy but time taking followed by leather crafts (rank IV) which were least adopted (Table 1).

4.1.3 Construction and working of products

Cent percent knowledge gain (rank I) in the use of round nose pliers, simple pliers and flexibility required in products for alterations had occurred along with knowledge gain about comfort by workstation. This was followed by knowledge gain in process of making dream catchers (rank II), use of cutter pliers (rank III), twisting of hand while making jewelry (rank IV) and combinations of colors along with adjusting climatic conditions for better efficiency (rank V each). More than half of the respondents gained knowledge about use of newspapers for jewelry making (rank VI) followed by importance of universal design of products (rank VII) and proper packaging and finishing of products (rank VIII)(Table 1).

4.1.4 Marketing

The major change observed in knowledge about marketing in respondents was the awareness about brand value of the products (rank I) which was observed in more than half of trainees. It was followed by the importance of selling products personally to know the drawbacks (rank II), loyalty to customers (rank III), fulfilling their expectations about products (rank IV), their feedback to improve the quality of products (rank V) and knowing their needs to design products (rank VI). Similarly all the respondents already knew about profitable pricing, promotions required, attractive packaging and marketing of products in local area showing no change in percentage gain of knowledge (rank VIII) (Table 1).

4.1.5 Advantages

Cent percent respondents felt the advantage that beautiful products could be made without using extra raw material and less number of beads could earn handsome income (rank I) followed by use of regular beads and less consumption of human energy (rank II). Other advantages felt were recognition in the society (rank III), alleviation of middlemen (rank IV), extra income through same contractor for product enhancement (rank V), extra income for simple products (rank VI) and working and earning from home itself (rank VII). Cent percent women already knew that sample products could provide them future orders and their traditional village work was getting promotion (rank VIII, Table 1).

Table 1: Gain in knowledge regarding bead products training-cum-workshops (n=30)

S. No.	Knowledge Parameters	Frequency			Rank
		Pre-test	Post-test	Gain (%)	
1.	Concept				
a	Bead product made before	17 (56.61)	30 (100.00)	43.39	I
b	Earning through value addition	19 (63.27)	26 (86.58)	23.31	III
c	Health and productivity through better posture	21 (69.93)	30 (100.00)	30.07	II
2.	Bead Products made				
a	Jewelry	4 (7.33)	30 (100.00)	92.67	II
b	Interior design crafts	-	23 (76.59)	76.59	III
c	Leather crafts	-	21 (69.93)	69.93	IV
d	Creative waste bead wood utilization	-	30 (100.00)	100.00	I
3.	Construction and Working				
a	Use of round nose pliers	-	30 (100.00)	100.00	I
b	Use of simple grab pliers	-	30 (100.00)	100.00	I
c	Cutter pliers are used to cut wires in-between	5 (16.65)	30 (100.00)	83.35	III
d	Process of making Dream Catchers	-	26 (86.58)	86.58	II
e	Twisting of wire	-	21 (69.93)	69.93	IV
f	Waste products use in jewelries	-	17 (56.61)	56.61	VI
g	Colour scheme	11 (36.63)	27 (89.91)	63.27	V
h	Universal design of products	19 (63.27)	30 (100.00)	36.73	VII
i	Flexibility in products	-	30 (100.00)	100.00	I
j	Value of packaging and finishing	20 (66.66)	30 (100.00)	33.34	VIII
k	Ergonomic workstation use	-	30 (100.00)	100.00	I
l	Lighting and temperature	8 (26.64)	27 (89.91)	63.27	V
4.	Marketing				
a	Trending product and need of the customers	27 (89.91)	30 (100.00)	10.09	VI
b	Customer's expectations	24 (79.92)	30 (100.00)	20.08	IV
c	Brand of the product for value	9 (29.97)	25 (83.25)	53.28	I
d	Initial pricing technique	30 (100.00)	30 (100.00)	0.00	VII
e	Promotion of products	30 (100.00)	30 (100.00)	0.00	VII
f	Selling techniques	18 (59.94)	30 (100.00)	40.06	II

g	Attractive packaging of products	30 (100.00)	30 (100.00)	0.00	VII
h	Loyalty to customers	19 (63.27)	30 (100.00)	36.73	III
i	Feedback of customers	25 (83.25)	30 (100.00)	16.75	V
j	Selling in local markets	30 (100.00)	30 (100.00)	0.00	VII
5.	Advantages				
a	Recognition among the people	9 (29.97)	27 (89.91)	59.94	III
b	Earnings made from home itself	20 (66.66)	30 (100.00)	33.34	VII
c	Products orders after sample	30 (100.00)	30 (100.00)	0.00	VIII
d	Beads use and no extra raw material	-	30 (100.00)	100.00	I
e	Simple products with extra income	8 (26.64)	23 (76.59)	49.95	VI
f	Less quantity of beads use	-	30 (100.00)	100.00	I
g	Alleviated role of middlemen	-	17 (56.61)	56.61	IV
h	Extra income through contractors	6 (19.98)	22 (73.26)	53.28	V
i	Beads use without any extra colors	10 (33.33)	30 (100.00)	66.66	II
j	Promotion of village	30 (100.00)	30 (100.00)	0.00	VIII
k	Not much human energy needed	-	20 (66.66)	66.66	II

Source: Based on authors' primary data

4.2 “t” test for significance of change in knowledge after pre-testing and post-testing knowledge

Table 2 reveals that p values for all the parameters of knowledge are smaller than 0.01, hence it is concluded that gain in knowledge is highly significant. There is highly significant difference between the pre and post exposure knowledge level of respondents among concept of intervention (29.445), knowledge of bead products (19.053), knowledge about construction and working of bead products (45.978), knowledge about marketing of the bead products (8.907) and advantages of the work and workplace intervention (9.817).

Table 1: Gain in knowledge regarding bead products training-cum-workshops (n=30)

S. No.	Knowledge	Mean Score		Change (+)	“t” value
		Pre-test	Post-test		
1	Concept	1.30	2.80	1.50	29.445**
2	Bead products	1.15	2.70	1.55	19.053**
3	Construction	1.20	2.90	1.70	45.978**
4	Marketing	1.50	2.90	1.40	8.907**
5	Advantages	1.30	2.90	1.30	9.817**

** Significant at 0.01 level

Source: Based on authors' primary data

5.0 Conclusion

Highly significant gain in knowledge was observed in the practice of making bead products, correct postures and use of waste woods after extraction of beads, jewelry making, decorative crafts, leather crafts etc. along with basic techniques of construction, tool handling and proper packaging and finishing of products, feedbacks, loyalty to customers and advantages.

Previously received training, handling of tools and materials, teaching other women, outlining market products, imitating market products, pricing or accounting and packaging were the best hard skills possessed by respondents.

The training for a couple of months and marketing for a month showed remarkable success which if implemented in an organized manner can increase the income of the women considerably. Overall the value addition of beads was a successful start for the future enterprise of Mangali village.

6.0 Recommendations

Training done to improve bead workers' skill and efficiency for making value-added products can be used for further income generation opportunities in future. This can create a source of sustainable income generation building social entrepreneurship for whole village. Provision of Government marts, fairs, etc. shall be provided so that the irony of the middlemen can be removed and also this will act as strong motivation force for other women to come forward. The elimination of hazards at workplace is necessary to focus upon by providing women the protective equipments and aiding tools. Mere knowledge of correct postures and correct techniques of doing work can reduce a lot of the discomforts.

References

- AICRP, 2008-2009. All India Coordinated Research Project on Home Science - FRM component. Annual Report of PAU Centre, Punjab Agricultural University, Ludhiana (PUNJAB) INDIA.
- AICRP, 2011-2012. All India Coordinated Research Project on Home Science - FRM component. Participation in Bead Making Activity, Annual Report of CCSHAU Centre, Choudhary Charan Singh Haryana Agricultural University, Hisar (HARYANA) INDIA.
- AICRP, 2017-2018. All India Coordinated Research Project on Home Science - FRM component. Gender Participation in Bead Making Activity, Annual Report of CCSHAU Centre, Choudhary Charan Singh Haryana Agricultural University, Hisar (HARYANA) INDIA.
- Annual Report, 2017-18. Government of India Ministry of Micro, Small and Medium Enterprises; 22-33, 84-87. (Retrieved on 5/03/2018 from www.msme.gov.in.)
- Anonymous, 2009. Beadwork. (Retrieved on 21/02/2018 from <https://en.wikipedia.org>.)
- Anonymous, 2018. Participation of Women in SSI Sector. (Retrieved on 5/03/2018 from www.dcmsme.gov.in.)
- Cultural India: All About Beads and Indian Bead Jewelry (Retrieved on 8/03/2018 from <https://www.culturalindia.net>)
- Dahiya, P., Singh, K. and Gandhi, S. 2011. Workplace Improvement In Bead Making Through Ergonomic Intervention. International Conference on Ergonomics and Human Factors, HWWE - 2011.
- Gupta, R., Sharma, M., Singh, D., Suthar, B. and Saha, S. 2015. Women empowerment by technology supported manufacturing of beads from Holy Basil. Current Science, 109(9): 1660-1664.
- Kushalakshi & Raghurama A. 2014. Rural Entrepreneurship: A Catalyst for Rural Development. International Journal of Science and Research, 3(8): 51-54.
- NSSO, 2014. Employment and Unemployment Situation in India. 68th Round. National Sample Survey Office. Ministry of Statistical and Programme Implementation. Government of India. New Delhi.
- OSHA, Occupational safety and health administration, (Retrieved from <https://www.osha.gov/SLTC/ergonomics>)
- Peichui, V., Chanam, S., Laishram I. and Kshetrimayum, R. 2016. Income Generating Activities of Women in Seijang village, Imphal East District, Manipur, Sai Om Journal of Arts & Education-A Peer Reviewed International Journal 2(12): 24-28
- Sanghi, S., Sreja, A. and Shirke S.V. 2015. Decline in Rural Female Labour Force Participation in India: A Relook into the Causes. VIKALPA- The Journal for Decision Makers, 40(3): 255-268.
- Sharma, A., Dua, S. and Hatwal, V. 2012. Micro Enterprise Development And Rural Women Entrepreneurship: Way For Economic Empowerment. Arth Prabhand: A Journal of Economics and Management, 1(6): 114-127.

Consolidation and Acquisition of Nationalized Banks and Their Effects on Profitability and Shareholder Value – A Holistic Purview

Jeyaprabha*

Abstract

Maidavolu Narasimham, the RBI's 13th Governor, proposed banking reforms in a committee report more than two decades ago, and his proposal may finally see the light of day. He proposed merging public-sector banks in 1991 in order to strengthen them. In India, bank consolidation has taken two forms. One of the most visible has been the voluntary merger of banks, which has been driven by a desire for synergy, growth, and operational efficiency. This study conducts Paired T-test on Pre-M&A and Post M&A to measure the impact of the profitability and shareholder values of Major Public sector banks during the last three financial years where most of the Mergers and Acquisition happened. To that end, it examined whether acquired banks post-consolidation in India improved their positions in terms of Profitability and Shareholder value compared to Pre-M&A. And the study also looked for distinctions between the performance of the banks post-consolidation. However, the Results show a dichotomy between Pre-Merger and post-merger of the nationalized banks. For this purpose, Fourteen Financial parameters are used in order to determine the change in profitability and shareholder value more precisely and accurately.

Keywords: Merger, Consolidation, Profitability, Shareholder Values, Operational Synergies.

1.0 Introduction

The recommendations of the Verma committee were considered very critical since they suggested some harsh measures for revitalizing the public sector banks. The committee recommended that it could be better to have five-strong banks than 20 weak banks. These recommendations were taken up by the government as early as FY 2008-09 when the first consolidation took place between the state bank of India and its subsidiaries or associate banks. However, the major leap took place in FY 2018-19 when a flurry of mergers was ushered in to streamline and strengthen the functioning of some commercial banks. It was when the major consolidation takes place between 4 public sector banks i.e., the merger of Bank of Baroda with Dena Bank and Vijaya Bank. Following this same route in the next financial year FY2019-20, four major consolidations of 10 public sector banks took place. They are namely Punjab National bank with Oriental bank of commerce and United bank of India, Canara bank with Syndicate bank, Indian Bank with Allahabad Bank, and Union Bank of India with Andhra Bank and Corporation Bank (Ref Table 1). So, in this context, it would be relevant to evaluate the performance of banks post-merger to understand the effect of such consolidation on profitability and shareholder value. Consolidation is primarily proposed to increase productivity, efficiency, and economic growth after a six-year slump, as well as to reduce the number of bad loans and non-performing assets (NPAs). The country currently has twelve public sector banks. By doing so, the government reduces the number of public sector banks and the expenses associated with capital infusion, i.e., cost-cutting; next, it improves the asset quality of the banks; and finally, the government's capital infusion to meet the capital adequacy ratio limits and Basel norms will be significantly reduced, as government capital infusion is primarily used to maintain these norms.

1.1 The objective of the Study:

The objective of the study is to evaluate the effects of mergers and acquisitions on the financial performance of the selected Indian banks. A post-merger study is carried out on selected parameters to assess the impact of mergers and acquisitions of banks in terms of profitability and shareholder value. In order to achieve this, the following objectives of the study are carried out as follows:

*V M, College of Management, SRM Institute of Science and Technology

- To evaluate the performance of banks post-consolidation by conducting a comparative analysis of performance prior to and after the consolidation, in order to assess the banks' strength and future prospects.
- To determine whether acquirers outperform non-acquirers.

2.0 literature survey:

Several research has been conducted to investigate the impact of M & As on various areas of the banking industry. Moreover, numerous investigations have revealed the diverse motivations for such a calculated move.

Rhoades (1993), mergers and acquisitions have an impact on efficiency and profitability in banking. For the study, a total of 33 local and international bank-to-bank mergers were examined. Domestic mergers, according to the study, lead to greater cost efficiency, though they have minimal impact on profitability. In spite of this, the study concludes that cross-border relations do not promote efficiency, but rather a profitability. Vander Vennet, (1996), Mergers are a popular strategy to develop operational synergies, but their success is contingent on the potential for economies of size and breadth. If these economies occur, a bank's scale expansion would be accompanied by a cost increase that is not proportional to its size. Pilloff (1996), Consolidated banks can generate more value than two individual pre-merger banks. Ravenscraft & Scherer, 1987- Avkiran, 1999, A merger, according to classic merger theory, is the transfer of scarce corporate resources from one organization to another that can function more efficiently and put those resources to better use. (Onikoyi et al., 2014; Zahid and Shah, 2014; Anand and Singh, 2008; Campa and Hernaldo, 2006; Scholtens and Wit, 2004; Resti and Siciliano, 2000), A variety of empirical research have been conducted to investigate the impact of M&A on banks in the pre-and post-event era.

This debate on the benefits of banks in M&A transactions is still unresolved. According to several studies, mergers and acquisitions in the banking sector are helpful. Bhatnagar, R. G. (2001) study investigated a hefty toll on public sector banks afflicted by NPA-tainted balance sheets and saddled with the flab of prior bureaucratic initiatives. Well-managed, popular, and inventive sector banks are giving the PSBs a run for their money in an increasingly competitive business. The author proposes a solution in the form of a merger and streamlined operations. Sufian (2004) evaluated the impact of mergers in the banking industry in the Malaysian economy. The efficiency effects of the merger were taken into account during the post-merger period.

The analysis revealed that overall efficiency improved in all institutions subject to merger, with the exception of a few large banks that experienced large-scale inefficiencies. (Kumar, 2009), The stock market's reaction to mergers and acquisitions announcements in developed countries has been documented, however, there is a paucity of information about the influence of mergers and acquisitions in developing countries' banking industries. (Badreldin & Kalhoefer, 2009), Several studies have been carried out in Egypt to analyze the performance of merging banks after banking reforms were successful in consolidating the sector. Findings revealed that Bank mergers helped in raising profitability and increased credit risk position by a small amount. After a series of mergers between commercial banks in Pakistan, Kouser and Saba (2011) sought to determine the impact of the transactions on profitability. Researchers discovered that all amalgamated banks' operating financial performance has worsened over time, as evidenced by the findings of the study. Adegboyega and Dele (2014), in the post-merger scenario, shareholder wealth decreases due to higher non-performing assets of merged banks, resulting in profit erosion and little or no payout to shareholders. Pessanha et al. (2016), the announcement of an M&A transaction during the banking period generates an increase in stock volatility. As a result, shareholders anticipated an increase in risk. Stock volatility receives a lot of attention.

3.0 Research Methodology

3.1 1. Data:

This study is based on secondary data and is being used for research purposes. To assess the influence of mergers and acquisitions on the performance of banks chosen as a sample, financial and accounting data was collected from the bank's published Quarterly reports for the period starting from the quarter of June 2018 to the current quarter of June

2021. And data was also gathered from the websites of the Bombay Stock Exchange, National Stock Exchange, and CRISIL database.

3.2 Paired T-Test:

The parametric t-test was used to analyze numerous critical parameters for the comparison of the pre-merger and post-merger periods of acquirer banks during the time period taken. This study looked at six major public sector banks prior to merger or acquisition and the same banks after consolidation with other target banks to measure the impact on profitability and shareholder value of the banks post-consolidation. The difference in their operational means of the major indicators is then calculated for each period, and this difference is used to determine the banks' real performance post-merger.

3.3. Analysis and Interpretation:

From the First quarter of FY 2018-19 to the First quarter of FY 2021-22, five major public sector banks that have undergone significant mergers were identified for this study. The Fund based income (Schedule 13), Fee-based income (Schedule 14), Interest Expenses, Operating Expenses, Net Profit, Provisioning, Earnings per share, Net Interest Margin, Market price per share, Price Book value ratio (PBV), and Market capitalization are all important aspects to consider when choosing financial parameters to measure the impact of Bank consolidation on profitability and shareholder value. The GNPA, NNPA, and Capital Adequacy Ratio (CAR) have all been highlighted in the correct context to provide this study with the needed depth and focus.

3.3.1 Fund Based Income

According to Table 2, the level of significance for the mean difference of Fund-based income for the corresponding study period taken (Post M&As over Pre-M&As) has increased in the case of all banks. And for all of the banks, the t-value is significant at the 0.05 level. The interest income of all five surviving public sector banks has increased significantly since the merger, and it appears that this trend will continue for some time. Profitability has had a beneficial influence from the merger activity of BOB, PNB, Indian Banks, Canara Bank, and Union Bank.

3.3.2 Fee-Based Income

From the observation of Table 3, it reveals that the level of significance for the mean difference of Fee-Based Income for the corresponding study period taken (Post M&As over Pre-M&As) in the case of all banks increased but, on average, in the case of only PNB (t-value = 2.882, $p > 0.05$), the t value of 2.882 is insignificant as PNB piled up with bad debts in the previous financial years, it has no effect on post-consolidation. And Except for PNB, the t-value is significant at the 0.05 level for the other banks.

3.3.3 Interest Expenses

From the observation of Table 4, it reveals that the level of significance for the mean difference of Interest Expenses for the corresponding study period taken (Post M&As over Pre-M&As) in the case of all banks increased and the t-values are significant at the 0.05 level. Interest expenses have climbed dramatically for all five public sector banks following the merger, and it appears that this trend will continue for some time, given it includes the merger cost synergies of various banks.

3.3.4 Operating Expenses

According to Table 5, the level of significance for the mean difference of Operating Expenses for the corresponding study period taken (Post M&As over Pre-M&As) increased in the case of all banks as the merger costs predominantly included Branch layoffs, technological improvements, supply chain advancements, and an increase in interest rates. The t-values for all six banks are significant at the 0.05 level. Following the merger, operating expenses for all five public sector banks increased considerably, and it appears that this trend will continue for some time now that Covid 19 Pandemic has joined the group. Furthermore, the bank's cost efficiency has been harmed by

the merger activity of BOB, PNB, Indian Banks, Canara Bank, and Union Bank.

3.3.5 Provisions

According to Table 6, the level of significance for the mean difference in Provisions for the corresponding study period taken (Post M&As over Pre-M&As) decreased in the case of all banks. And the t-values for all six banks are insignificant at the 0.05 level. Hence the provisions have very little impact on profitability.

3.3.6 Net Profit

The level of significance for the mean difference in Net Profit for the corresponding study period taken (Post M&As over Pre-M&As) increased in the case of all banks, according to Table 7. Though the t-values for all five banks are insignificant at the 0.05 level, it becomes trivial in nature, when compared to the mean differences in net profit of all five commercial banks over the study's overall average period. As a result, net profit has a significant impact on profitability.

3.3.7 Earnings Per Share (EPS)

From the observation of Table 8. Despite the fact that Bank of Baroda merged with Vijaya Bank and Dena Bank, it is still regarded as the government of India's first major bank consolidation, and many were skeptical of the positive outcomes of this major consolidation. Furthermore, the t-values for the other banks are insignificant at the 0.05 level. Thus, the fact that the t value is insignificant for all banks does not imply that it has less influence on profitability when viewed as a whole.

3.3.8 Net Interest Margin

From the observation of Table 9, NIM increased marginally, and the t value is insignificant for all the banks except for Canara Bank (t-value = 13.408, $p < 0.05$), the high t value of 13.408 is significant as Canara bank's advances grew by 3.68 percentage post-merger and it also raised capital through selling shares and tier (AT-1) bonds. Thus, NIM despite COVID19 influence, still holds good and indicates the future possibility of an increase in profitability of the banks in the long run.

3.3.9 Market Price Per Share

According to Table 10, The t-values for all six banks are insignificant at the 0.05 level and have a negative T value which indicates the negative impact on the Shareholder Value of the Banks. Hence the Market price per share have a negative impact on shareholder value as the mean difference for all the banks is negative and so t value being insignificant is of less importance.

3.3.10 Price To Book Value (PBV)

According to Table 11, the P/B ratio is below-one for all the banks and it doesn't affect the P/B ratio of the bank a lot compared to the merged banks. This means the stock is being valued at a discount to equity book value and there is no indication of an increase in P/B value due to the M&A. As a result, the PBV has a negative influence on shareholder value, as the mean difference for all banks has reduced over time, and the t-value, which is insignificant, has become less important.

3.3.11 Market Capitalization

In table 12. and Figure 11, all five banks' t-values are insignificant at the 0.05 level. This is because the Centre's proposed capital infusion at abysmal valuations, as well as shares issued to investors of the amalgamating banks in the main bank (into which the bank/banks are merged), would result in a significant dilution in the merged entity's book value. In other circumstances, the merging banks trade at a significant premium to the main bank, implying that more shares will be issued under the swap arrangement, resulting in additional dilution. As a result, the stock prices

of these PSU Bank stocks plummeted even lower, which became a logical explanation for the Public Sector Banks' market cap increasing slowly post-merger/acquisition.

3.3.12 Gross Non-performing Assets (GNPA)

Table 13. shows that Except for the Indian Bank (t-value, =7.727, $p < 0.05$), the level of significance for the mean difference in GNPA decreased marginally for all banks. The high t value of 7.727 for Indian Bank is significant and GNPA increased post-merger. This is because the Bank faced massive consequences of the COVID19 pandemic, especially the second wave, which led to a weakness in the asset quality of the bank. Furthermore, all the other five banks' t-values are negative and insignificant at the 0.05 level, implying that the banks are doing well following the consolidation in terms of GNPA.

3.3.13 Net Non-Performing Assets (NNPA)

In Table 14. NNPA decreased marginally for all banks including Indian Bank. This is due to the high provisions. And in the case of Canara Bank (t-value =3.584, $p < 0.05$), and Union Bank of India (t-value =4.050, $p < 0.05$), The t value is significant and NNPA decreased post-merger. This is because of the increase in the COVID19 loan welfare package issued by RBI, restructuring of loans during the pandemic period, an increase in provisions which leads to the decrease in the NNPA post-consolidation. It indirectly impacts the bank's share price and profitability to a greater extent. Other banks, which are insignificant have a lesser hold on the NNPA on profitability and shareholder value post-consolidation as shown in Figure 13.

3.3.14 Capital Adequacy Ratio (CAR)

Table 15. shows that the level of significance for the mean difference in Capital Adequacy Ratio for the corresponding study period (Post M&As over Pre-M&As) increased marginally for all banks except for Canara Bank and Union Bank of India. The negative t value indicates the decrease in the CAR ratio of the Canara Bank and Union Bank of India and all t values irrespective of being positive or negative, is insignificant as shown in figure 14. The Capital Adequacy Ratio of commercial banks is used to assess the efficiency and stability of a strong banking system.

4.0 Findings

It is found that the acquiring bank, Bank of Baroda tends to reduce the Shareholder value the post-consolidation remains lowered despite the good performance of, the targets banks Vijaya Bank and Dena bank prior to consolidation. Canara Bank's Net interest margin increased compared to other banks the reason being an increase in its asset portfolio post amalgamation. The Indian Bank merger cost efficiency is quite low compared to other banks and Bank's Gross NPA increased post-consolidation though it recorded an increase in the net profit post-consolidation. Union Bank and Canara Bank reported a huge rate of increase in their Net profit post-consolidation as both of these banks turned profit-making banks from loss-making banks in their last financial year prior to the consolidation.

The Capital adequacy ratio, Asset quality ratio, Market price per share, Price Book value ratio (PBV), and Market cap being insignificant statistically indicates that the Cost synergies, Profitability synergies will be met in a long period of duration and cannot be measured in the shorter time frame post-consolidation because of the outburst of the COVID19 Pandemic. The t-value though insignificant is not trivial. So, it can be concluded that for a longer time period also, the merger activity of BOB, PNB and Indian bank, Canara Bank, and Union Bank of India has an impact on their left-over earnings.

Conclusion:

In terms of market reactions to merger announcements, the market initially reacted unfavorably to most bank acquisition announcements, lowering shareholder value, but ultimately, there was either destruction or growth of shareholder wealth among public and private sector bank investors. In the banking sector, merger announcements

often result in no (or slightly positive) cumulative abnormal returns on acquiring banks' equities and significantly positive abnormal returns on target bank stocks. However, the findings should be viewed with caution. While stock prices reflect the market's expectations for future cash flows, actual results may differ from those forecasts. This is especially true in the case of bank mergers.

To quote Mr. Muthu Raman, Former Managing Director of Tata steel on the day tata steel acquired Corus, “It will take at least another three years before we realize the full synergies of this consolidations”. Similarly, it would take at least another two years for the consolidated new entities in the public sector banking to bring out the synergies of such mergers. The major concerns such as Capital Adequacy, Credit delivery and growth, asset quality, and profitability needed to be addressed urgently due to 10.76 lakh crore gross non-performing assets that came to light during the first half of FY2018-19. Hence the drastic step of bank consolidation had to be carried out to restore public confidence in the banking system. However, it is heartening to note that there are clear indications of a pullback as revealed by analysis of financial data post-merger of these banks. The full benefits of such consolidations may take at least another couple of years but it is reasonable to assume that the first step has been taken in the right direction in this matter.

Tables and Figures:

Table 1. Recent Mergers in Public sector Banks

S.no.	Acquirer BANK	Target Banks	Type of Consolida- tion	Merger / Ac- quisition Date	Quarters post Consol- idation
1.	Bank of Baroda	Vijaya bank Dena Bank	Merger	01/04/2019	June19, Sep 19, Dec19, March20, June20, Sep 20, Dec20, March21
2.	Punjab National Bank	Oriental Bank of Com- merce United bank of India	Merger	01/04/2020	June20, Sep20, Dec20, March21
3.	Canara Bank	Syndicate Bank	Merger	01/04/2020	June20, Sep20, Dec20, March21
4.	Indian Bank	Allahabad Bank	Merger	01/04/2020	June20, Sep20, Dec20, March21
5.	Union Bank of India	Andhra Bank Corporation Bank	Merger	01/04/2020	June20, Sep20, Dec20, March21

P value: Significant at 5% level

(Sources: Based on author's calculation)

Table 2. Fund Based Income

FUND BASED INCOME						
Acquirer Bank	Pre-M&As		Post M&As		T-value	P-value
	Mean	Standard Deviation	Mean	Standard Deviation		
BOB	13226.563	879.042	19723.675	439.545	11.007	0.002
PNB	13729.618	379.567	20445.390	977.828	10.182	0.002
Indian Bank	5350.323	163.239	9777.018	586.815	12.650	0.001
Canara Bank	12439.688	127.351	17553.150	729.416	16.653	0.000
Union Bank of India	9369.805	304.940	17327.865	1261.208	11.267	0.001

P value: Significant at 5% level

(Sources: Based on author's calculation)

Table 3. Fee Based Income

FEE BASED INCOME						
Acquirer Bank	Pre-M&As		Post M&As		T-value	P-value
	Mean	Standard Deviation	Mean	Standard Deviation		
BOB	1971.763	469.965	3047.833	497.815	8.552	0.03
PNB	2346.918	214.736	3302.315	629.142	2.882	0.063
Indian Bank	831.375	151.976	1635.115	178.603	6.974	0.006
Canara Bank	2949.850	156.387	5861.788	1457.107	4.308	0.023
Union Bank of India	1447.318	453.560	3474.770	1422.754	2.715	0.035

P value: Significant at 5% level

(Sources: Based on author's calculation)

Table 4. Interest Expenses

INTEREST EXPENSES						
Acquirer Bank	Pre-M&As		Post M&As		T-value	P-value
	Mean	Standard Deviation	Mean	Standard Deviation		
BOB	8126.430	516.852	12509.973	235.549	11.663	0.001
PNB	9249.368	137.614	12701.145	895.752	6.718	0.007
Indian Bank	3449.378	70.868	5859.700	293.174	13.358	0.001
Canara Bank	8954.298	264.366	11295.625	510.097	10.424	0.002
Union Bank of India	6459.203	56.667	11028.100	894.173	10.034	0.002

P value: Significant at 5% level

(Sources: Based on author's calculation)

Table 5. Operating Expenses

OPERATING EXPENSES						
Acquirer Bank	Pre-M&As		Post M&As		T-value	P-value
	Mean	Standard Deviation	Mean	Standard Deviation		
BOB	3192.243	358.672	5144.070	296.026	9.092	0.003
PNB	3037.628	228.856	5128.943	139.117	13.516	0.001
Indian Bank	1108.175	29.237	2697.320	142.887	20.242	0.000
Canara Bank	4016.740	436.869	7071.225	672.025	14.535	0.001
Union Bank of India	2046.968	259.835	4937.880	563.127	17.898	0.000

P value: Significant at 5% level

(Sources: Based on author's calculation)

Table 6. Provisions

PROVISIONS						
Acquirer Bank	Pre-M&As		Post M&As		T-value	P-value
	Mean	Standard Deviation	Mean	Standard Deviation		
BOB	3498.508	1579.199	5425.943	1969.474	2.566	0.083
PNB	3582.785	1267.468	4971.510	346.340	2.304	0.105
Indian Bank	1279.565	517.445	2123.783	255.922	2.399	0.096
Canara Bank	2796.878	1713.530	4077.700	209.670	1.512	0.228
Union Bank of India	2721.263	1198.716	4254.860	730.987	2.028	0.136

P value: Significant at 5% level

(Sources: Based on author's calculation)

Table 7. Net Profit

NET PROFIT						
Acquirer Bank	Pre-M&As		Post M&As		T-value	P-value
	Mean	Standard Deviation	Mean	Standard Deviation		
BOB	138.817	697.092	235.545	984.323	0.138	0.899
PNB	90.835	780.118	538.100	46.002	1.092	0.355
Indian Bank	189.520	274.997	753.928	620.715	1.262	0.296
Canara Bank	498.898	1807.615	675.898	293.918	1.134	0.339
Union Bank of India	760.208	1457.193	707.005	400.823	1.649	0.198

P value: Significant at 5% level

(Sources: Based on author's calculation)

Table 8. Earnings per Share

EARNINGS PER SHARE (EPS)						
Acquirer Bank	Pre-M&As		Post M&As		T-value	P-value
	Mean	Standard Deviation	Mean	Standard Deviation		
BOB	0.860	2.656	0.595	2.627	-0.145	0.894
PNB	0.425	1.649	0.658	0.091	0.270	0.805
Indian Bank	4.595	6.160	6.973	5.552	0.408	0.711
Canara Bank	- 3.775	18.260	4.693	1.902	0.847	0.459
Union Bank of India	-2.753	5.342	1.115	0.625	1.352	0.269

P value: Significant at 5% level

(Sources: Based on author's calculation)

Table 9. Net Interest Margin

NET INTEREST MARGIN (NIM)						
Acquirer Bank	Pre-M&As		Post M&As		T-value	P-value
	Mean	Standard Deviation	Mean	Standard Deviation		
SBI	2.935	0.095	3.190	0.292	1.585	0.211
BOB	2.715	0.127	2.795	0.066	1.029	0.379
PNB	2.500	0.149	2.993	0.345	2.672	0.076
Indian Bank	2.803	0.136	2.840	0.357	0.154	0.887
Canara Bank	2.285	0.061	2.803	0.039	13.408	0.001
Union Bank of India	2.663	0.440	2.665	0.246	0.010	0.992

P value: Significant at 5% level

(Sources: Based on author's calculation)

Table 10. Market Price Per Share

MARKET PRICE PER SHARE						
Acquirer Bank	Pre-M&As		Post M&As		T-value	P-value
	Mean	Standard Deviation	Mean	Standard Deviation		
SBI	285.375	28.487	290.663	73.108	0.111	0.918
BOB	114.900	12.200	92.525	28.592	-1.219	0.310
PNB	59.550	19.737	33.250	3.461	-2.476	0.090
Indian Bank	132.288	91.733	80.025	27.211	-0.922	0.424
Canara Bank	194.663	81.169	117.638	28.538	-1.511	0.228
Union Bank of India	54.338	21.396	30.438	4.211	-2.124	0.124

P value: Significant at 5% level

(Sources: Based on author's calculation)

Table 11. Price to Book Value

PRICE TO BOOK VALUE (PBV)						
Acquirer Bank	Pre-M&As		Post-M&As		T-value	P-value
	Mean	Standard Deviation	Mean	Standard Deviation		
BOB	0.8	0.178	0.605	0.2229	1.3134	0.280
PNB	0.68	0.1774	0.475	0.1871	2.849	0.0651
Indian Bank	0.4175	0.2347	0.3025	0.8539	0.9418	0.415
Canara Bank	0.5225	0.1598	0.4075	0.09287	1.1717	0.32608
Union Bank of India	0.4925	0.08770	0.4	0.15253	1.8664	0.1588

P value: Significant at 5% level

(Sources: Based on author's calculation)

Table 12. Market Capitalization

MARKET CAPITALIZATION						
Acquirer Bank	Pre-M&As		Post M&As		T-value	P-value
	Mean	Standard Deviation	Mean	Standard Deviation		
SBI	2529.753	252.709	2576.623	648.044	0.111	0.918
BOB	302.334	32.140	381.490	110.648	1.257	0.298
PNB	320.840	98.208	329.635	48.011	0.152	0.889
Indian Bank	68.895	42.328	89.417	31.067	0.607	0.587
Canara Bank	167.108	63.752	185.065	59.165	0.357	0.745
Union Bank of India	129.729	43.706	194.043	26.745	3.020	0.057

P value: Significant at 5% level

(Sources: Based on author's calculation)

Table 13. Gross Non performing Assets

GROSS NON-PERFORMING ASSETS (GNPA)						
Acquirer Bank	Pre-M&As		Post M&As		T-value	P-value
	Mean	Standard Deviation	Mean	Standard Deviation		
SBI	9.220	1.392	6.953	0.587	- 5.454	0.012
BOB	11.215	1.223	10.090	0.467	-2.510	0.087
PNB	15.940	1.169	13.663	0.553	-2.988	0.058
Indian Bank	7.160	0.196	9.928	0.757	7.727	0.005
Canara Bank	8.538	0.262	8.388	0.678	-0.431	0.696
Union Bank of India	14.858	0.500	14.223	0.716	-2.513	0.087

P value: Significant at 5% level

(Sources: Based on author's calculation)

Table 14. Net Non-Performing Assets

NET NON-PERFORMING ASSETS						
Acquirer Bank	Pre-M&As		Post M&As		T-value	P-value
	Mean	Standard Deviation	Mean	Standard Deviation		
SBI	4.273	1.009	2.685	0.350	-4.735	0.018
BOB	4.463	0.887	3.760	0.424	-2.305	0.105
PNB	6.945	0.808	4.975	0.750	-2.791	0.068
Indian Bank	3.503	0.291	3.110	0.603	-1.292	0.287
Canara Bank	4.945	0.493	3.460	0.585	-3.584	0.037
Union Bank of India	6.673	0.797	4.248	0.737	-4.050	0.027

P value: Significant at 5% level

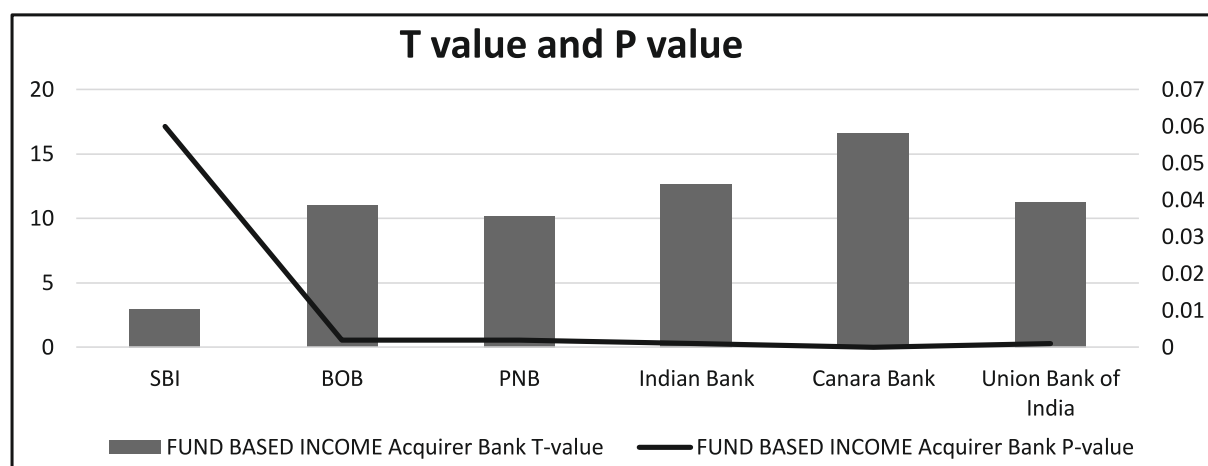
(Sources: Based on author's calculation)

Table 15. Capital Adequacy Ratio

CAPITAL ADEQUACY RATIO (CAR)						
Acquirer Bank	Pre-M&As		Post M&As		T-value	P-value
	Mean	Standard Deviation	Mean	Standard Deviation		
SBI	12.733	0.093	13.318	0.406	2.549	0.084
BOB	12.275	0.786	12.815	0.901	0.968	0.404
PNB	13.005	2.157	13.418	0.813	0.474	0.668
Indian Bank	13.925	0.860	14.215	1.029	0.532	0.632
Canara Bank	13.300	1.076	13.150	0.397	- 0.289	0.791
Union Bank of India	13.323	1.874	12.385	0.569	-1.191	0.319

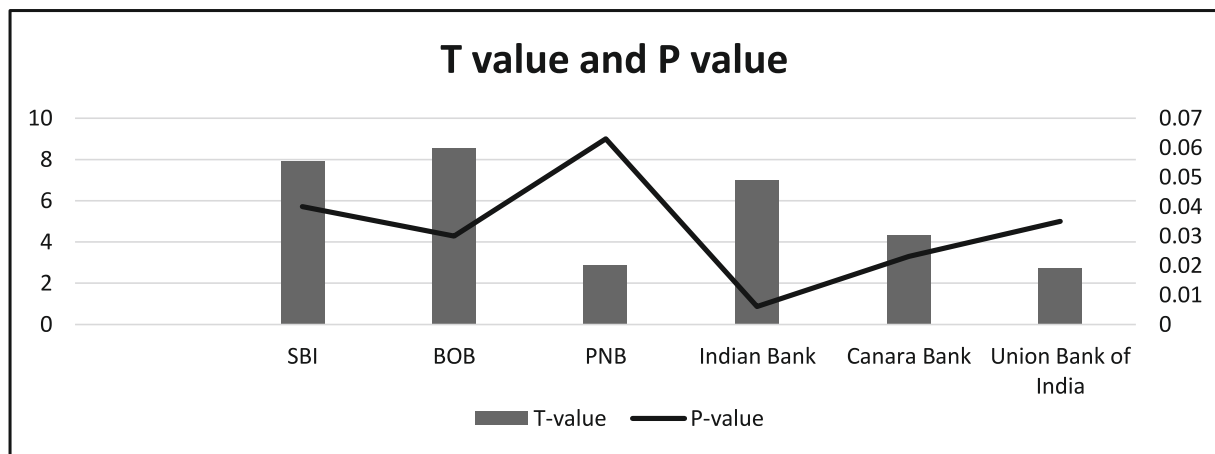
P value: Significant at 5% level

(Sources: Based on author's calculation)

Figure 1. Fund Based Income

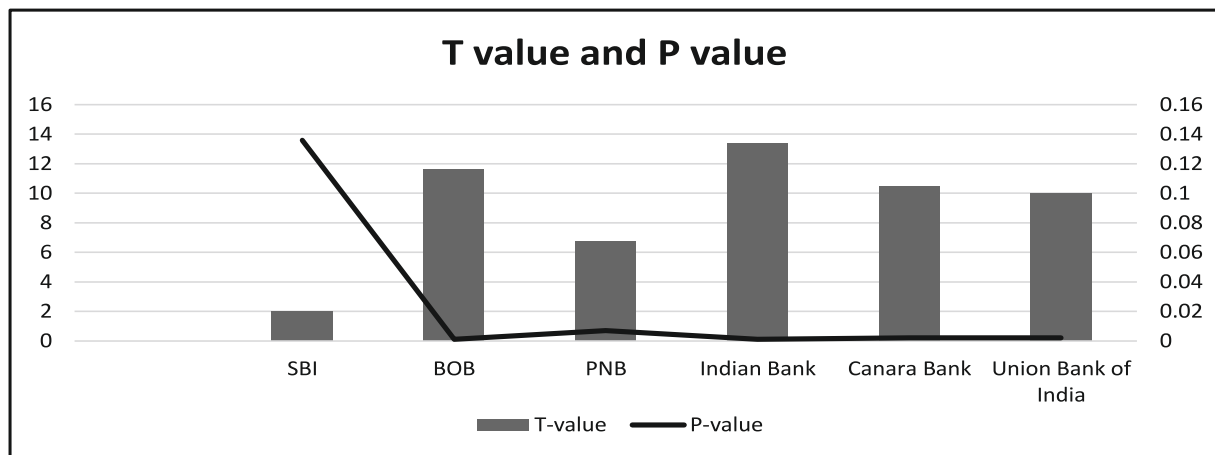
(Sources: Based on author's calculation)

Figure 2. Fee Based income



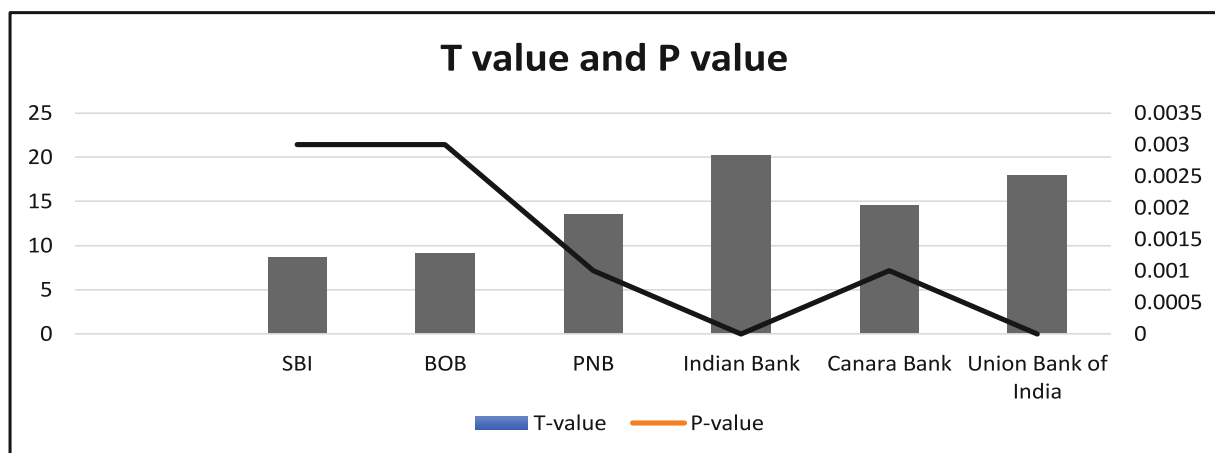
(Sources: Based on author's calculation)

Figure 3 . Interest Expenses



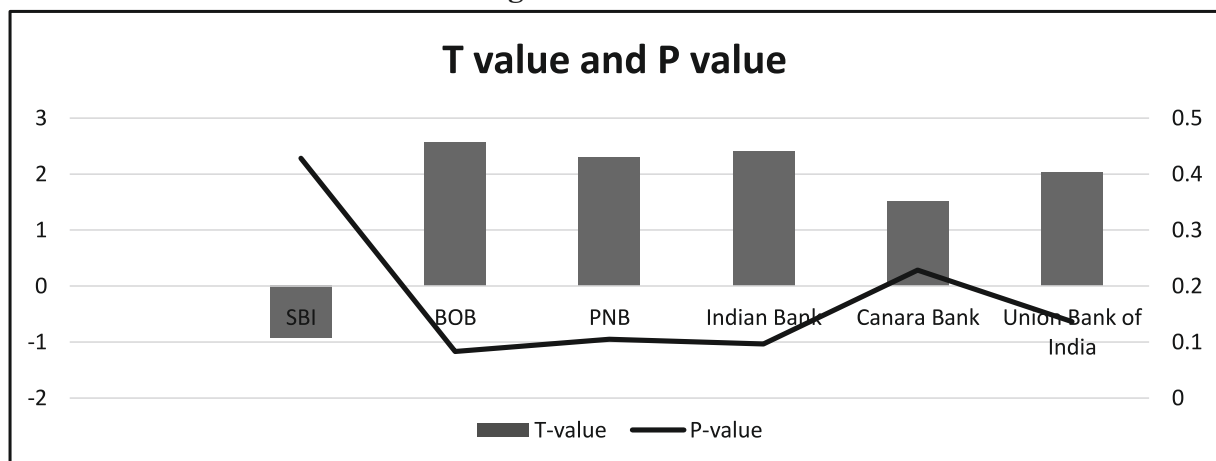
(Sources: Based on author's calculation)

Figure 4. Operating Expenses



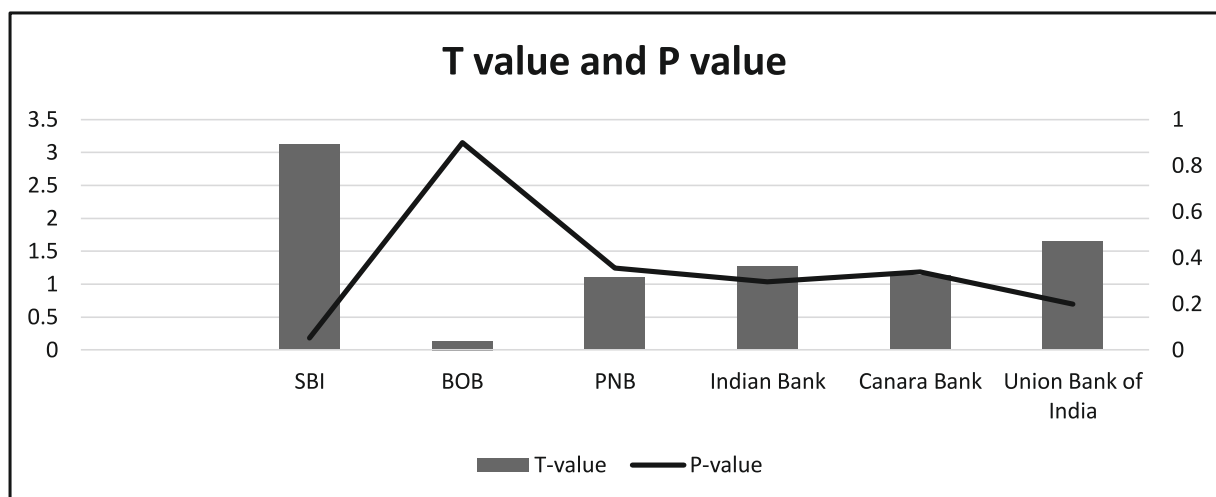
(Sources: Based on author's calculation)

Figure 5. Provisions



(Sources: Based on author's calculation)

Figure 6. Net Profit



(Sources: Based on author's calculation)

Figure 7. Earnings per Share

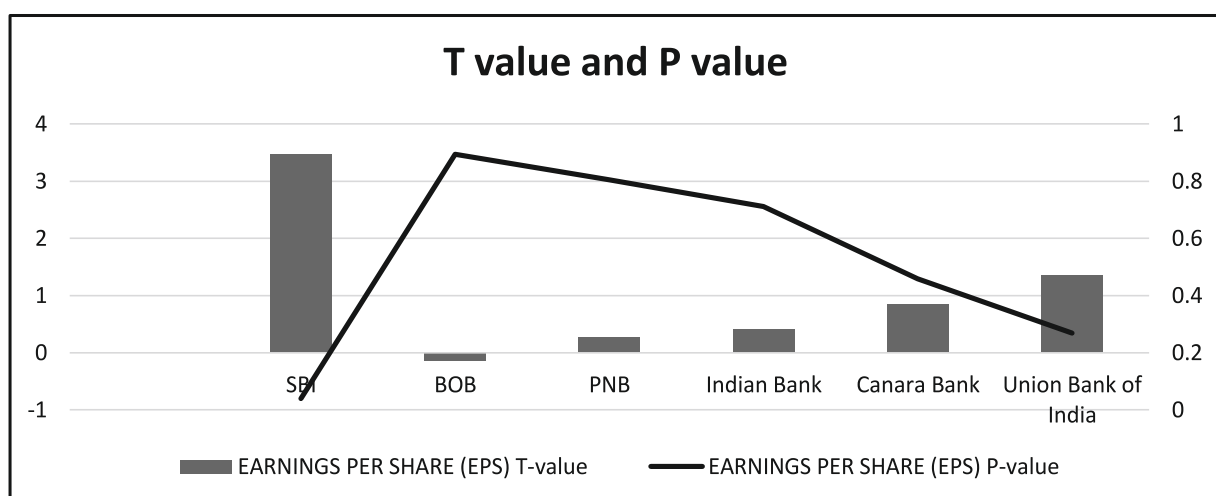
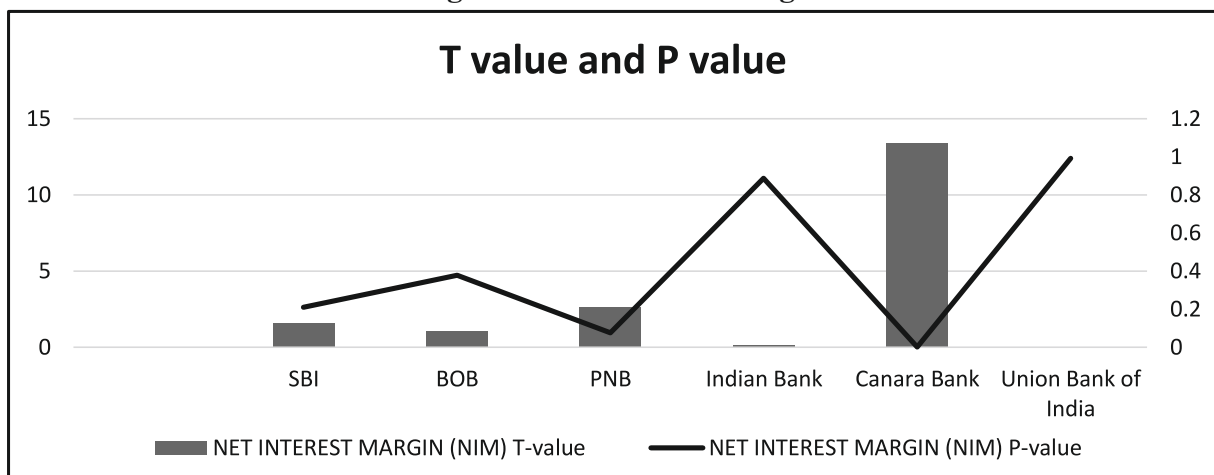
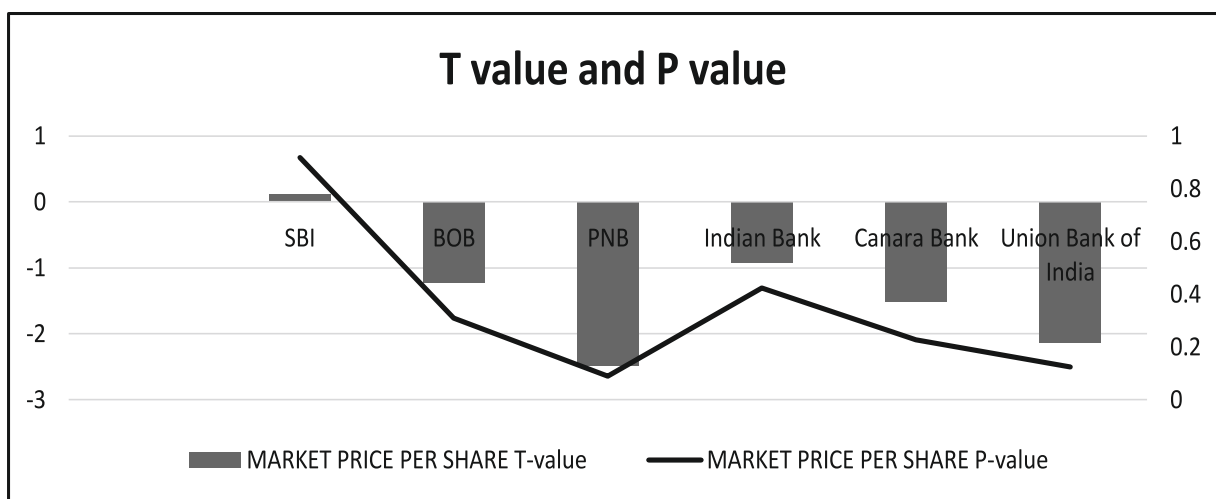


Figure 8. Net Interest Margin



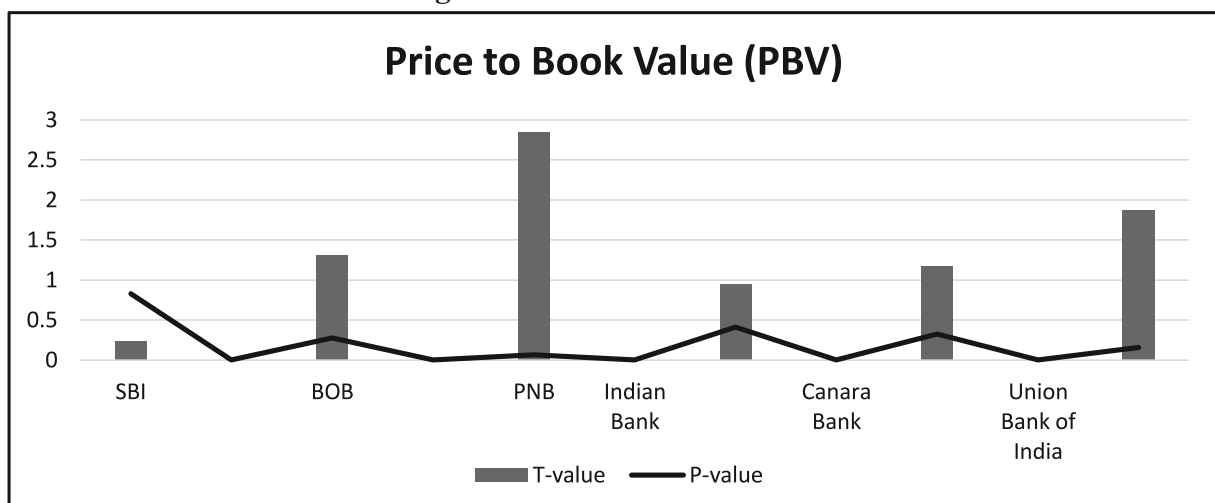
(Sources: Based on author's calculation)

Figure 9. Market Price Per Share



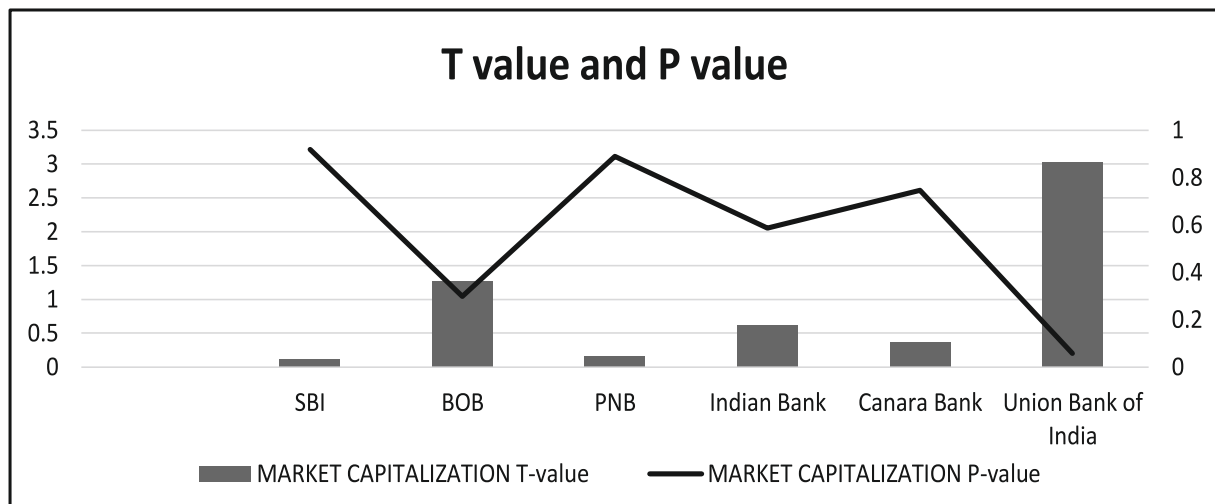
(Sources: Based on author's calculation)

Figure 10. Price to Book Value



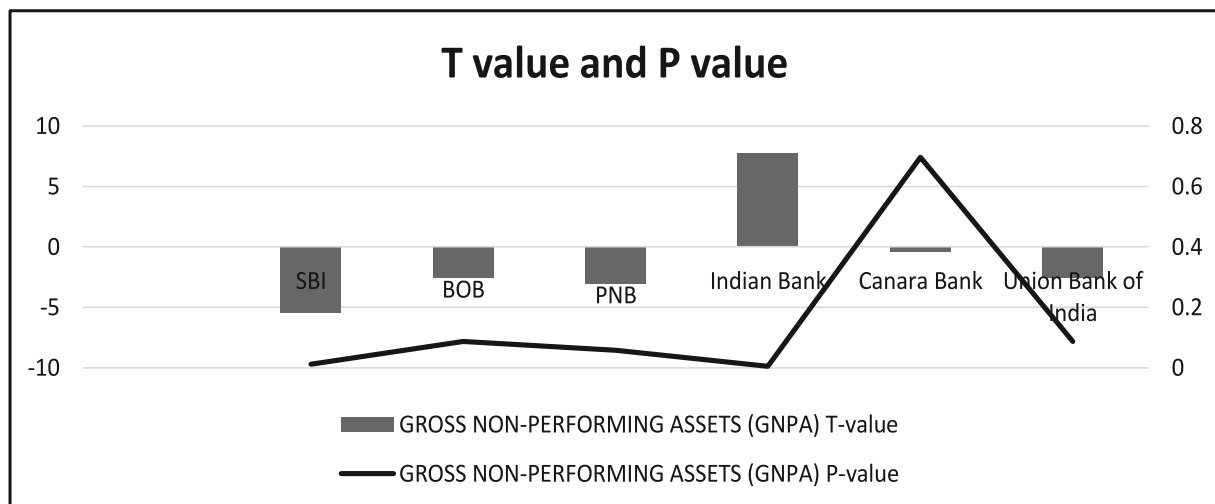
(Sources: Based on author's calculation)

Figure 11. Market Capitalization



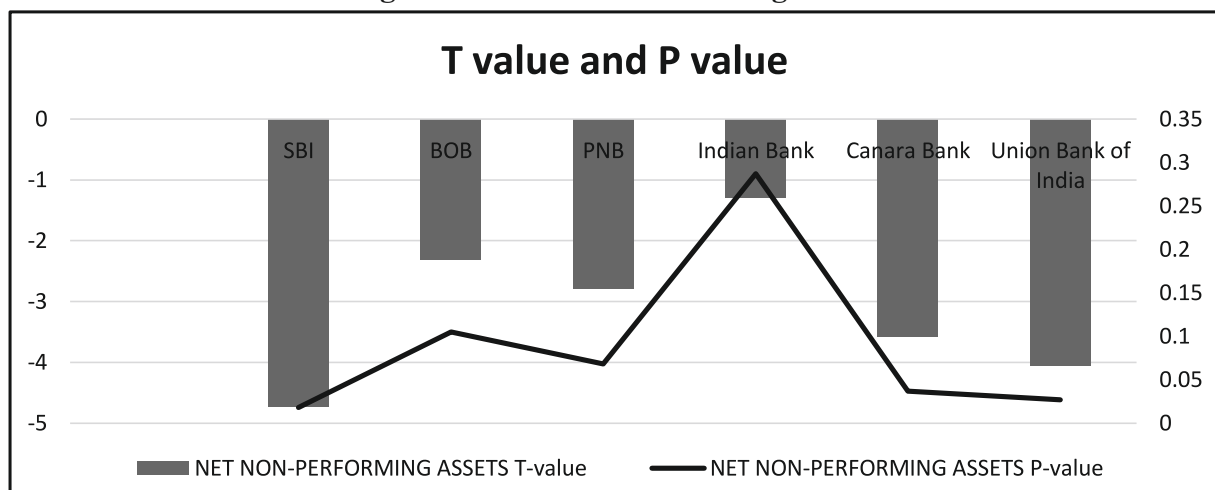
(Sources: Based on author's calculation)

Figure 12. Gross Non- Performing Assets

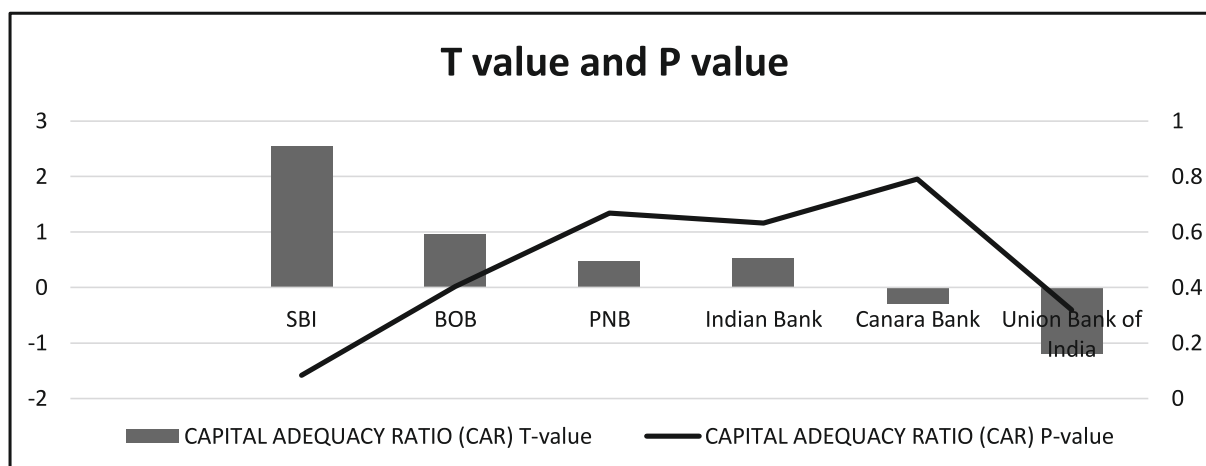


(Sources: Based on author's calculation)

Figure 13. Net Non- Performing Assets



(Sources: Based on author's calculation)

Figure 14. Capital Adequacy Ratio

(Sources: Based on author's calculation)

References

- Rhoades, S. A. (1993). Efficiency effects of horizontal (in-market) bank mergers. *Journal of Banking & Finance*, 17(2-3), 411-422.
- Vander Venet, R. (1996). The effect of mergers and acquisitions on the efficiency and profitability of EC credit institutions. *Journal of Banking & Finance*, 20(9), 1531-1558.
- Pilloff, S. J. (1996). Performance changes and shareholder wealth creation are associated with mergers of publicly traded banking institutions. *Journal of Money, Credit and Banking*, 28(3), 294-310.
- Avkiran, N. K. (1999). The evidence on efficiency gains: The role of mergers and the benefits to the public. *Journal of banking & finance*, 23(7), 991-1013.
- Ravenscraft, D. J., & Scherer, F. M. (1989). The profitability of mergers. *International journal of industrial organization*, 7(1), 101-116.
- Mall, P., & Gupta, K. (2019). Impact of merger and acquisition announcements on stock returns and intraday volatility: Evidence from Indian Banking sector. *Journal of entrepreneurship and management*, 8(3), 1.
- Abbas, Q., Hunjra, A. I., Azam, R. I., Ijaz, M. S., & Zahid, M. (2014). Financial performance of banks in Pakistan after Merger and Acquisition. *Journal of Global Entrepreneurship Research*, 4(1), 1-15.
- Anand, M., & Singh, J. (2008). Impact of merger announcements on shareholders' wealth: Evidence from Indian private sector banks. *Vikalpa*, 33(1), 35-54.
- Campa, J. M., & Hernando, I. (2006). M&As performance in the European financial industry. *Journal of Banking & Finance*, 30(12), 3367-3392.
- Scholtens, B., & de Wit, R. (2004). Announcement effects of bank mergers in Europe and the US. *Research in International Business and Finance*, 18(2), 217-228.
- Resti, A., & Siciliano, G. (2000). Do bank acquisitions increase shareholders' wealth? A comparison between market-based and accounting-based performance indicators for some Italian banks. *A Comparison between Market-Based and Accounting-Based Performance Indicators for Some Italian Banks* (Undated).

- Bhatnagar, R. G. (2001). M&A–The Key to Survival. *Mergers and Acquisitions: New Perspectives*, ICFAI, 167, 172.
- Sufian, F. (2004). The efficiency effects of bank mergers and acquisitions in a developing economy: Evidence from Malaysia. *International Journal of Applied Econometrics and Quantitative Studies*, 1(4), 53-74.
- Kumar, B. R., & Panneerselvam, S. (2009). Mergers, acquisitions and wealth creation: A comparative study in the Indian context. *IIMB Management Review*, 21(3), 222-242.
- Badreldin, A., & Kalhoefer, C. (2009). The effect of mergers and acquisitions on bank performance in Egypt. German University in Cairo, Faculty of Management Technology (Working Paper Series No. 18), 1-15.
- Kouser, R., & Saba, I. (2011). Effects of the business combination on financial performance: Evidence from Pakistan's banking sector. *Australian Journal of Business and Management Research*, 1(8), 54.
- Adegboyega, O. I., & Dele, A. O. (2014). Effect of Mergers and Acquisitions on Shareholders' Wealth in the Nigerian Banking Industry. *Journal of Economics*, 10 (1), 52-71
- Pessanha, G. R. G., Bruhn, N. C. P., Calegario, C. L. L., Sáfadi, T., & Ázara, L. N. D. (2016). Mergers and Acquisitions and Market Volatility of Brazilian Banking Stocks: An Application of GARCH Models. *Latin American Business Review*, 17(4), 333-357.

Links:

<https://www.moneycontrol.com/>

<https://www.crisilresearch.com/#/>

<https://www.pnbindia.in/financials-current.html>

<https://www.unionbankofindia.co.in/english/financial-result.aspx>

<https://www.bseindia.com/stock-share-price/indian-bank/indianb/532814/financials-results/>

<https://www.bloombergquint.com/>

<https://www.investindia.gov.in/>

<https://www.bankofbaroda.in/quarter-annual-result.htm>

<https://www.indianbank.net.in/>

https://canarabank.com/User_page.aspx?othlink=379

<https://economictimes.indiatimes.com/>

<https://www.valueresearchonline.com/stocks/>

<https://in.investing.com/>

<https://ycharts.com/indicators/regions/countries/IND>

<https://tradingeconomics.com/india/indicators>

<https://www.statista.com/topics/754/india/>

<https://www.screener.in/>

Pioneering Food Delivery in the Aftermath of a Global Pandemic- A Case Study of Zomato and Swiggy

Ms. Mahnoor Sahrash* and Anushka Kamashani**

Abstract

The Indian unicorns in the food delivery sector, Swiggy and Zomato, have seen tremendous growth in recent years. This success is attributed to not only their service innovation but also to their exemplary marketing strategies. These companies stand as an inspiration for many upcoming startups. This article gives an insight into the overall market scenarios of the food delivery sector with a special focus on Swiggy and Zomato and their growth trajectories. With delivery services currently being seen as a hotbed for investments, certain fundamental lessons emerge from these two technology-based delivery services, especially in the context of the uncertainty brought about by a pandemic and its aftermath. Focus has also been given to specific practices adopted by Zomato and Swiggy during the pandemic era, that set the tone for their future growth.

Keywords: Food delivery, Swiggy, Zomato, Marketing, Services

1.0 Introduction

The Indian food delivery market is huge. Many people have become habituated to ordering food online. The sector has experienced immense growth in recent years. As of 2019, the organized Indian food market that includes restaurants was worth \$22 billion, of which online food delivery only made up about 15%. That shows the huge growth potential of the food delivery sector in the country. In 2020, India's online food delivery market was valued at approximately \$5 billion. The number of users in this segment in India is expected to amount to 492.9m users by 2025. (glginsights.com, 2021).

The COVID-19 pandemic helped in the growth of the sector, with the urban population being confined to their homes, work from home being the new norm, closure of dine-in facilities, isolation and safety and social distancing taking priority. This sector is expected to reach about \$21 billion by 2026 at a CAGR (compound annual growth rate) of nearly 30% (statista). It is interesting to note, however, that such growth is mainly concentrated in large metro cities such as Mumbai, Delhi, and Bangalore, among others.

The top 7 to 10 cities make up about 70% of the business and the remaining 490 cities fill in the rest but are growing (glginsights.com, 2021). We've seen an aggressive movement of people to smaller cities, and with the hesitancy of online food ordering decreasing, smaller cities as potential markets are rapidly accelerating. There is higher awareness in these places of the fact that people can get food delivered instead of going to a restaurant. Older parents, who are not the original target generation for food delivery firms, are now starting to place orders. More delivery-oriented companies are seeing opportunities to open in this sector. Greater access to the internet and the extensive use of smartphones resulted in the success of this sector. The revenue of the online food delivery market in India is projected to reach \$13,988mn in 2022. The number of users is expected to amount to 492.9m users by 2025 (Statista).

The food delivery market in India is currently dominated by Swiggy and Zomato which have highly competitive market shares with usage shares being 35% for Zomato and 25% for Swiggy in 2020 (Statista). This highly competitive nature makes it impossible to declare one of them as a market leader in the food delivery sector. Their service innovation, effective marketing strategies and long-term initiatives positioned them as market leaders in the food delivery sector.

*Assistant Professor, St. Francis College for Women

**BMS Student, St. Francis College for Women

1.1 Objectives of the study

- To understand the market scenario of the food delivery sector in India
- To analyze the pandemic performance of Swiggy and Zomato
- To understand the reasons for the popularity of Swiggy and Zomato
- To understand the valuable marketing lessons offered by Swiggy and Zomato

2.0 Review of Literature

Dr. Vijaya Lakshmi Kanteti (2018), in her research paper titled “**Innovative strategies of startup firms in India - A study on online food delivery companies in India**” attempts a conceptual study to understand the innovative strategies followed by online food delivery startup companies in India like Swiggy, Zomato, Food Panda and Faasos. She notes that the food industry's growth relies heavily on technology and innovation. Restaurant partners benefit from significant cost and efficiency savings thanks to technology. It is critical to concentrate on creating scalable revenue streams in order to be profitable. She believes that the Indian food tech startup industry is ripe for growth and these startups are here to stay in the race. Operations and procedures must be examined and stabilized as well as recognizing and seizing the best opportunity to expand and profit.

Manudhi Yadav & Madhav Muraleedharan (2021), in their research paper titled “**Zomato's game plan: Marketing strategies of Zomato**” studied the marketing strategies adopted by Zomato and attempted to analyze how these strategies affected the growth of the company. They found that innovation, agility, and effective communication are at the heart of Zomato's marketing tactics. Their voice has a playful, funny, and sometimes even counterintuitive tone to it, which helps them stand out. Interaction with their audience is their main goal. The study also identifies Zomato's marketing efforts during COVID. Zomato established the Feed the Daily Wager fund to help families of daily wage laborers who are unable to generate any money during these difficult times. They set a goal of 50 million dollars, of which they have already raised approximately 28.13 million dollars. This money is used to provide food packages to households that can feed up to 5 people for a week. In order to ensure that the food reaches the proper individuals, they've worked with a network of NGOs and other groups.

Adity Tribhuvan (2020), in his paper titled “**A study on consumers perception on food apps**” attempts to find out what is the consumer's perception of online food delivery apps and investigates the factors that have influenced consumer perception of online food delivery apps. The study uses primary and secondary research techniques. The study outlines the important facts about the Indian food delivery industry. By 2023, the Indian internet food market is anticipated to be worth \$12.3 billion. The global growth rate is 9.01 percent, whereas India's online meal delivery sector is increasing at a pace of 15%. Swiggy makes \$1.5 billion in sales, while Zomato makes \$800 million. Between April 2017 and March 2018, both companies delivered 96 million orders. (Visakhapatnam News, 2020).

Ashish Kumar (2020), in his paper titled “**A study on the impact of COVID-19 on home delivery of food items through food delivery platforms**” found that the pandemic condition induced by the coronavirus had a significant influence on the online food delivery system. Many restaurants and food delivery partners have created new business models as a result of the traditional means of cooking and delivering food. Furthermore, morale and safety issues about food delivery staff, as well as concerns about the safety of delivery personnel, were severely impacted. He noted that after a few months of lockdown, general usage of online food delivery platforms increased, but many small enterprises had to bear the consequences.

Anupriya Saxena (2019), in her paper titled “**An analysis of food ordering applications in India: Zomato and Swiggy**” attempted to identify the pros and cons of the online food delivery apps from the point of view of restaurants and analyze the pros and cons of the online food delivery apps from the viewpoint of customers. She observed that Consumers are most attracted to the feature of Doorstep Delivery, which is available at any time and in any location. Customers are most attracted when they obtain Rewards & Cashbacks, which are followed by loyalty

points or advantages. Bad past experience, reviews, and word of mouth are all reasons that deter customers from trying online food delivery applications. This concept with innovation can thrive if it provides continuous and excellent services.

K. M. Kiran Raj & K. G. Nandha Kumar (2021), in their article titled “**Impact of COVID-19 pandemic on Zomato: A case study**” analyzed the financial performance of Zomato in comparison to its competitors during the pandemic. A SWOT analysis is used for this purpose. The study also described the COVID-19 initiatives undertaken by Zomato. The authors opined that even if there has been a slowdown in the market due to client buying habits being influenced by the threat of COVID-19 spreading and the deployment of Lockdown, there has been a slowdown in the market. Following the relaxing of the hotel-related industry's lockdown, we've seen an upsurge in demand for online meal delivery services. Zomato has made a number of steps to recover from the COVID-19 problem, as well as initiatives to assist its partners.

Kaviya. B, Kiruba Gladis. L, Lavanya. V.K & Mythreyi. R (2021), in their paper titled “A study on digital marketing strategy towards food delivering apps during pandemic” attempted to study the digital marketing strategies of Swiggy and Zomato, their comparison, and the covid's impact on food deliveries. They stated that Zomato has grown in popularity to the point where it now claims to be the industry leader in food delivery. They've surpassed a monthly run rate of 21 million people. Zomato's incredibly designed user interface is appealing to users, simple and easy to navigate, and this has helped it stand out from its competitors. Swiggy has a hyperlocal product delivery technique. They're even concerned about the tiniest details. Swiggy places a strong emphasis on the logistics of the business. Swiggy realized from the start that the best way to break into the delivery market was to develop a strong logistics network, and as a result, Swiggy has built a solid and long-term company logistics structure. It has its own increasing fleet of delivery partners, which presently numbers 1.25 million active partners.

3.0 Analysis and Discussion

3.1 Growing by Leaps and Bounds

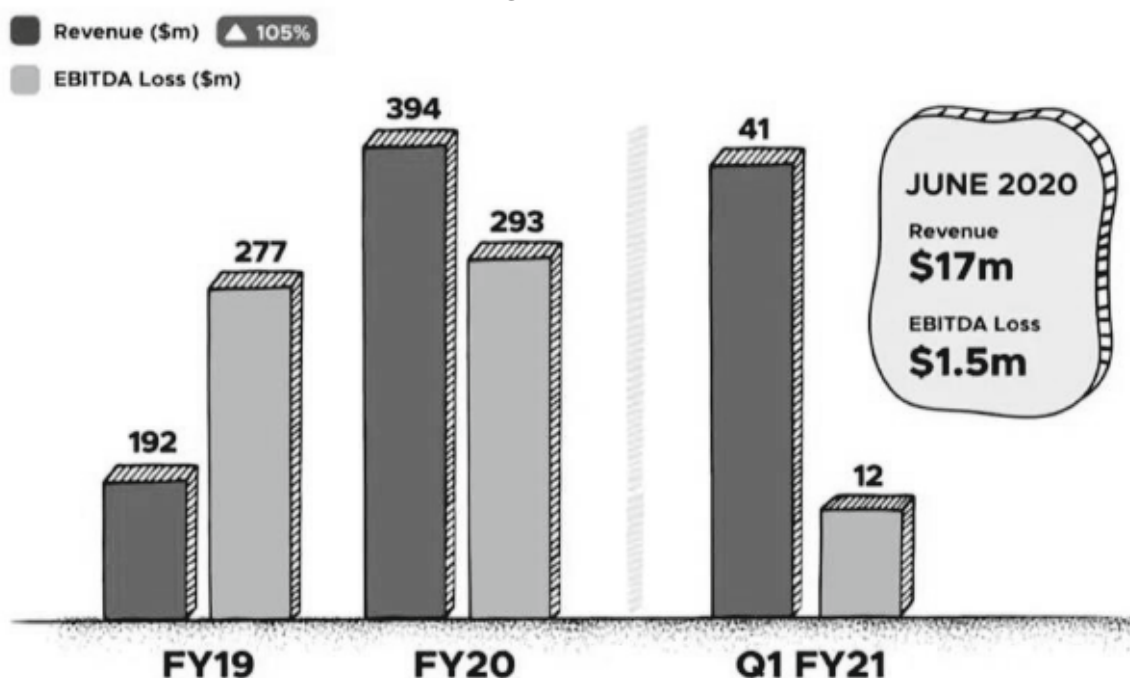
The Indian food delivery industry is experiencing fast-paced growth spearheaded by Swiggy and Zomato. They are the leading brands in the food delivery sector. Their effective marketing strategies and competitive offerings successfully kept the traffic coming, thereby driving sales. Their focus on innovation and agility proved extremely yielding.

Zomato is the first unicorn in India to go public on the stock exchanges. It has come a long way and evolved to be one of the greatest in the industry, from being known as Foodiebay in 2008 to being renamed Zomato in 2010 to being what it is now (date2compete.com, Sep 28, 2021). Its business strategy has transformed from that of a restaurant discovery company to one that focuses on delivery and operations.

As of September 2021, Zomato had about 173,000 eateries, up to 43,000 in 2019. In the first half of FY2020, Zomato's income increased by 225 percent, setting a new high. According to the company's biannual report, revenue was \$205 million, up from \$63 million in the first half of the previous year. (Feedough.com, 2021). Since its commencement in the food delivery sector in 2015, it has delivered 1 billion orders (The Economic Times, Aug 11, 2021). Zomato has experienced its fair share of peaks and valleys and has successfully recovered from numerous failures and life-threatening catastrophes.

To grow its operations, UberEats was acquired for \$350 million (The Economic Times, 2020). Zomato has a 45 percent market share in the meal delivery business and operates in 24 countries. In FY 2020, the average order value was 286.9 dollars, while in FY 2021, it was 395.4 dollars (Q4). When comparing the financial year 2019 to the financial year 2020, Zomato's revenue increased by 105 percent. However, throughout the same time span, its prices only climbed by 47%. In 2018, it made \$68 million in revenue, rising to \$206 million in 2019 and \$350 million in 2020. (Feedough.com, 2021).

Figure 1: Zomato's Revenue



Source: www.feedough.com

Swiggy, which was launched in 2014, has risen to the top through successful entrepreneurship, new initiatives, cost-effective operations, dynamic environment adaptation, and exceptional marketing methods. Swiggy Company reported a revenue of 133 crores and a loss of 200 crores for the fiscal year 2016-17. The Better Awards were given to Swiggy by The Economics Times in 2017. Swiggy was also included in Forbes magazine's 2017 edition of the Forbes 30, UNDER 30 INDIA. (The Economic Times, Nov22, 2021).

As of September 2021, Swiggy had 1,28,000 restaurants on its platform. Between June 2020 and June 2021, the company's revenue increased 2.8 times (Business Insider, Aug 13, 2021). Swiggy made \$2,776 crores in sales in the fiscal year that ended in March 2020. As of 2019, it processes over 45 million orders per month and plans to expand to 520 Indian cities by 2020. (The Economic Times, Nov22, 2021).

It has launched a new business called 'Swiggy Instamart,' which specializes in groceries delivery. In addition, it has launched a local courier service called 'Swiggy Genie' to bolster its post-pandemic market.

Swiggy has had its fair share of delivery agent and staff issues, but it has always tried to resolve them and maintain maximum stakeholder satisfaction. Swiggy's success may be ascribed to a "customer-backward" mindset, service innovation, dynamism, competitive efforts, successful marketing and collaborations, and a laser-like concentration on client orientation and satisfaction.

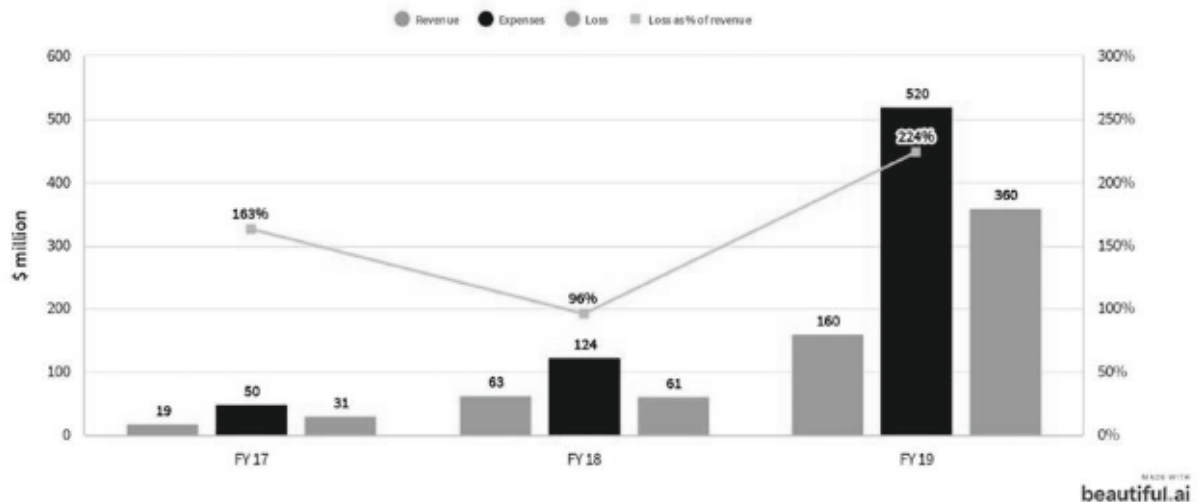
Figure 2: Swiggy's revenue and losses

Figure 2: Swiggy's revenue and losses

3.2 A Test of Resilience- The Pandemic Experience

During the coronavirus pandemic, many businesses, especially those involved in the delivery of basic commodities, had to deal with several setbacks. During the lockdown, many people did not have the appropriate permits to operate their businesses. Against all obstacles, India's resilient companies have stepped up to help not only their customers but also others.

Food delivery companies had an advantage during the pandemic in terms of remote functioning and technology-based operations since everything was moving from offline to online. With restaurants being shut down for many months, food delivery platforms served as a lifeline for restaurants to ensure some business continuity. The increase in customers' ordering-in during the pandemic serves as a testament to the surge in demand for food delivery apps and the subsequent increase in their market. Many restaurants and hotels which have delivered through online platforms were able to grow their delivery revenue throughout 2020. Ready-to-eat food delivery has emerged as a key industry, thanks to the introduction of appealing, user-friendly apps and tech-enabled driver networks, as well as changing consumer expectations. Early on in the pandemic, lockdowns and physical separation rules provided the food delivery sector a huge boost, with delivery being a lifeline for the struggling restaurant industry.

3.2.1 The Rise of Contact-less Delivery

During the pandemic, assuring customers of safety was the need of the hour. Key safety policies such as no-contact delivery, greater delivery partner hygiene, and best safety standards practices for restaurants were established to overcome the fear factor and restore consumer confidence, while also conveying these measures and proper food handling practices to consumers. Consumer awareness of food ordering has spread over time, thanks to the WHO and other sources, resulting in a resurgence of demand. To ensure safety, Swiggy and Zomato conducted regular temperature checks of the delivery personnel and tracked the same of the restaurant staff.

Contactless Delivery has become the norm during the pandemic. Swiggy and Zomato have been at the forefront, heavily emphasizing this to assure customers of safety. The goal of contactless deliveries is to reduce the distance between the delivery partner and the customer. The fewer people a delivery partner interacts with, the lower his risk of catching a virus, and even lower his risk of spreading it to other customers or restaurant executives.

3.2.2 Maintaining the Evolving Hygiene Standards During the Pandemic

Swiggy and Zomato ensured that Restaurants promote a high level of hygiene. Every four hours, restaurants scrub down every possible touchpoint, including chairs, tables, doorknobs, worktops, and sinks. 3-ply face masks were distributed to all staff involved in food preparation (bytes.swiggy.com, May 8, 2020). At collection areas, hand wash facilities were set up to allow delivery partners to practice proper hand hygiene. All orders were packed in a separate bag to ensure that the food container does not come into contact with anyone during transportation. This was rigorously monitored to ensure maximum safety.

3.2.3 The Emergence of Cloud Kitchens

Another significant phenomenon observed during the pandemic is the emergence of cloud kitchens or delivery-only restaurants that effectively beat the pandemic blues and thrived during these times. A cloud kitchen is a delivery-only restaurant business with no physical premises, no dine-in facilities, and no takeout counter. In other words, it's a restaurant kitchen that only accepts delivery orders and doesn't have a regular dining area. There is no expensive infrastructure, no waitstaff, no tables, no furniture, nothing. (unengage.in).

Customers can place orders online using online food aggregator applications or restaurant apps and get food delivered to their respective locations. Such a model worked perfectly well for food delivery aggregators during the pandemic times as well as in the current times. Seeing this as a great revenue opportunity, Swiggy and Zomato are heavily investing in such models.

3.2.4 Pioneering Marketing Communication

Rather than traditional brand marketing, Swiggy and Zomato focused their communication strategies and campaigns throughout the pandemic on doing their part for consumers and the restaurant and delivery partner ecosystem. The communication was designed with the consumer's sentiment in mind throughout the crisis. The pre-lockdown and early lockdown periods concentrated on cleanliness and safety procedures, with the goal of informing customers about how ordering in is safe and what precautions they should take. (Thedrum.com, Dec 3, 2020)

In times of crisis, customers turn to companies they know and trust. These are the times that put a company's value and trust to the test. With the use of technology, logistical prowess, and a thorough awareness of hyper-local trends, the food delivery platforms were able to establish themselves as necessary services during the lockdown and following unlock stages.

3.2.5 Displaying Action-Oriented Corporate Social Responsibility

Swiggy has announced the creation of the Swiggy Hunger Saviour COVID Relief Fund, which will be utilized to safeguard the safety and well-being of its delivery partners and their families. Sriharsha Majety, Swiggy's co-founder and CEO, has pledged half of his annual income to the fund. Swiggy's goal for this fund is to raise Rs 10 crore, and it has already raised over Rs 4 crore from initial contributions from Swiggy's founders and staff. In another initiative, Swiggy plans to deliver food and essentials to daily wage workers from partner restaurants, which are also at risk of shutting down due to a lack of revenue. It states that it has been helping thousands of kitchen workers, waiters, and chefs to earn a living in these times. This initiative was launched in partnership with Milaap. (yourstory.com, April 5, 2020).

In the midst of the coronavirus pandemic's 21-day shutdown, Zomato has launched Zomato Market, a grocery delivery service. Zomato Market, like its counterpart Swiggy Stores, is a hyperlocal grocery delivery service. At the moment, it is only available in Delhi, Punjab, and Kerala. Zomato also announced earlier in April 2020, the introduction of a Gold Support Fund to help millions of restaurant workers in the food industry cope with the COVID-19 pandemic. In April 2020, all earnings from the sale of Zomato Gold annual memberships will be used to support restaurant housekeepers, cooks, and waiters, as well as their families, in these trying times. (yourstory.com, April 5, 2020).

A lot has changed in the food delivery landscape with the onset of the coronavirus pandemic. The initial setbacks and challenges were inevitable but the consistent and innovative efforts of food delivery giants like Swiggy and Zomato during this period ensured survival and growth. Their ability to tap into the advantages of technology, remote conditions, customer trust, and loyalty proved to give successful results during the pandemic. Most importantly Swiggy and Zomato have been able to retain customer trust and attract new ones by assuring them of maximum safety which is another factor contributing to their success.

Both organizations have achieved their current status as a result of a clear focus on delivering customer value and ensuring customer happiness. They work along similar lines and are in direct competition with one another. Their outstanding marketing methods and activities have greatly boosted their popularity, distinguished their services and attributes, and aided their expansion in the food delivery business. Swiggy and Zomato have valuable lessons and ideas to impart to any company considering entering this market.

3.3 Some Valuable Marketing Lessons Offered by Swiggy and Zomato

3.3.1 Customer Empowerment

It is not a new saying that the customer is the king. However, he is the king not just because he consumes but also because he reviews. Customers are becoming more sophisticated with increased levels of awareness and availability of choices and information. Their feedback, ratings and reviews play a great role in influencing potential customers. It is important to cater to all the needs of the customers, exceed their expectations by providing a multitude of services and ensure quality. The success of Swiggy and Zomato in the food delivery industry is primarily due to positive customer response and feedback and high customer satisfaction and service value delivery.

3.3.2 Holistic Marketing

From a contextual point of view, Holistic marketing requires external, internal and interactive marketing (Kotler & Keller, 2016).

External marketing describes promotion, pricing, etc (Kotler & Keller, 2016). In the food delivery space, external marketing plays a pivotal role and its success ensures competitive advantage. Both the firms have excelled in this area, especially through digital media.

Internal marketing describes the training and motivation of employees to serve the customers well. Pioneering in this area will guarantee quality customer service and positive customer feedback (Kotler & Keller, 2016).

Interactive marketing describes the employee's skill in serving the client (Kotler & Keller, 2016). Functional quality matters along with technical quality. It is not enough to deliver food to the customer's doorstep. The food must be fresh, hygienic, delivered on time and properly packed.

3.3.3 Service Quality

It is very important to understand that no amount of promotional techniques will work unless there exists high-quality service. User-friendly interface, easily available customer service, employing the right technology, etc, play a role in ensuring quality. The determinants of service quality⁵ - Reliability, Responsiveness, Assurance, Empathy and Tangibles must be emphasized on and companies must work towards enhancing quality through these determinants. At the same time efficient use of technology in service delivery becomes inevitable to ensure superior service quality.

3.3.4 Relevance

The importance of staying relevant to current trends, issues, events, etc cannot be stressed enough. This is so due to the changing scenarios and the dynamic nature of the economy and the consumer markets. In fact, Zomato has successfully marketed its service by staying relevant and using techniques like moment marketing, understanding

the audience's nature, sensing the audience's pulse and always managing to attract their attention. Similarly, Swiggy is introducing new services to meet the changing and growing customer demands- 'Swiggy Instamart' for grocery delivery and 'Swiggy Genie' for hyperlocal courier service. One intriguing aspect of their marketing communications is that both Swiggy and Zomato deliver relatable content to their audience.

3.3.5 Differentiation

This is important to stay ahead of your competitors. Differentiation of service offerings can take place in many ways, through people and processes that add value. The service offering must include innovative features. Secondary services can be added to the primary service package. Zomato started off as a restaurant booking and reviews service and later entered the food delivery sector. This move has made food delivery a primary service package and restaurant booking and reviews as its secondary service.

4.0 Conclusion

It can be said with no doubt that Swiggy and Zomato are successful in the food delivery sector due to their service innovation, service quality, customer orientation, service differentiation, successful efforts in staying relevant and adapting to the dynamic environment and most importantly due to their holistic marketing efforts and strategies. Their strong adherence to customer-oriented values and efficient service delivery motive have positioned them at the top. Swiggy and Zomato have an excellent track record with regard to their marketing communications which is evident on social media. Newcomers into the food delivery industry have much to learn from the leaders and their ways of delivering not just food but also great customer satisfaction. Their initiatives and approaches to fighting the pandemic are commendable and make the organizations more resilient than ever. The pandemic and the resulting lockdown caused a shift in how people consume products and buy food. The demand for secure, easy-to-access, and convenient services aligns perfectly with the existing food delivery app models. The food services industry led by Swiggy and Zomato has effectively moved forward by streamlining their services to satisfy the increased demand.

References

- BusinessInsiderIndia. (2021). Swiggy reports nearly three-fold increase in annual revenue, in neck and neck race with Zomato. Retrieved from <https://www.businessinsider.in/business/ecommerce/news/swiggy-reports-nearly-three-fold-increase-in-annual-revenue-in-neck-and-neck-race-with-zomato/articleshow/85233393.cms>
- Feedough. (2021). Zomato Statistics: Usage, Revenue, & Key Facts. Retrieved from <https://www.feedough.com/zomato-statistics-facts-user-counts/>
- Kanteti, V. L. (2018). Innovative strategies of startup firms in India - A study on online food delivery companies in India. *International Research Journal of Management Science & Technology*, 9(3), 17-23
- Kaviya.B, Kiruba Gladis.L, Lavanya.V.K & Mythreyi.R. (2021). A study on digital marketing strategy towards food delivering apps during pandemic. *Journal of Emerging Technologies and Innovative Research*, 8(4), 384-392
- Kiran Raj, K. M., & Nandha Kumar, K. G., (2020). Impact of COVID-19 Pandemic on Zomato: A Case Study. *International Journal of Case Studies in Business, IT, and Education*, 5(1), 14-24.
- Kotler, P. & Keller, K.L. (2016). *Marketing Management*. Essex: Pearson Education Limited.
- Kumar, A. (2020). A study on the impact of COVID-19 on home delivery of food items through food delivery platforms. *PalArch's Journal of Archeology of Egypt/ Egyptology*, 17(12), 1593-1599.
- Medium. (2020). Facing up to a Pandemic — A look at Swiggy's efforts to counter the COVID-19 threat. Retrieved from <https://bytes.swiggy.com/facing-up-to-a-pandemic-a-look-at-swiggys-efforts-to-counter-the-covid-19-threat-7b9ec0bd7e5f>

- Online food delivery. (n.d.). Retrieved from <https://www.statista.com/outlook/dmo/eservices/online-food-delivery/india>
- Saxena, A. (2019). An analysis of online food ordering applications in India: Zomato and Swiggy. *International Journal of Research in Engineering, IT and Social Sciences*, 9, 13-21
- StartupInsider. (n.d.). Swiggy Startup Success Story – In-Depth Analysis. Retrieved from <https://www.startupinsider.in/swiggy-startup-success-story/>
- Swiggy statistics, user count, facts & news 2022. (2022). Retrieved from <https://expandedramblings.com/index.php/swiggy-statistics-and-facts/>
- Swiggy's food delivery revenue grew 56% from April to Sept, Prosus says (2021, Nov 22), *The Economic Times*. Retrieved from <https://economictimes.indiatimes.com/tech/startups/swiggys-food-delivery-revenue-grew-56-from-april-to-sept-prosus-says/articleshow/87847157.cms>
- TheDrum. (2020). How Indian delivery app Swiggy combated the lockdown blues. Retrieved from <https://www.thedrum.com/news/2020/12/03/how-indian-delivery-app-swiggy-combated-the-lockdown-blues>
- The rise and rise of Zomato - A case study. (2021). Retrieved from <https://dare2compete.com/blog/the-rise-and-rise-of-zomato-a-case-study>
- The strong growth of India's food delivery sector will likely continue. (n.d.). Retrieved from <https://glginsights.com/articles/the-strong-growth-of-indias-food-delivery-sector-will-likely-continue/>
- Tribhuvan, A. (2020). A study on consumers perception on food apps. *International Journal of Advance Research and Innovative Ideas in Education*, 6(4), 208-24.
- Yadav, M., & Muraleedharan, M. (2021). Zomato's game plan: Marketing strategies of Zomato. *International Journal of Creative Research Thoughts*, 9(7), 735-768.
- Yourstory. (2020). Here's how startups and businesses are stepping in to fight COVID-19. Retrieved from <https://yourstory.com/2020/04/startups-businesses-fight-coronavirus-swiggy-zomato-bigbasket/amp>
- Zomato's revenue grows to Rs 844 crore as losses widen 168% for April-June quarter (2021, August 11), *The Economic Times*. Retrieved from <https://economictimes.indiatimes.com/tech/startups/zomatos-revenue-grows-to-rs-844-crore-as-losses-widen-168-for-april-june-quarter/articleshow/85215231.cms?from=mdr>

A Sustainable Supply Chain Management through TQM

A state of the art literature review

Dr. K SR Sarma*

Abstract

Global competition made competitiveness an imperative for sustainable growth of organizations. This competitiveness is influenced by many parameters like quality, delivery, cost, technology, features, flexibility, and customer service etc. of products and services offered by the organizations. Organizational excellence is a result of the composite score for all these performance parameters. Depending upon the business environment and the intensity of competition, importance for different parameters vary. Supply chain management (SCM) decisively influences all these performance parameters thus deciding the sustainability of organizations. Unlike in the past where SCM was considered more as a dominant issue in production operations, it is now the most important consideration in service operations as well, thus becoming a part and parcel of organizational value chain. The issues to be addressed in the enlarged scope of Supply Chain Management are many and invite attention in the context of the inevitable considerations of economic, environmental and social performance which define the Triple Bottom Line of organizations.

TQM as a philosophy survived the test of times and continued to be relevant in the context of business excellence and organizational sustainability. In view of its focus on continuous improvement as the basic tenet, all enlightened organizations across the world embedded TQM philosophy into their operational strategies. TQM organizations which could scale business excellence levels continue to survive the onslaught of global competition. While the philosophy promotes a customer-centric culture, the tools and techniques deployed as TQM interventions facilitate operational efficiency and customer satisfaction.

This paper focusses to establish the importance of supply chain management in the changed context of competitive business environment and reiterate the relevance of using TQM as a veritable vehicle for ensuring sustainable growth of organizations.

Key words: SCM, TQM, Sustainability, Quality, Delivery, Technology.

Sustainable Supply Chain Management through Total Quality Management

Introduction- The dynamic business environment and the imperatives for survival

Post-globalization, whether an organization operates globally or not, has to face global competition even in local markets. Therefore, all systems, procedures, rules, regulations and criteria for success apply equally even for all local players. In view of the intensity of competition and the volatility of global economy, organizations initially focus more on survival in view of the uncertainties and risks involved. Among many conditions for survival, profitable operations attain utmost importance. Profitability depends upon the ability to compete and succeed in the market place through actionable competitive advantage. When it comes to business environment, Indian business scenario is no way different from global picture except for a few advantages it is presently endowed with. "Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs."

Business challenges and the criteria for sustainability

Economic development keeps on exhausting the planet's loads of normal capital, notwithstanding the endeavours of many organizations to limit their effects, through exercises like diminishing their carbon impressions and developing closed loop manufacturing system. India has 13 out of 20 worst polluted cities in the world. Presently

*Assistant Professor, Pendekanti Institute of Management, Hyderabad

placed at no.3 position, very soon it will occupy no. 1 status, overtaking China. It was established that the present global concern for climate change due to Green House Gas (GHG) emissions is mainly due to industrialization, which was significantly contributed by the developed countries. With shifting of manufacturing activity to China during 90s, due to its low cost operations, China became no.1 in emissions. When India dominates manufacturing scene as predicted, it will overtake China as the topmost polluter.

- Environmental impact of its increasing manufacturing operations will be the highest challenge for India, a major threat to sustainability.
- Associated with environment protection is the need to achieve significant levels of economic performance to service its obligations of generating employment, housing for all by 2022, affordable healthcare, universal education etc. This puts inclusive growth as another inevitable challenge to focus on community development.
- Customers, in addition to best quality at lowest price on demand are insisting on environmental protection, regulatory compliance, ethical governance, corporate social responsibility and profitable operations. Customer delight in an enlarged scope of supply chain operations is yet another challenge.
- Mainstream investors are insisting on value generation through sustainability
- Suppliers expect win-win partnerships on a long-term basis for supporting the operations of the organizations.
- Stakeholders like the regulators, governments, NGOs etc. have their own expectations from organizations to support accelerated socio-economic development

To sum up, sustainability of operations is the most important challenge for the country as it addresses the entire spectrum of sustainable performance management. Sustainability enables companies to profit and grow and maintain competitive advantage.

Competitive advantage comes through producing goods and services of world class quality by focusing on efficient and sustainable supply chains. Reassessing manufacturing footprint is necessitated by changing trends of global operations.

- The essentials for the sustainability are Productivity, green operations, waste minimisation, optimum allocation of resources and sophisticate IT tools.
- A survey of successful organization suggests that an integrated green supply chain strategy, facilitated by TQM principles is a sure way to ensure competitive advantage and sustainable growth of organizations.

Harvesters, as the companies wedded to sustainability management are addressed, they focus on sustainability through innovation, market share maximization and profit maximization. Significant relations among geographic business units is hall mark of sustenance through regulators, suppliers, NGOs and citizen groups.

Suppliers of Walmart, through a Sustainability Supplier Assessment evaluation ensure that they are in alignment with its sustainability objectives

- Starbucks has hosted a coffee cup suit at MIT for seven years, with the objective of improving the life cycle value of coffee cups, it included the representative and competitors. It ensured the harvesting practiced did not damage the rain forests.
- Nestle faced problem when they used the palm oil ingredient which was sourced from forest nd which is the depleting resource in making kit kat. Nestle was forced to correct the process.
- Coca Cola made substantial investments to redesign pet bottles by using biodegradable sugarcane waste and reduce use of plastic.

- Pollution free packaging, sustainable sourcing practices, reducing releasing of industrial affluent are made as central theme of supply chain management. In general the supply chain practices adversely affect the human health and safety. Hence sustainable SCM is aimed at redesigning to reduce the intensity of risks.

Green Supply Chain Management (GSCM)

While supply chain management is the essential aspect of operational excellence, Green Supply Chain Management offers holistic solutions for sustainable Supply Chain management. Practitioners of GSCM realised some benefits as follows:

- Financial pay offs include reduced operating costs, increased revenue, lower administrative costs, lower capital costs.
- Customer related pay offs include increased customer satisfaction, product innovation, increase in market share, improved reputation and new opportunities.
- Operational pay offs include process innovation, productivity gains, reduced cycle times, improved resource yields and waste minimisation.
- Organizational pay offs include employee satisfaction and reduced attrition, improved stakeholder relationships, reduced regulatory intervention, reduced risk and increased organizational learning.

Companies are focusing on sustainable business practices through strategies incorporating climatic changes, scarcity of resources, uncertain regulations and volatility in business. P&G launched a performance rating index and sustainability score card through consumption of water and waste management, GHG emissions to assess the supplier performance.

Shifting global supply chains

Manufacturing is migrating from China that served as the workshop of the world for two decades, unable to sustain competitiveness. All MNCs, including those in China are looking for low cost locations elsewhere in the world. It has adopted China+1 strategy to achieve global expansion with at least one unit outside China and investing in R&D and innovation.

From the above discussion, following conclusions may be drawn.

- The crucial aspect of SCM is sustainability
- The below factors are impacting the business to focus more on population growth, environmental concerns and scared resources.
- Sustainability at every stage is playing a major role in SCM, companies are responsible for their suppliers' environmental liabilities.
- Adoption and implementation of GSCM can provide long term strategic benefit to organizations, in addition to providing a competitive edge, putting it firmly on sustainability track.

To understand the shifting economies of global manufacturing, the BOSTON Consulting Group (BCG) studied world's 25 leading exporting economies (which account for 90% of global exports of manufactured goods) along four key dimensions: Manufacturing wages, labour productivity, energy costs and exchange rates.

Major findings of the study are:

- Manufacturing cost competitiveness of some countries including India held steady.
- Manufacturing must be done at regional level by maintaining the global standards.

- Goods consumed in specific regions will be made at close locations.
- Periodic reassessment of manufacturing footprints to shore up competitiveness.

Adjusting to rapidly moving cost competitiveness

Volatility and cost competitiveness will remain dynamic. There are profound implications for global operations calling for a need to enhance productivity levels to global benchmarks

Supply chain decisions should be based on latest understanding of competitiveness within regions instead of seeing low cost Vs High cost. The winners will align their operations with the shifting economies of global manufacturing.

Advantage India

MNCs are looking at India not merely as a low cost base, but as a place of growing consumption and sustainable market. To capture and capitalize this opportunity, Indian companies must look at the changing patterns of cost-competitiveness and reassess their operations footprints and reengineer their strategies. Government is taking initiatives to ensure ease of doing business in India. Advantages for India are:

- Demographic dividend
- Industry-friendly initiatives of the Central and State Governments to ensure ease of doing business

Initiatives like Make in India strategy, Swatch Bharat and AMRUT (Atal Mission for Rejuvenation and Urban Transformation) and Defence offset policy to attract foreign companies with latest technology, upgrade skills, infrastructure, and quality levels and explore opportunities to export products and services made in India.

Sustainability campaign is focussed on the entire spectrum addressing the Triple Bottom Line of economic, social and environmental performance of organizations.

Supply Chains to be Customer Driven

- Best quality at least cost on demand
- Customer more knowledgeable than the seller.
- Customers demand compliance to environmental regulations and business ethics.
- Want world class products and services and interested to know how and where they are produced.
- Partnering with other organizations.
- Customization is the current trend.
- Competition is led by advances in industrial technology, increased globalization, and tremendous improvements in information availability and creative business designs.
- Sustainable development is reflected by better and more stable economic systems, greater equity, increased health and wellbeing, strengthened communities and improved relations with nature.
- To put a pathway to low carbon, developments in climate resilience needs to be addressed.
- To regionalise manufacturing, companies are establishing manufacturing units' closure to the places of consumption to minimise logistic problems like transportation, local sourcing and talent search.

Innovation, the essential aspect of sustainable supply chains

According to a study by BCG, INSEAD, sustainability champions across the world focused on innovations in resources management as a part of Total Return on Resources strategy. And adopt resource management as a strategic differentiator to give sustainable growth

- Ford advocated sustainability as a performance enabler as energy efficient operations and eco-friendly automobiles are bound to reduce overall costs and increase profitability.
- Renault employed circular economy model and used 90% less water, 80% less energy, 70% less oil and less waste and achieved higher operating margins.
- Toyota, a major victim of Tsunami of 2011 in Japan that disrupted its supply chains chaotically, employed anticipatory supply chains to bounce back to market leadership.

The Challenges of Supply Chain Management

Organizations spend large part of their budgets on purchasing materials and services. SCM is a significant source of competitive advantage as most of the resources of an organization are deployed there, transformation of inputs into outputs happen, defectives are produced, productivity is judged and the cost of operations is estimated. Achieving business excellence predominantly depends upon the efficiency of SCM. Success of Walmart is attributed to its efficiency in Supply chain management through deployment of latest technology, IT, partnerships with vendors, local sourcing, cost competitiveness and inventory management.

Green Supply Chain Management (GSCM)

Implementation of TQM, SD, BPR, EMS and Lean are navigating to a paradigm shift in productivity levels and global competitiveness, paving way for sustainable supply chain performance. SCM's entire focus is on resources productivity through minimisation of waste and environmental pollution, low energy consumption and material resources and cutting operational costs.

Effective waste management is an integral part of GSCM

When waste is managed efficiently, resource productivity is high enabling cost efficiencies, leading to operational efficiency and profitability, ensuring sustainability and competitive advantage.

Risk Management

Tsunami proved that one major event can disrupt many elements of global supply chains. Sustainability is ensure by integrating environmental considerations into supply chain management, such as product design, material procurement and selection, manufacturing processes, final product delivery to consumers, and product life cycle management according to a useful lifecycle approach.

Supply Chain Management challenges

- Globalization of manufacturing operations
- Limited resources and unlimited demand
- Safety and quality products and services
- Shorter lead time, less inventory and better throughput
- Supplier base consolidation

- Access to latest technology
- Green Supply Chain Management and Waste Management

TQM and its Growing Importance

TQM is not a stage in quality journey but a management philosophy aimed at business excellence. It focuses on quality in management instead of mere quality management.

TQM encompasses every activity an organization does- strategy formulation and deployment, winning and retaining customers, corporate governance, and regulatory compliance, strict adherence to business ethics, environmental protection and community focus. Quality in every activity in the supply chain leads to operational excellence through best quality, lowest costs and fastest process times, all leading to customer delight and sustainable operations.

All global business excellence models, which were earlier called National Quality Awards, are based on TQM philosophy, standards and interventions. All these models insist on efficient supply chains and supplier partnerships to realize benefits of synergy.

Green efforts, lean processes and globalised supply chain are integrated into a complex business environment. The Green Supply Chain Strategy is an effort to minimize the negative impact of a company and its supply chain on the natural environment. Lean focuses on waste minimisation.

TQM as a facilitator of efficient supply chain

There are many common features between TQM and SCM- Both are customer-centric, organization-wide and insist on excellence. Lean, JIT, Six sigma, Quality at Source, zero-defects make Quality Free, providing best competitive advantage. TQM, when embedded into every stage of SC, enables operational excellence. SCM is tuned to customer requirements and TQM is aligned with customer satisfaction. This is achieved by eliminating inefficiencies, integrating processes and manufacturing products only upon receipt of the order. TQM interventions facilitate efficiency improvement. Focus of TQM is Customer Satisfaction through Continuous improvement, zero defect or right first time and every time

Supply chain management on the foundations of TQM can ensure efficiency in terms of environment management

Systems thinking of SCM as facilitated by TQM

Continuous improvement of SCM- PDCA approach

Circular Economy and Reverse Logistics- Reduction, Reuse, Recycling. The circular economy, which minimizes resource and energy consumption and maximizes recycling, has the potential to add up to \$ 1 trillion to the global economy by 2025.

SCM, when embedded with Six Sigma, JIT, Lean, Kaizen, QMS, EMS etc. becomes TQM

Elimination of non-value added activities through Waste management addresses reduction, control and prevention by using the waste management hierarchy.

Important measures for sustainable development

- Technology-appropriate, locally adaptable, eco-friendly, resource-efficient and culturally suitable
- Promoting environmental education and awareness
- Sustainability-based resource usage (sustainability depends on system sustainability)
- Improving quality of life including social, cultural and environmental dimensions

Conclusions

Sustainable Supply Chain Management is an achievable, actionable and essential proposition in the volatile business environment. A study by MIT and BCG established that

- 70% of the CEOs are permanently wedded to sustainability.
- Most managers believe that sustainability strategy provides competitive advantage.
- Harvesters are integrating their operating frameworks and strategies dynamically in an eco-friendly way.
- Addressing climate change is a huge business opportunity. Companies are taking this opportunity to develop new products and services to identify and address climate risks in their businesses and supply chains.

In the 17 Sustainability Development Goals adopted by the member nations of the United Nations in September, 2015, at least 6 focus on sustainable supply chains- Good Health and Wellbeing, Decent Work and Economic growth, Industry, Innovation and infrastructure, Responsible production and consumption, climate action and partnerships for the goals.

- Realising that resource efficiency is essential for sustainability, champions focused on Total Return on Resources.
- Supply chains are intrinsically linked to cost reduction, resource conservation and speed of delivery, ensuring competitive advantage and profitability
- Both TQM and SCM are based essentially on customer-centric models.
- As both TQM and SCM are organization wide activities, embedding TQM principles all along the supply chain, is bound to produce excellent results, which ensure most profitable and sustainable operations.

This calls for cross-disciplinary innovation- sustainability-oriented innovation can create breakthroughs. Today, competition is not between companies, but it is between supply chains.

- Firms with superior supply chain operations will have a competitive edge
- Supply chain managers must be familiar with the principles of TQM and EMS
- Suppliers play a vital role in implementing sustainability practices as most of the materials and services are outsourced.

Measures of Excellence are mostly common to TQM and SCM as both are essentially customer-focused. They provide competitive advantage through reduced costs, enhanced quality and customer satisfaction, happening on the vehicle of continuous improvement. Both focus on energy efficiency, resource efficiency, sustainability, lean management, JIT, Six Sigma etc.

Socially just, environmentally friendly and economically viable supply chains will be a natural consequence of embedding TQM principles in operations.

With better ease of doing business initiatives by the central and state governments, opportunities for India may be immense, aided by its demography. If this bus is missed, the 4th Industrial revolution will go out of India's hands. Country level commitments for environment protection gives businesses certainty and an indication of where investments will be safe and rewarding.

Any mission is leadership driven, more so in India where “Yatha Raja, Tatha Praja is the established work ethic.”

When leaders decide and resolve, sustainable supply chain management becomes a reality.

References

- https://www.researchgate.net/publication/333893149_Supply_Chain_Management_and_Total_Quality_Management_in_Textile_Manufacturing_Companies_Bandung
- Fernandes, A.C., Sampaio, P., Sameiro, M. and Truong, H.Q. (2017), "Supply chain management and quality management integration: A conceptual model proposal", *International Journal of Quality & Reliability Management*, Vol. 34 No. 1, pp. 53-67. <https://doi.org/10.1108/IJQRM-03-2015-0041>
- MIT Sloan Management Review., SOI: The More the Merrier, January 12, 2016
- Sustainability nears a tipping point, a report on the findings of the 2011 Sustainability & Innovation Global executive Study and Research report, MIT & BCG
- Handle with Caare, Resource Management as a Competitive Edge, the Boston Consulting Group, INSEAD, 2012
- Venkatesh Ganapathy., Introduction to Green Supply Chain Management., bookboon.com, 2014
- Harold L. Sirkin, Michael Zensar and Justine R ROSE., BCG Perspectives- 2014 on Manufacturing: The Shifting Economics of Global manufacturing- How Cost Competitiveness is changing worldwide, bcg.perspectives. 2014

A Study of Latest Trends in Indian Rural Markets Scenario

Dr. Yugandhar Vangaveti*, Dr. Nageswara Rao Iraraju**, B. Lakshmipathi*** & P. Neelima****

Abstract

Rural market includes all business activities which are involved in the flow of goods and services from producers to rural consumers. The definition of rural as given by the Census of India is not being Urban. There can be several approaches to understand the rural markets. Rural market covers all marketing activities which include forecasting the demand, product planning, distribution and facilitating the entire marketing process, with the aim of satisfying the rural consumers. Rural markets offer growth opportunities as the urban markets are increasingly becoming competitive and in many products even getting saturated. Now, income level and standard of living are increasing rapidly in rural areas. The demand for brands is also increasing. This study focuses on the latest trends, strategies and challenges in Indian rural marketing scenario.

Key words: Rural, market, trends, Indian, scenario.

1.0 Introduction

Usually, rural areas are located at the outskirts of the towns and cities and are far away from the same. They have very less density of population. Most of the rural areas are surrounded by the agricultural fields, barren lands and forests. For all practical purposes such as administration, demographic and geographic segmentation etc., the rural areas defined differently in various countries.

The rural economies are different from the urban economies due to the cultivation of various crops, horticulture, cattle rearing, agri-based industries, and so on. The main agro-based industries in India are textile industry, sugar industry, tea industry, coffee industry and vegetable oils industries, leather goods industry etc. Infrastructural facilities like roadways, railways, electricity, television, telecommunication and internet networks etc. are not adequate in the rural areas. The rural economies are vulnerable to floods, draughts, forest fires, pandemics, and so on. People migrate to urban areas for want of good education and training facilities, employment opportunities, health facilities etc. Despite various schemes and efforts of the central and state governments, all the above factors make the rural areas not to grow much or grow at a very slower rate.

In some countries as well as in some of our states, the governments are enabling socio-economic development at a faster pace by providing good and wide roads, extension of railway lines, drinking water facilities, continuous electricity supply, telecommunication, television and internet networks, banking, credit and insurance facilities, and so on. The government of India has also planned some smart cities in rural areas. The governments are also encouraging setting up of good engineering, medical and pharmacy colleges, industries, NGOs and so on for the all-round development of rural areas.

1.1 Objectives of the Study and Research Methodology

This study has certain objectives like the following ones:

- To study the prevalent scenario of Indian rural economies
- To study the latest trends in Indian rural markets scenario
- To focus upon the policies and strategies in effective rural marketing

*Associate Professor, Department of Management Studies, B V Raju Institute of Technology, Hyderabad, India.

**Professor & Head, Department of Management Studies, B V Raju Institute of Technology, Hyderabad, India

***Assistant Professor, Department of Management Studies, B V Raju Institute of Technology, Hyderabad, India

****Assistant Professor, Department of Management Studies, B V Raju Institute of Technology, Hyderabad, India

1.0 Review of Literature

The literature available on the latest trends in Indian rural markets scenario can be reviewed as follows. Kalotra (2013) identified that there is a high potential in rural India but exists major differences between the existing and the desirable levels of rural marketing.¹ Rural market has a lot of potential buyers. However, tapping their needs and wants and promoting to them is a herculean task.

Kumar and Dangi (2013) observed that rural India offers sustainable sales and profit for growth.² Since rural population is two thirds of India of the Indian population and incomes are on rise, rural India offers good scope for growth in sales revenues and profits. Rani and Shrivastav (2014) learned that focusing on the Indian rural market is a good option as its market is increasing day by day.³ A lot of corporates and marketers prefer to locate and expand in total India because its market is expanding year on year. Sivanesan (2014) studied that farming mostly depends on the climatic conditions and, hence, the need or purchasing capability isn't regular.⁴ The purchasing power in rural India is influenced by the patterns of harvesting the crops. Hence, there is a need for mapping the marketing with the patterns of harvesting the crops.

3.0 Research Methodology

Research design adopted for this study is descriptive research. So as to attain the objectives of this study, the type of data relied upon is secondary data. The sources of data include various websites, online newspapers, online journals etc.

4.0 Analysis and Discussion

4.1 Indian Rural Marketing

Rural marketing and urban marketing are different and they are interdependent. Agricultural and forest produce are supplied by the rural areas to the urban areas whereas the consumer, durable and other goods and services are supplied by the urban areas to the rural areas.

4.1.1 Marketing

Marketing refers to identifying the potential customers' needs, wants and desires, planning, executing, designing, procuring, producing, promoting and delivering the goods and services to satisfy their needs and wants and fulfil their desires and getting the feedback so as to improve the quality and range of the products and services.

4.1.2 Rural Marketing

Wheat, rice, cotton, sugar and so on are produced in rural areas. The same are also consumed in rural areas. The surplus produce is sold outside the rural areas for the benefit of people in urban and other rural areas. Rural marketing has to focus on economic goods, promotion and distribution through conventional and non-conventional means and so on.

4.1.3 Potential drivers of the rural marketing system

The main reasons why the corporates focus on rural markets and develop effective marketing strategies are to tap the potential of rural markets which can be described as follows:

4.1.3.1 Higher purchasing power

Rural people are more in number and are growing at a faster rate compared to the urban people and hence they have higher purchasing power.

4.1.3.2 Scattered and large rural population

The population in rural areas is scattered, i.e., the density of population is less. Hence, the marketers need to focus on mobile distribution channels like mobile ATMs, mobile vegetable supplies etc.

4.1.3.3 Infrastructural Development

The infrastructure such as roadways, railways, airways, seaways, power grid, telecommunication and cable TV networks, health and educational facilities are inadequate in rural areas. This implies that the rural marketing is a herculean task.

4.1.3.4 Growth in rural market

Rural market is growing steadily because of various factors like income and money transfer schemes of the central and state governments, good employment opportunities, development of good health and educational facilities, remittances by people in urban areas and in foreign countries and so on. This is an attractive factor for marketers.

4.1.3.5 More income from the agriculture: Due to various initiatives of the central and the state governments, the farmers are earning more revenue from the agriculture which in turn leads to their good purchasing and saving power.

4.1.3.6 Traditional look and feel: Rural people give good weightage to old customs and traditions. This encourages the marketers to offer good products and services matching with the traditions and customs of the rural people.

4.1.3.7 Varying demand patterns: The demand patterns of rural people for fast moving consumer goods and consumer durable are varying and hence marketers need to focus upon these patterns so as to establish and grow in rural areas phenomenally.

4.1.3.8 Socio-economic background: The socio-economic background of the rural people is very much diversified. Marketers need to focus an eye upon these backgrounds for their survival and growth.

4.1.4 Significance of development of rural infrastructure

How rural infrastructure is significant in improving the rural economy and lives of the rural people can be explained as follows.

4.1.4.1 Roadways: Roadways provide connectivity and mobility to rural people. They also provide a great means so as to reach the rural people. Hence, the respective governments have to plan and execute to develop good roadways.

4.1.4.2 Water supply system: Water is the backbone of civilizations. Safe drinking water and water for agricultural and other purposes has to be supplied. If there a good water supply system, it leads to good growth of rural population, good growth in cultivation of various crops, savings in terms of buying and supplying water, good health, and so on.

4.1.4.3 Supply of sufficient electricity: Supply of sufficient electricity is the boon for civilization, modernization, urbanization etc. If rural areas get adequate electricity supply, it leads all round development of not only rural people but also rural economies.

4.1.4.4 Housing infrastructure: The house is the main parameter for civilization, modernization and urbanization. If there is no adequate housing infrastructure, no economic activity is possible.

4.1.4.5 Telecommunication, cable TV and broadband networks: Now-a-days, telecommunication, cable TV and broadband networks have become essential for communication, entertainment, updates, news coverage, work

from home, online classes, webinars, online shopping etc. Hence, the respective governments and private operators need to establish good telecommunication, cable TV and broadband networks.

4.1.4.6 Sports facilities: Indore and outdoor stadia, football, volley ball, cricket and other grounds etc. need to be developed for physical and mental fitness, entertainment, getting rewards and awards etc. in rural areas.

4.1.4.7 Mini Commercial and shopping complexes and malls: Mini Commercial and shopping complexes and malls need to be developed in rural areas so that the unorganised and organised marketers can reach the rural people effectively and efficiently. One of the factors for the growth of rural trade and rural economies is commercial complexes.

4.1.4.8 Educational facilities: Education and especially higher education is very much essential for the development of rural areas and rural people. For want of education, the rural people migrate to urban areas like Indians migrate to USA, UK, Germany etc. for want of education. Hence, educational institutions have to be established with public and private participation.

4.1.4.9 Health care facilities: Rural people need good and affordable facilities like clinics, hospitals, multi-speciality hospitals, diagnostic centres etc. Even though primary health care centres exist in rural areas, they are not considered as substitutes to the super speciality hospitals by the rural people.

4.1.4.10 Public and private toilet facilities: Another very important of the rural people is private and public toilet facilities. The local bodies have to take care of the development of public toilet facilities. Whereas the central and state governments should support the rural people in the construction of private and individuals toilet facilities. These facilities ensure that the rural areas are developed on par with the urban areas.

4.1.4.11 Open air theatres and function halls: Another much needed infrastructure to be developed in the rural areas is development of open air theatres and function halls so as perform functions, ceremonies, recreational activities etc. These facilities help the rural people to preserve and promote their customs and traditions.

4.1.4.12 Establishment of citizen service centres: Citizen service centres are very much needed in rural areas to obtain birth and death certificates, trade licenses etc. Even these centres were established in some rural areas, the number has to be increased for the convenience and comfort of rural people.

On the whole, it can be concluded that the development of rural economies mainly depend upon development of roadways, supply of safe drinking water, supply of adequate electricity, development of good housing facilities and so on.

4.2 Latest Trends in Indian Rural Markets

The latest trends in rural marketing can be summarized as follows:

4.2.1 Development of Rural E-Commerce

Thanks to internet coverage by various internet service providers and data enablers such as Airtel, Jio etc., of late, e-commerce sites like Amazon, Flipkart etc. have developed their networks in rural areas. Now, the rural people are also able buy online various FMCGs and durables like their counterparts in urban areas. The recent sales in rural areas through e-commerce is above 40 million USD. This is one of the latest trends in rural marketing. Other e-commerce sites can also extend their networks in rural areas.

4.2.2 Demo Tents

Many organized and unorganized sellers of durables like bikes, cars, real estate etc. are using demonstration tents in rural areas. With this they are able to get good sales. The prominent users include dealers of Royal Enfield, TVS etc. This is the another latest trend in rural marketing. This trend has to be encashed by other sellers and marketers.

4.2.3 Mini stores

Many organized and unorganized sellers and marketers are opening mini stores in rural areas. The prominent ones include HUL Shakti, ITC e-Choupal & Caupal Sagar, Godrej Aadhaar, Warana Bazar, DSCL Hariyali Kisaan Bazaar etc. This is the another latest trend in rural marketing. This trend has to be availed by other unorganized and organized national and international marketers.

4.2.4 Mini showrooms

Mini showrooms are also opened by sellers of durables like bikes, cars, etc. Maruti Suzuki started opening such mini showrooms at the space to accommodate one or two cars in places like Narsapur, Medak district, Telangana. This is another trend in rural marketing. This trend has to be taken advantage by other national and international marketers dealing with rural consumer durables.

4.2.5 Trade shows

Many Trade shows are also being arranged in rural areas. Many sellers and marketers are opening stalls in such trade shows. These look like mini industrial exhibitions. Agricultural, forestry, fisheries and other food products are made available in these trade shows. The prominent shows include Grain industry expo, Farm Tech Asia, Indian International Dairy expo, India Grain Mech expo etc. The unorganized and organized sellers and marketers can take advantage of these trade shows.

4.2.6 Credit facilities

Credit facilities have also been increased in rural areas. Governments are also initiating many schemes like self-help groups so as to extend the credit facilities. Innumerable banking and non-banking financial companies have also been set in rural areas. This is another trend in rural economies. This trend has to be taken advantage by various marketers dealing with rural consumer durables, real estate etc.

4.2 Marketing Strategies, Policies and CSR initiatives to capture the growing Rural Markets

The marketers need to adopt the following strategies, policies and CSR initiatives to capture the growing rural markets.

4.2.1 Strategies and Policies

4.3.1.1 Keeping the products and services at the affordable levels

Since the income levels of rural people are less against those of urban people, the marketers need to offer their products at affordable prices, keeping at the vicinity of the rural people.

4.3.1.2 Training and employing rural people

Rural people need to be trained and employed in production, procuring, human resource management, marketing etc. so as to increase their income levels and make them feel that the products are made by them, owned by them and belong to them.

4.3.1.3 Using agricultural, forest and other rural inputs

Rural inputs such as agricultural inputs, forest inputs and other inputs are very invaluable. Hence, those inputs have to be used by the marketers so as to make the rural people actively involved in the production, procurement, exports etc. and earn their livelihood.

4.3.2 CSR Initiatives

4.3.2.1 Spending a part of profits towards rural welfare

The marketers need to spend a part of their profits earned towards rural welfare such as providing good health, education, drinking water facilities etc. This will help them save the expenses in terms of obtaining those facilities and spend those savings on the goods and services of their choice.

4.3.1.2 Encouraging rural people to be innovative and creative

Rural people are unique and they have a lot of innovative and creative qualities like their urban counterparts. To encourage and support their innovations and creations, they have to be offered grants, aids, awards, rewards etc. These innovations and creations help the marketers a lot directly and indirectly towards sales, profits etc.

4.3.1.3 Protecting and promoting rural culture, traditions etc. by organizing various events

Rural culture, traditions, customs etc. bond the rural people like anything. The corporates need to organize the events so as to protect and promote the same. These events indirectly make the rural people loyal to the corporates and their products and services.

4.3.1.4 Developing rural areas on par with the urban areas

The central and state governments initiate various programs for developing the rural areas on par with the urban areas. The marketers at the corporates should take active role in the process of developing rural areas on par with the urban areas. This will help the corporates indirectly so as to win the hearts of the rural people and thereby increase their revenues and profits.

5.0 Conclusion

Based on the above presentation, it can be concluded that if the marketers take up right policies, strategies and initiatives, they can win the hearts of the rural people which in turn leads to good sales, revenue, profits and so on of their products and services for the benefit of marketers and society at large.

Citation & References

- Kalotra, A. (2013). Rural marketing potential in India-An analytical study. International journal of advanced research in computer science and software engineering, 3(1)
- Kumar, P., & Dangi, N. (2013). Rural marketing in India: Challenges and opportunities. International Journal of Management and Social Sciences Research (IJMSSR), 2(8), 93-100.
- Rani, P., & Shrivastav, N. (2014). Rural Marketing in India. International Journal of research, 1, 131- 134.
- Sivanesan, D. R. (2014). Problems of Rural Market in India–An Overview. International Journal of Research in Business Studies and Management, 1(2), 1-7.
- <https://economictimes.indiatimes.com>
- <https://www.ibef.org>
- <https://www.livemint.com>
- <https://www.business-standard.com>
- <https://www.thehindu.com>

The Impact of Covid-19 on Online Shopping of Consumers and The Factors Influencing Online Purchase Intention

Manasa N* and Dr. G Alex Rajesh**

Abstract

The COVID-19 pandemic has impacted the lifestyle and motivation of so many individuals all across the world and their purchasing habits have shifted as well. The study determines the impact of the pandemic on online shopping. The study has also identified the most important factor influencing online consumer shopping behavior. The main objective of the study was to investigate the effect of covid-19 on online shopping; to analyze the problems faced during covid-19 and also to study the factors influencing the online purchase intention. The study was conducted on the people of Bangalore; sample size for the study was 100. The study found that the main significant factor for online shopping is Time and Convenience followed by wide range of products, better price, Discounts, deals and offers. E-commerce platform allowed users to have a wide range of products at their convenience and also it helped them in doing that from the comfort of the place where they are.

Keywords: Purchase intention, online shopping, consumers, consumer behavior, Covid-19

1.0 Introduction

COVID-19 has been a dangerous virus which is being spread; the first Covid case has been reported in the Wuhan. These viral diseases infection can spread easily by the discharge from the saliva droplets of the person who is infectious and also by the sneezing or the cough by any person who is already being infected. As on the year 2021, in the India there is availability of vaccines to stop the spread of covid 19 virus. Most of these vaccines are much more effectively working against the cure of the COVID-19 disease

Introduction to the world economy in general and international trade in particular have experienced significant losses as a result of the coronavirus Covid 19 epidemic, which is still ongoing. Multiple factors have exacerbated the precarious scenario in which firms and end consumers have found themselves. Consumers have increased their purchases on the online internet marketplace due to the global lockdown, social distance, and other precautions taken to limit the spread of the COVID-19 virus, among other considerations. During the lockdown and quarantine period, the corporate landscape underwent fast change.

The COVID-19 pandemic has impacted the lifestyle and motivation of so many individuals all across the world; their purchasing habits have shifted as well. The current study aims to analyze this shift in consumer behavior. In achieving this objective, the study determines the impact of the pandemic on online shopping across industries, due to pandemic situation raised from the spread of COVID 19 virus has made to identify the priority of the online digital consumers. The study has also identified the most important factor influencing online consumer shopping behaviors based on the multi stages survey.

The study aims to test proposed approaches to assess the purchasing behaviors of the online consumer, which can contribute to the identifications of the trend and patterns of the online digital shopping. Hence, it can also be the components of a comprehensive toolkit in the designing of the e-commerce strategies, used both in the state levels and for the individual company.

*Research Scholar, Bharathiar University, Tamil Nadu

** Principal, Sri Venkateswara Institute of IT and Management, Coimbatore, Tamil Nadu.

1.1 NEED AND RELEVANCE OF THE STUDY

To understand the growth of e-commerce due to consumer change in behavior towards online shopping and to know the factors that influence for this change in behavior. When traditional shopping becomes difficult or even terrifying, people are increasingly inclined to shop online.

2.0 LITERATURE RFEVIEW

Gu, Slusarczyk, Hajizada, Kovalyova, & Sakhibieva (2021) The study was conducted in ten fastest E-commerce growing nations, it has been found that during pandemic there is a high impact on awareness and experience among consumers.

Phetnoi, Nichabha & Siripipatthanakul, Supaprawat & Phayaphrom, Bordin. (2021). The study was conducted to understand the factors influencing online purchase intention. The study has found that “perceived usefulness” had a high impact purchase intention.

Di Crosta A, Ceccato I, Marchetti D, La Malva P, Maiella R, Cannito L, et al. (2021) The study was conducted on understanding consumer behavior towards necessity and non-necessity products, the consumer spending level on necessity products were high in comparison with non-necessity products.

Fatema, F., & Siddiqui, M. A. (2021). The study was conducted to know the factors influencing online buying behavior during covid19 pandemic. The study considered eight factors to understand its influence on online shopping. The research found that there is a positive effect on online consumer behavior between quality and features, price, durability and performance, reliability and trust, E-service, security, time, service quality and ease of use.

Prebreza, A. and Shala, B. (2021) the study was conducted to understand the impact of various factors on online shopping behavior. Hypothesis has been framed to test the relationship between factors and online shopping behavior; the study revealed that there is a positive relationship between quality and price, socialism on online shopping behavior.

Van Kien Pham, Thu Ha Do Thi & Thu Hoai Ha Le | Usama Awan (2020) The study has found that the covid19 pandemic shows a moderating role in making consumers to buy online.

Aggarwal & Kapoor (2020) The study conducted to understand the effect of Covid-19 on online shopping behavior, it was a descriptive study and the study has found that covid19 pandemic made consumers to rely more on online shopping. Demand for FMCG goods increased during pandemic.

3.0 RESEARCH METHODOLOGY

This is the method of a conducting the study of a research paper in a way of systematic manner, the research and the study becomes easy and the result orient, if the study is correctly planned and structured. The current study is descriptive and exploratory.

3.1 Objectives

- To investigate the effect of COVID 19 on online shopping.
- To analyze the problems faced during COVID 19.
- To study the factors influencing online purchase intention.

3.2 Data Collection

The data is collected from primary sources via questionnaire which is shared among the customers who are shopping online in Bangalore city.

3.3 Scope Of The Study

- The research is focused on online buying.
- The data is collected from the consumers in Bangalore

3.4 SAMPLING

Sampling Technique	Convenience Sampling
Sample Unit	Online Shopping Customers in Bangalore
Sample Size	100

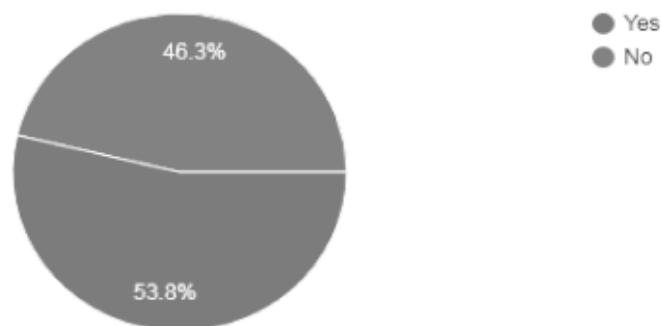
(Source: Primary data)

4.0 Data Analysis

Challenges

Stock Availability

Fig.4.1: Showing Stock Availability

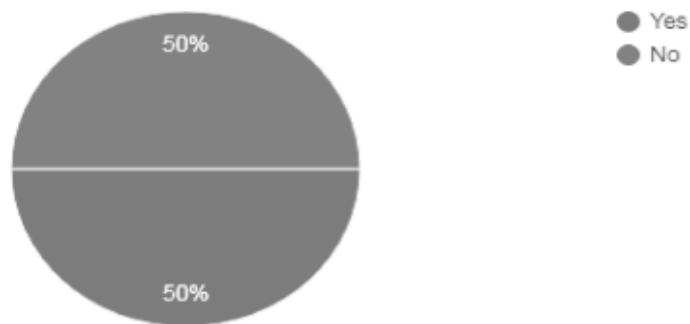


(Source: Primary data)

From the above chart it is clear that out of 100 respondents, 53.3% of consumers found it easy in finding what they need in stock whereas 46.3% of the respondents found it hard in finding stocks.

Predicament On Availability

Fig 4.2: Showing Predicament on Availability



(Source: Primary data)

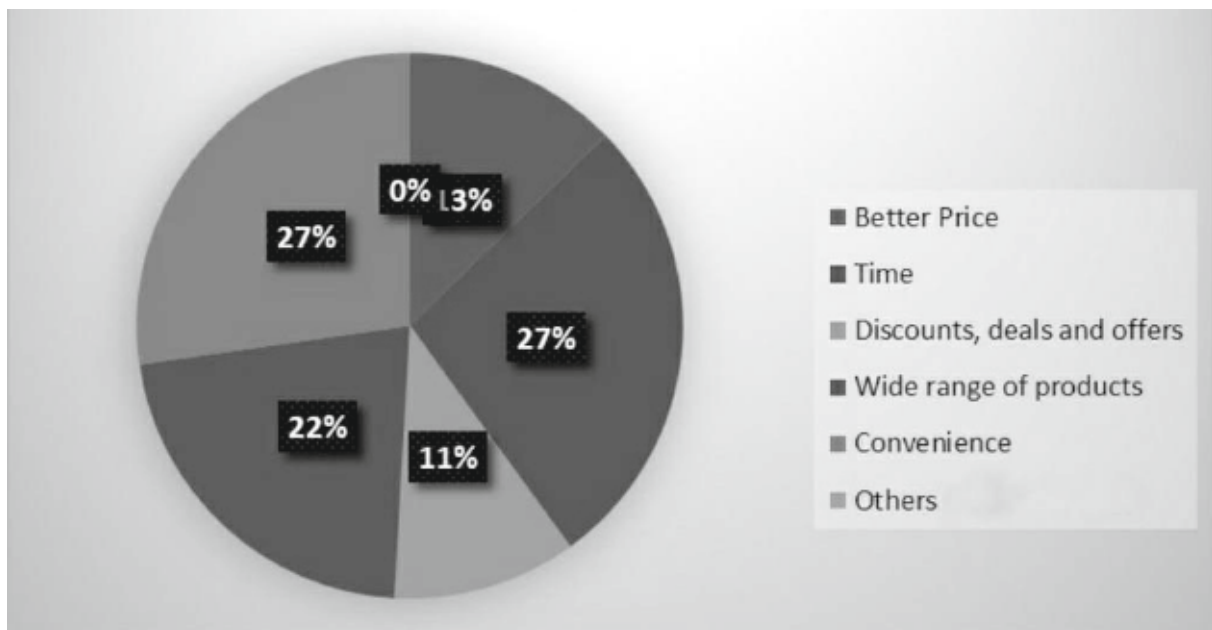
The study shows that 50% of the respondents found it hard to in getting what they were looking for whereas the rest 50% from 100 respondents which comes to 50 people found what they were looking for.

Challeneges Faced In Return Policies Of Goods

The study shows that 59% of the respondents out of 100 people found hard for the return policies of goods during Covid pandemic situation; whereas the rest of people which comes around 41% of the respondents told it was not hard for the returning policies of goods.

Factors Influencing Online Shopping

Fig 4.2: Showing Predicament on Availability



(Source: Primary data)

From the study, it can be inferred that the main significant factor for online shopping is time and convenience followed by wide range of products, better price, discounts, deals and offers

5.0 Conclusion

It was best time for e-commerce industry as the consumers felt this was the best option to do shopping over traditional practices. The Covid 19 norms and restrictions especially the lockdown made the drastic shift of the consumers from regular buying to online purchasing and there was a positive impact of pandemic on online buying.

The consumers felt it was much easy for them; they enjoyed shopping online as it saved lot of time and the need of the consumers was able to meet as there were no restrictions of hours of searching it on online. It seemed that the online business has grown very high in this short period of time.

Electronic purchasing will be a bright spot in India in the next years. In India, following COVID-19, attitudes regarding E-buying are improving. It will be extremely beneficial in preventing the spread of Corona from person to person. The Covid-19 epidemic has prompted more active online buying by consumers; today, E-shopping is a better source in this Corona virus situation, and E-retailers sell products that are generally purchased in supermarkets. This shows that even if there are some factors which pull the customers back from online shopping, in this pandemic situation it is more convenient for everyone to shop online rather than going out. Online shopping is easier and all the things come to your fingertips. The study helped in understanding the online shopping behavior from which to prepare a timely response in the future. The whole study shows how convenient e-commerce platform was during the lockdown and how easy was it for the customers to get what they wanted. E-commerce platform allowed users to have a wide range of products at their convenience and also it helped them in doing that from the comfort of their house of the place where they are. So, we can conclude this on the note that online shopping is more convenient and easier at any time for anyone.

References

- Gu, S.; Slusarczyk, B.; Hajizada, S.; Kovalyova, I.; Sakhibieva, A. (2021) Impact of the COVID-19 Pandemic on Online Consumer Purchasing Behavior. *J. Theoretical and Applied Electronic Commerce Research*. 2021, 16, 2263–2281.
- Phetnoi, Nichabha & Siripipatthanakul, Supaprawat & Phayaphrom, Bordin. (2021). Factors Affecting Purchase Intention Via Online Shopping Sites and Apps During COVID-19 in Thailand. *Journal of Management in Business, Healthcare, and Education (JMBHE)* 1. 1-17.
- Aggarwal B, Kapoor D. (2020). A Study on Influence of COVID-19 pandemic on customer's online buying behavior. *MDIM Business Review* Volume: I, Issue: II
- Di Crosta A, Ceccato I, Marchetti D, La Malva P, Maiella R, Cannito L, et al. (2021) Psychological factors and consumer behavior during the COVID-19 pandemic. *PLoS ONE* 16(8): e0256095
- Fatema, F., & Siddiqui, M. A. (2021). Factors affecting customers' online shopping behavior during Covid-19 pandemic in Bangladesh. *ABC Research Alert*, 9(2), 67-79.
- Van Kien Pham, Thu Ha Do Thi & Thu Hoai Ha Le | Usama Awan (Reviewing editor) (2020) A study on the COVID-19 awareness affecting the consumer perceived benefits of online shopping in Vietnam, *Cogent Business & Management*
- Prebreza, A. and Shala, B. (2021) The Trust in Online Shopping during COVID-19: Case Study from Kosovo. *Open Access Library Journal*, 8, 1-15.

The Journey of OORVI HOLY WASTE and now Exploring the Chemistry of its component and pigments for Potential Applications

Shuchi Tiwari*, Maya Vivek**, Minal Dalmia*** and Anand Kishore Kola****

Abstract

Holy waste is a niche offering by Oorvi Sustainable Concepts Pvt Ltd., operational in Hyderabad. Holy waste is a Floral Project for us! A beautiful part of the garbage world which we aim to make valuable. At Holy waste, we infuse life into floral discards by a process that we endearingly term “FloRejuvenation” – a rejuvenation of floral trash. This start-up that deals with floral waste employs underprivileged women from Gundlapochampally. Minal Dalmia and Maya Vivek started Holy Waste to take care of floral waste and employ women in Gundlapochampally, Hyderabad. All their care and efforts have led to them being incubated at a-IDEA (Association for Innovation Development of Entrepreneurship in Agriculture) at ICAR-National Academy of Agricultural Research Management, Hyderabad. They process floral waste from temples to manufacture fragrant soaps, incense sticks and natural compost. Seated on the floor of the terrace, a team of women start plucking petals from semi-dried and wilted roses. Holy Waste won the Best Green start-up award under Eco Ideas by Green India Awards 2019. 2021 onwards Holy waste wants to know the chemistry and chemical components behind in this colourful world and explore for its sustainability.

Keywords: Floral waste, Value-added chemicals, Sustainable development, Biofertilizer, Pigments and dyes

Abbreviations: FW- Floral waste, MSW- Municipal solid waste.

1. Introduction

Like many industries, floristry and floriculture are rapidly evolving as technology and farming practices further evolve in the 21st Century. Over the past 20 years, the production of cut flowers has grown at a median annual rate of 7.5% [1]. Still Netherlands retains a key role in the global trade of cut flowers accounting for over 40% of all global export volume. n (Abeliotis et al., 2016) [2] India, itself produced around 1641 t of loose flowers and 477 lakh cut flowers in 2014 (Horticulture- Statistical Yearbook India 2016) [3] . In developing countries like India and Sri Lanka, they have one more issue that 40% of the total flower production is unsold and goes as waste due to lack of amenities like cold storage facilities (Masure and Patil, 2014) [4]. A study estimated that the amount of FW generated per day in India is approximately 4738 t (Sharma et al., 2018a) [5]. Arici et al. (2016) [6] reported. Its ugly truth, these beautiful industries responsible for Floral waste {FW}. FW is one of the most overlooked class of organic waste. There is no waste management practised by such floral-waste generators except hand over to the civic bodies or just leave it on the streets. There is no process currently that caters to the floral waste collected through the city. Thus, this large dump ends up being part of the ever-burgeoning landfill or rots in our water bodies causing serious consequences to our environment.

HolyWaste partners with places of worship, vendors, event planners, decorators and just about anybody who generates floral waste. Our work began in November 2018 with just one temple. We have grown the operations to 40 Temples and 2 flower vendor zones and a market zone by the end of February 2020. We are now keeping away ~ 200kgs of floral waste from the landfills and lakes every day.

1.1 The Journey

Pedaling back to the start, the two ladies met through their children, who are in the same class, and the cause that further united them was the will to do something for the greater good. During November last year, after shuffling through ideas like fridge covers and goodwill stores (which they gave a shot), a friend and avid gardener suggested

*Assistant Professor, VNR Vignana Jyothi Institute of Engineering and Technology, Hyderabad

&* Founder and Co-Founder, Oorvi Sustainable Concepts Pvt Ltd., Hyderabad

**** Professor of Chemical Engineering, Chairman: Admissions, National Institute of Technology Warangal

that they do something with floral waste — those withered flowers left behind after their brightness and fragrance have expired. "And we finally had our first breakthrough!" We { Maya and Minal } start our journey of Oorvi HolyWaste Making waste beautiful.

HolyWaste© is a Floral Project for us! A beautiful part of the garbage world which we aim to make valuable. At HolyWaste, we infuse life into floral discards by a process that we endearingly term “FloRejuvenation” – a rejuvenation of floral trash.

1.2 The Vision

The symbol is depicted in figure 1. Oorvi Sustainable Concepts – the bulb of ideas, with the “pancha-tatva” or the five elements of nature springing to life from a womb – symbolises our core focus – Women and Environment. What motivated us to work with Floral Waste?

Figure Oorvi Sustainable Concepts



(Sources: Authors' primary data)

Look at these numbers:

~7000MT – that's the estimated garbage Hyderabad generates every single day. ~1000MT – the flowers that come into the Hyderabad market every single day (which would also mean the similar amount being trashed the next day after use) A gargantuan increment of flowers and leaves is seen during festival and wedding seasons. What happens to these flowers after every use should be of grave concern to all of us.

1.3 The Mission

The objectives are

- To be able to create absolute eco-friendly, child-safe, recycled/upcycled products in a sustainable environment,
- Generate employment for women in the target markets.
- Having a zero-waste unit is our dream that we are working towards too.
- Further working on different products and value-added chemicals extracted from floral waste.

1.4 The operations

The initial operations began at the village community hall provided to us by the Sarpanch of Gundlapochampally to benefit the women of the locality. We have since moved to a rented premise in the same vicinity. The operations of segregating, sorting, cleaning, drying, composting and development of products currently happens from this facility

2. Our products

Simplicity, Integrity, Transparency and Commitment to Environment defines our attitude and form our business ethos. Our Products also carry these attitudes – true and conscious - just as they are meant to be. HolyWaste is our journey into realizing these aspirations of ours.

2.1 Anandha : Shows in Figure 2



(Sources: Authors' primary data)

Charcoal-free, Bamboo-free, Essential Oil Enriched, Handcrafted Incense Sticks with an all Natural Biodegradable Holder. Available in the below mentioned fragrances (can be customized too) Abhra Champa Jasmine Rajanigandha Rose Scent of Mysore

2.2 Vimoksh : Figure 3



(Sources: Authors' primary data)

Charcoal-free, Essential Oils Enriched, Handcrafted Incense Sticks, Available in the below mentioned fragrances (can be customized too) Soulful Rose CitRush., Celestial Wood Heal My Soul Kiss of the Rain Tranquility

2.3 Mehek : Figure 4



(Sources: Authors' primary data)

Natural Soy & Bees Wax Tablets, Ambience Enhancers Essential Oil Enriched, Hand-Poured & Handcrafted for fragrant closets.

2.4 Petals: Figure 5



(Sources: Authors' primary data)

Paraffin-free, Essential Oils, Cold Pressed Oils & Butters enriched, with floral extracts Handcrafted Soap

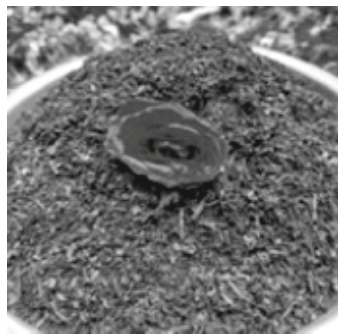
2.5 Raksha: Figure 6



(Sources: Authors' primary data)

All-Natural Floor Cleaning Liquid Child, Pet and Plant-Safe Earth-Friendly, Biodegradable Plant-based ingredients, Active microbes All Natural Floor Cleaning Liquid Child, Pet and Plant-Safe Earth-Friendly, Biodegradable Plant-based ingredients, Active microbes

2.6 Bhoomija: Figure 7



(Sources: Authors' primary data)

All-Natural Growth Enhancing Compost Earth-Friendly, Contains Essential growth boosters for fruiting & flowering. All products are available for Bulk/Reselling

Option: Email: HolyWaste@Oorvi.Org maya@oorvi.org, Ph: Moiz: +91 63058 74271 Maya: +91 78937 88662

3. Exploring the Chemistry in Flowers

In year 2019, I {Shuchi Tiwari} approach to her {Maya} and ask her to why not we explore chemistry of these products, she is agreed, then t did analysis, All the products done Infra-red Spectroscopy, Identifying functional groups. Fumes test don, and its shows no toxics gases are present. In the intense sticks. After burning sticks and collect ash, and test nature with help of digital pH meter. Ash is also showing alkaline nature.

3.1 Future perspective: Value-added products from FW

In year 2022 Anand Kishore Kola is join in this team. He is Professor of Chemical Engineering, National Institute of Technology Warangal. According to literature survey [7], natural compounds extracted from flowering plants have been proved to possess health-promoting, antioxidant, antimicrobial, dyeing and eco-friendly properties. Flowers are found to be a reservoir of many pesticides, fertilizers, and preservatives. Now we are focusing on the utilization of floral wastes for the extraction of natural colorants. Identification and characterization of extracted colorants was done using thin layer chromatography (TLC), UV Spectroscopy and Fourier Transform Infra-red spectroscopy (FT-IR) analysis. Antimicrobial and antioxidant properties of extracted natural colorants were evaluated. Applicability of extracted colorants as natural dye and biofertilizer was also evaluated. It can be concluded that the natural colorants extracted from the floral wastes can be used in textile, Paint and pharmaceutical industries. In addition, contamination free natural colorants can also serve as safe biofertilizer.

3.2 Classification of Natural Dyes

- **Red**

Index lists 32 red natural dyes. Most of the red

colourants are found in the barks or in roots of the plant

Example : madder, manjistha, Brazil wood/sappanwood , morinda, cochineal and lac dye.

- **Blue**

Index lists only four blue natural dyes, viz. natural indigo, sulphonated natural indigo,

Kumbh (Manipur) and the flowers of Japanese 'Tsuykusa' used mainly for making awobana paper.

- **Yellow**

Index lists 28 yellow dyes. Some of the important are obtained from barberry , tesu flowers and kamala . turmeric, kamela, tesu, marigold, larkspur, harshingar, annatto, berberis, and dolu.

- Green Plants that yield green dyes are rare. Both woad (Isatistinctoria) and indigo have been used since ancient times in combination with yellow dyes to produce green shades.
- Black and Brown When it comes to natural brown, there is virtually no limit to the natural sources for that. According to Colour Index, six dyes are there in black colour. Some common examples of black colour are roots of iris plant, lac, carbon, and caramel
- Orange Dyes that create reds and yellows can also yield oranges. The sources for a natural orange dye are barberry, annatto, sweet pepper blood roots etc.

Classification Based on Chemical Constitution

- Anthraquinone Dyes : Red
- Indigoid Dyes: Indigo
- Carotenoid Dyes: Orange
- Flavonoid Dyes: Yellow

3.3 Application of Flower Colourant

These natural colorants can be potentially applied in pharmaceutical and medical fields in a cost-effective way. The effect of colorants with different mordants had enhanced the colour intensity of the cloth pieces reflecting the excellent dyeing property which can be useful towards the development of cost effective eco-friendly dye for the textile industry. Moreover, the supplementation of flower extracts had shown enhanced growth and development in the test crop plant which indicated that these flower extracts can also be used as bio fertilizing agent in the agriculture field in a sustainable and eco-friendly way. Plz refer figure no 8.

Figure 8



(Sources: Authors' primary data)

4. Conclusions

The HolyWaste Sustainable Development Goals (SDGs) Impact

- 8 Women Open their personal Bank Accounts for first time in life.
- Generated direct Employment for 14 Women. Over 175,000kgs
- Floral Waste recycled In 2019-2021
- All products are made Earth-friendly, bio-degradable

References

- Online article <https://www.petalrepublic.com/floristry-and-floriculture-statistics/#2-which-countries-are-the-biggest-producers-of-cut-flowers>
- Abeliotis, K., Barla, S.A., Detsis, V., Malindretos, G., (2016). Life cycle assessment of carnation production in Greece. J. Clean. Prod. 112, 32e38. <https://doi.org/10.1016/J.JCLEPRO.2015.06.018>.
- Horticulture- Statistical Year Book India, (2016). Ministry of Statistics and Programme Implementation. Government of India

- Masure, P.S., Patil, P.B.M., (2014). Extraction of waste flowers. *Int. J. Eng. Res. Technol.* 3, 43-44
- Sharma, D., Yadav, K.D., Kumar, S., (2018) Role of sawdust and cow dung on compost maturity during rotary drum composting of floral waste. *Bioresour. Technol.* 264, 285e289.
<https://doi.org/10.1016/j.biortech.2018.05.091>.
- Arici, M., Karasu, S., Baslar, M., Toker, O.S., Sagdic, O., Karaagacli, M., (2016). Tulip petal as a novel natural food colorant source: extraction optimization and stability studies. *Ind. Crop. Prod.* 91, 215e222.
<https://doi.org/10.1016/J.INDCROP.2016.07.003>.
- Aardra V Kumar, Amal Raj, Amrutha Lakshmi, Nupur Ojha, Nilanjana Das. A green approach towards utilization of Floral wastes for the extraction of Natural Colorants. *Research J. Pharm. and Tech* (2019) 12(1): 269-279. doi10.5958/0974-360X.2019.000519.

GUIDELINES TO CONTRIBUTORS

Articles submitted to the journal should be original contributions and should not be under consideration for any other publication at the same time. Submissions may be sent via E-mail to: editor@vjim.edu.in and one hard copy by post. The intellectual contributions can be made under any one of the following categories:

1. Research Article: It should be original research article in any discipline of management which includes finance, operations, human resource, marketing and general management.
2. Book Review/Literature Survey/Case Study : Author should send one copy of the book along with review
3. Doctoral Dissertation: Author can send summary of Ph.D. thesis.
4. Case Study: Author should send the scanned copy of the approval taken from the company for doing the case.

General Information about Submission:

1. For Submission:
 - Covering Letter: Title of the paper, Author's Name, Designation, Organization, Official Address, Personal Address, Contact Numbers (Official & Personal) and e-mail address.
 - Abstract: Should contain in brief – Objectives, Research Questions / Hypothesis, Methodology, Findings and 5-6 Keywords. Word Limit : 250-300 words.
2. Full Paper:
 - Format: A-4 Size, MS-Word, 2003-07
 - Word Limit: Not to exceed 5000 words
 - Font: Times New Roman
 - Font Size: Title– 16, Heading– 12 & Text– 11
 - Margin: 1.5 – inch on all four sides
 - Line spacing: 1
3. Format of the Paper:
 - Definitions: Paper should be clear and concise with proper definitions for specialized terms.
 - Sections: Introduction, Objectives, Research Questions/ Hypothesis, Methodology, Findings/ Results, Conclusions/ Recommendations and Limitations, 5-6 Key Words.
 - Annexure: Tables, Charts, Graphs, Quotations, Equations, Articles should be numbered, cited and referenced properly.
 - Abbreviations: Any Abbreviations used should be written in full at first followed by the abbreviations in the parenthesis.
 - Referencing: The Harvard System should be used in referencing.
 - End notes: To be given with the text citation..
4. Declaration: Author must declare originality of work. The article should not have been published or be submitted for publication elsewhere.
5. Author will receive two complimentary copies of the journal.
6. Editorial Board's decision will be final.
7. The copyright of all accepted papers will vest with VJIM.

Address for Correspondence:

Editor,
Gavesana Journal of Management,
C/o Vignana Jyothi Institute of Management,
Veljan Centre, Vignana Jyothi Nagar, Bahcupally, via Kukatpally,
Hyderabad - 500090. Tel. 040-2304 4901/02, Fax: 040 2304 4953
Email: director@vjim.edu.in
Website: www.vjim.edu.in

Contact Address:

Editor,

Gavesana Journal of Management,
C/o Vignana Jyothi Institute of Management,
Veljan Centre, Vignana Jyothi Nagar, Bahcupally, via Kukatpally,
Hyderabad - 500090. Tel. 040-2304 4901/02, Fax: 040 2304 4953
Email: director@vjim.edu.in

Follow us on:



www.vjim.edu.in