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Review

Editorial

Dear Readers,

I am happy to place AMBER, Volume 13, Issue 2 in your hands with the theme **'Redefining Business Strategies: New Age Business Models'**. The authors have covered important topics related to various Business Practices in this issue. Case Study and Book Reviews have added flair to the Journal. This is a small effort by ABBS in Knowledge creation and dissemination. I am sure this issue would certainly enhance the knowledge of the readers by providing more insights into the area of Business Practices that have changed in the modern era, due to the advanced development of Information and other Technologies. I wish the readers would benefit from this issue and would give feedback to make the forthcoming issues better.

Patrons of this Journal from top management of the institution deserve special accolades for their support and coordination in bringing out AMBER in the last 13 years. I fail in my duty, if I do not thank the Editor of this issue Dr.V.P.Sriram and authors who have subscribed to this issue. I profusely thank the reviewers who shouldered the responsibility in reviewing the papers.

Business Case Studies are important as they help us understand how real-life business scenarios are different from any other kind of learning. Businesses are dynamic, meaning they are susceptible to external forces. A business case study tells us how a particular business responded to a unique situation. Other businesses can learn from them and be prepared for what can happen, how-to, or how not to respond to a similar situation.Case study gives the readers a chance to apply theory to a real-life situation, analyze, and draw insights. The business case study can be a fictitious account of a business situation provided by the instructor to check the critical thinking and problem-solving skills of the readers to a greater extent. Some of the case studies will highlight the decision-making process in a business or management setting. Other cases are descriptive or demonstrative in nature, showcasing something that has happened or is happening in a particular Business or Management Environment. Whether decision based or demonstrative, teaching cases give students the chance to be in the shoes of a protagonist. With the help of context and detailed data, students can analyze what they would and would not do in a particular situation, why and how. These case studies offer readers the opportunity to think along with a small-business owner, who has confronted an interesting challenge. Keeping this in mind the theme of the forthcoming issue Volume 14 and Issue 1 is **"Business Case Studies"**. Research Papers, Case Studies and Book Reviews are solicited from Corporate, Academic, Research and Student Community.

Dr. H.R. Venkatesha, Director
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Cost of Funds Vs Return on Advances – A Comparative Study of Scheduled Commercial Banks in India

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Abstract

In the light of shrinking gap between interest income and interest cost, this paper examines the trend in interest cost and income ratios, and also the differences among three groups of scheduled commercial banks viz., public sector banks, private sector banks and branches of foreign banks in India. For this purpose, data for 16 years from 2004-05 to 2019-20 are used and analysed with descriptive statistics besides t-test and Levene's test. The study finds that the cost of fund ratios are lower for branches of foreign banks followed by private sector banks and public sector banks. As far as the return on advances/ investment ratios are concerned, private sector banks have improved their performance more than the public sector banks and branches of foreign banks. Further, in terms of return on advances and investments adjusted to cost of funds, the branches of foreign banks are more profitable among three groups of scheduled commercial banks, and between two groups of domestic scheduled commercial banks, private sector banks are more profitable than the public sector banks.

Keywords: Cost of Deposits, Cost of Funds, Return on Advances/Investment, Returns adjusted to Cost of Funds, Scheduled Commercial Banks.

1. Introduction

Banking companies are primarily associated with the acceptance of deposits and lending activities. Over the years, they have diversified their lines of servicesby designing and introducing many new banking services. Still, mobilization of deposits and lending activities continue to be the major lines of business of banking companies. This becomes evident from the fact that the interest cost on deposits/borrowings of scheduled commercial banks (SCBs) in India accounts for 68.70% of their total cost for 2019-20. Similarly, for 2019-20, interest income from loans and advances, and from investment of these SCBs account for 84.19% of their total income. Comparatively lower interest cost to total cost ratio is due to the exclusion of 'wages and salaries' from 'interest cost' category and their inclusion in 'non-interest costs' category.

Both the amount and rate of profit depend upon the ability of banking companies to keep the interest cost at the lower possible/permissible level and to earn the maximum possible interest income. These two are influenced by the rates of interests on deposits and borrowings, and the rates of returns on loans and advances and investments. Of course, they are also influenced by the amounts of deposits and borrowings, and loans and investments.

1.1. Unavoidability Vs Uncertainty

Banking sector plays a pivotal role in the overall development of the economy by providing a safe place for the public to park their surplus fund and also by channelizing the fund so mobilized for different sectors of the economy. And this deposit is one of the major sources of fund for banking companies for their second important business viz., lending. Therefore, banking companies have designed a few deposit schemes (also called, financial products) keeping in mind the requirements of different categories of depositors and also different purposes for which they park their funds

with the banks. Besides, the banks also borrow some amounts from a few sources which normally include inter-branch borrowings, inter-bank borrowings and other debts. What is important is, no bank is permitted to accept interest-free deposits (other than in Current Account). And the borrowings by banks are always associated with interest at specific/agreed rates depending upon the source, duration, purpose, amount of borrowings, etc. And the payment of interest by the banks on both deposits and borrowings periodically is mandatory irrespective of whether they (i.e., banks) earn profit or not. This is compulsory and therefore, this payment is unavoidable/inescapable.

The funds so mobilized are used by the banking companies for the purpose of their lending activities. Lending by the SCBs comprises bills purchased and discounted, cash credits, overdrafts and loans, and term loans. These loans include both the loans secured by tangible assets and/or covered by bank/government guarantees, and unsecured loans. Further, they comprise both the advances in India and outside India. Besides lending, banks also make certain investments and major portion of this investment (about 80%) in government securities which are risk-free investments. For the loans, the banking companies charge interest based on Base Rate and by including customer specific charges. However, there is an element of uncertainty about the receipt of interest income from their lending and/or investment as a few borrowers (including corporate borrowers) fail to pay the interest. Therefore, there is an element of uncertainty about the receipt of interest income.

These two aspects viz., unavoidability of interest cost payment and uncertainty about the receipt of interest income are disrupting the banking companies – the gap between income and expenses is shrinking leading to decrease in profit and/or increase in loss.

2. Review of Literature

In the light of heightened competition in Indian banking industry during post-1991 financial sector reforms, Shollapur and Baligatti (November 2010) examined the profitability of funds management in the selected Indian banks withan emphasis on cost-benefit perspective. They used the relevant data for 12 public sector banks (PSBs) for eight years, 1999-2000 to 2006-07. Based on their performance, these banks were classified into three groups as high-profile banks (HPBs), medium profile banks (MPBs) and low-profile banks (LPBs). And each group comprised four PSBs selected randomly. The study showed that the overall cost of funds has registered a declining trend in the case of HPBs as better performing HPBs were able to obtain funds in the call money market. Further, returns on advances of HPBs have improved during the study period. However,the LPBs have recorded higher return than other two categories of PSBs.**Mathuva (2009)** examined the relationship between Return on Equity (RoE) and Return on Assets (RoA) on the one hand, and capital adequacy ratios (CARs) and Cost-Income Ratio on the other selected Kenyan banks. The study found that, profitability is positively related to core capital ratio (i.e., risk adjusted capital adequacy measure) and negatively related to Cost-Income Ratio. It is also found that the non-risk weighted capital adequacy measure (i.e., equity capital ratio) is negatively related with both the profitability ratios viz., RoE and RoA.

Ronald (May/June 1978) identified the inappropriate method followed for the purpose of estimating the cost of funds as the weakness of Franklin National Bank of Philadelphia. During the period of high interest rate regime, the bank underestimated the cost of mobilizing money consistently. Further, the cost of money that the bank borrowed for investment was higher than the return on investment (it was making). Roshni (July-August 2014) analysed the relationship between Statutory Liquidity Ratio (SLR) and Cash Reserve Ratio (CRR) on the one hand, and the loans and advances on the other. The researcher used the data of State Bank of India (SBI) for six years, 2005-06 to 2010-11 (the period that witnessed high volatility in both SLR and CRR). The study reiterated that both SLR and CRR have significant negative impact on their lending activities. Using the datasets for both wholesale funding costs and deposit rates for a large sample of

euro area banks, **Guillaume**, **Cosimo and Dawid (January 2020)** examined the relationship between bank funding costs and solvency. They also examined the relationship between senior bond yields, term deposit rates and overnight deposit rates on the one hand, and bank solvency on the other. It was observed that the interest rates for overnight deposits are least sensitive. Besides, it is found that the asset quality, profitability and liquidity of banks play a minor role in driving funding costs. Contrarily, monetary policy, sovereign risk and uncertainty in financial markets appear to be the major forces driving the funding costs.

With the help of statistics (pertaining to six major lenders of Qatar for a period of eight years, 2008-2015,collected from 'worldwide bankscope database'), El-Kassem (31 August 2017) examined the major determinants of profitability of banking companies, and the implications of liquidity and risk variables on their performance. The author considered the RoA as dependent variable, and the liquidity and risk variables as the independent variables. The results showed that, variation in the independent variables has a significant positive effect on the explained variation in the performance, RoA. On the other hand, Cost-Income Ratio has significant negative impact on the performance of banking companies in Qatar. Besides, the study found significant negative impact of variation in 'reserves for NPAs' and in 'Loan to Assets Ratio' on the RoA.Swain (2007-08) undertook a study to delve into the existing pricing mechanism in the Indian banking sector and to develop an effective pricing model for the banks functioning in a highly competitive environment. It is assumed that a price structure can be provided where a series of price levels would represent how a product/service will be priced. These price levels may permit flexibility in pricing by providing variations in price depending upon the product features, customer differences, purchase behaviour, etc.Using a large sample of individual loans, borrowers and banks, **Glenn, Kenneth and Darius (7 June 1999)** examined the implications of borrower and bank characteristics on loan interest rates. The study found that, (i) cost of borrowing from low-capital banks is

higher than that from well-capitalized banks, (ii) weak bank effects on cost of funds are higher in periods of aggregate contractions in bank lending, and (iii) the companies facing high information costs hold more cash.

Anna and Peter (July 2020) analysed the implications of changes in regulatory framework on the cost of capital and lending of banking companies. They noted that, during the post Dodd-Frank Act, the cost of capital of banks has averaged 10.50% declining by more than 4%. It was further observed that the decrease in the cost of capital was much higher for larger banks subjected to new regulations than for other banks. On the other hand, increase in the cost of capital of banking companies is associated with tightening of credit supply and lending.In its white paper, Oracle Financial Services (September 2017) felt that the banks should treat their challenges(rising costs, shrinking margins, increasing competition and stringent regulations) as drivers and not as impediments to their growth.And to remain sustainable, competitive and profitable, the banks should manage their costs efficiently. However, 'cost management'does not necessarily mean cost reduction and cost control.Although short-term cost reduction exercises may ensure quick benefits, they may not be sustainable in the long-term. Further, theymay result in the loss of competitive edge of banks. Therefore, it is suggested to undertake a comprehensive cost-benefit analysis of processes, products, people and infrastructure to manage their costs efficiently and to improve their profitability.With the help of data from 534 banks from 19 emerging market economies, **Kohlscheen, Murcia and Contreras (2018)** analysed the important determinants of profitability of banking companies. They found that, higher long-term interest rates tend to boost profitability while higher short-term interest rates reduce profitability by increasing funding costs. In normal times, credit trend plays a crucial role in the profitability of banking companies than the growth rate in gross domestic product.The study also

showed that the increase in sovereign risk premia significantly lowers the profitability of banks.

Rita and Marco (April 2014) analysed the determinants of bank funding costs of a few internationally active banks from 2001 to 2012. They found that the changes in banks' funding costs are associated with the bank-specific characteristics like credit worthiness of institution, return on its market value, and the level and quality of capital. Besides, the market forces such as the level of investor risk appetite and shocks to financial markets have acted as key drivers of sharp increase in the bank funding costs. Further, the study showed that the increased amount of capital buffers supports the bank lending to real economy by lowering bank funding costs. Gowda (May-August 2020)examined the lending by PSBs, private sector banks (PVSBs) and branches of foreign banks (FBs)to priority and non-priority sectors, and also the extent to which these loans are causing the increase in their NPAs. Using the data for 12 years, 2007–08 to 2018–19, significant difference was found between non-priority sector lending and priority sector lending from the point of view of NPAs of SCBs. The study further showed that the general perception, 'priority sector lending is contributing heavily for the mounting NPAs of SCBs' is unfounded.

3. Objectives and Hypothesis

The important objectives of this study are, (a) to examine the trend in the costs of funds and returns on advances/investment of SCBs,(b)to ascertain whether the performance of SCBs has improved over the years, and (c) to analyse the gap between costs of funds and returns on advances/investments of SCBs. In this backdrop, three null hypotheses are formulated as presented below:

- **Hypothesis Testing (H_{01}):** There exists no significant difference between the funding costs of PSBs, PVSBs and FBs.

- **Hypothesis Testing (H_{02}):** There exists no significant difference between the returns on advances and/or investments of PSBs, PVSBs and FBs.

- **Hypotheses Testing (H_{03}):** There exists no significant difference between the net interest margin rates of PSBs, PVSBs and FBs.

Each of the above three null hypotheses is tested from the point of view of three measures. In the process of analysis and hypothesis testing, the paper also examines and tests whether changes/improvements over the years in the funding costs, returns and net returns are significant or not.

4. Other Aspects of Methodology

For the purpose of addressing the objectives and for testing the hypotheses,necessary data are collected from secondary sources including the reports of RBI, reference books, reports, research papers, websites, etc.

The units of study comprise three ownership groups of SCBs viz., PSBs, PVSBs and branches of FBs functioning in India. However, only the relative measures (i.e., percentages) for each group of SCBs(not the absolute amounts and not for individual banks) are used. One of the reasons for using the percentages/averages is the substantial difference in the size of three groups of SCBs. And the study period is 16 years from 2004-05 to 2019-20.

Three sets of measures are used for addressing the objectives and for testing the hypotheses. And each set of measures comprise three variables/parameters as identified below:

(1) Interest Cost:
- Cost of Deposits,
- Cost of Borrowings and
- Cost of Funds,

(2) Interest Income:
- Return on Advances (RoA),
- Return on Investments (RoI), and
- Return on Advances and Investments, and

(3) Interest Income adjusted to Cost of Funds:
(a) Return on Advances adjusted to Cost of Funds,

- Return on Investment adjusted to Cost of Funds, and
- Return on Advances and Investment adjusted to Cost of Funds.

For the purpose of analysis and interpretation of data, and for testing the hypotheses, the descriptive statistics of mean, standard deviation (SD, σ), Coefficient of Variation(CV) and skewness are used besides compound annual growth rate(CAGR),and *t*-test and Levene's test. It may be noted here that,Levene's test, an inferential statistic, is carried out to measure the equality of variances for a variable calculated for three ownership groups of SCBs. It tests the null hypothesis that the population variances are equal.

However, this study is subject to a limitation pertaining to the return on advances and investment ratio. This ratio is computed by considering (i) aggregate of interest on advances and investments, and (ii) aggregate of advances and investment at the end of each year. This has also influenced even the return on advances and investment adjusted to cost of funds. It may be noted here that other ratios are computed using the average of current and previous years' end balances. But the implications of this difference on the results and conclusions are not material as the same base is used for all the three groups of SCBs and for all 16 years.

5. Results and Discussion

In the above backdrop, performance of three groups of SCBs from the points of view of each of the nine parameters is examined, and also the trend in, and differences between, funding costs and returns on advances/investment of three ownership groups of SCBs are analysed.

5.1. Interest Costs - Costs of Deposits, Borrowings and Funds

It is known that the rate of interest differs from one kind of deposit scheme to another, and also from deposits to borrowings. For example,

- With effect from 25 October 2011, interest rate on Savings Bank Account is deregulated and the banks are now free to fix the interest rates on their savings bank deposits.

- On the other hand, the banking companies may pay differential rates of interest on term deposits.For instance, with effect from 18 March 2021, Axis Bank is offering 5.25% interest for term deposits maturing in 1½-2 years, 5.40% for long-term deposits maturing in 2 to 5 years, etc (Sangeeta Ojha, 22 March 2021).

- Cost of deposits differs from cost of borrowings.

Further, cost of funds is influenced by many factors – both macro and micro environmental factors such as government policy, monetary policy, inflation rate, demand for funds, maturity period, etc.The costs of deposits, borrowings and funds (i.e., the aggregate of deposits and borrowings) are computed as follows:

$$\text{Cost of Deposits} = \frac{\text{Amount of Interest on Deposits}}{\text{Average of Amounts of Deposits at the end of current and previous years}} \times 100 \quad ..(1)$$

$$\text{Cost of Borrowings} = \frac{\text{Interest Expended-Interest on Deposits}}{\text{Average of Amounts of Borrowings at the end of current and previous years}} \times 100 \quad ..(2)$$

$$\text{Cost of Funds} = \frac{\text{Interest Expended}}{\text{Average of Amounts of Deposits \& Borrowings at the end of current and previous years}} \times 100 \quad ..(3)$$

In the below backdrop, average costs of deposits/borrowings (%ages) are presented in Annexure 1. Based on the details in Annexure 1, a few descriptive statistics are calculated and tests are carried out, and the summary of these results is presented below (Table 1).

A careful observation of the content of Annexure 1 and Table-1 provides some insights into costs of deposits, borrowings and funds as summarised below. Initially, costs of deposits, borrowings and funds registered continuous increase followed by continuous reduction (with a few exceptions). More specifically, the ratios moved in both the directions. In spite of these fluctuations, the variations (with regard to each of three cost measures and for each of three groups of SCBs) are not wide as both the SD and CV are on lower side e.g., the higher CV is 33.52% in the case of cost of borrowings by PSBs.

Table 1: Costs of Deposits, Borrowings and Funds – Descriptive Statistics and Test Results

Descriptive Statistics and Test Results	Cost of Deposits (%)			Cost of Borrowings (%)			Cost of Funds (%)		
	PSBs	PVSBs	FBs	PSBs	PVSBs	FBs	PSBs	PVSBs	FBs
Mean	5.63	5.64	3.96	7.21	7.87	4.36	5.72	5.94	4.06
SD	0.71	0.81	0.60	2.42	1.82	1.15	0.66	0.71	0.52
CV	12.62	14.37	15.02	33.52	23.10	26.32	11.52	12.02	12.85
Skewness	-0.04	-0.26	-0.20	0.69	0.89	0.41	0.02	0.16	?0.39
CAGR	0.34	1.51	1.01	-4.80	-2.90	-1.52	-0.02	0.66	0.16
t value	31.743	27.845	26.614	11.929	17.314	15.205	34.695	33.236	31.087
f value	1.3042 (0.2815)			5.1086 (0.01001)			1.8301 (0.1721)		

Source: Compiled the table based on the calculations made using the data in Annexure 1

As far as the cost of deposits ratio is concerned, it increased during the 16-year period in all three groups of SCBs and the ratio in the last year is higher than in the first year of the study period. Therefore, the CAGRs are positive -PSBs: 0.34%, PVSBs: 1.51% and FBs: 1.01%. This is also supported by the results of 't' test. As is known, at 5% level of significance (á = 0.05) for degree of freedom 15 (df = 15), the critical/table value of 't' is 2.131 (t_{tab} = 2.131). Calculated values of 't' (t_{cal}) for cost of deposit ratio are 31.743, 27.845 and 26.614 for PSBs, PVSBs and FBs respectively. As $t_{cal} > t_{tab}$ for each group of SCBs, it signifies the existence of significant improvement/change in the cost of deposits ratio. However, keeping in mind positive CAGRs, it is inferred that the 'change' is in the form of increase which is not desirable as the increase is in undesirable value viz., cost of deposits ratio. However, the skewness values are negative (PSBs: 0.04, PVSBs: 0.26 and FBs: 0.20) signifying that the ratio, in all three groups of SCBs, skewed towards negative value than positive during the study period which is desirable. The 16-year annual average cost of deposits ratio is lowest in the case of FBs (3.96%) followed by PSBs (5.63%) and PVSBs (5.64%). However, Levene's test carried out to test the first null hypothesis, 'H_{01}: *There exists no significant difference between the funding costs* (in terms of cost of deposits) *of PSBs, PVSBs and FBs*', shows that the calculated value of 'f'

of 1.3042 is lower than the critical/table value of 'f' is 3.2 (á = 0.05, and df = 2 and 45). Further, 'p' value of 0.2815 is higher than á 0.05 - higher the p-value, stronger it supports the 'H_o'. Therefore, the null hypothesis is tested and accepted with regard to cost of deposits ratio.

On the other hand, in the case of cost of borrowings ratio, CAGRs are negative (PSBs: 4.80%, PVSBs: 2.90% and FBs: 1.52%) as the ratio in the last year is lower than in the first year of the study period. This is desirable. But the skewness values are positive (PSBs: 0.69, PVSBs: 0.89 and FBs: 0.41). This signifies that the ratio skewed towards positive value than negative during the study period which is not desirable. Besides, the calculated values of 't' are 11.929, 17.314 and 15.205 for PSBs, PVSBs and FBs respectively against the critical value of 't' of 2.131 (á = 0.05 and df = 15). As $t_{cal} > t_{tab}$ in each of three groups of SCBs, there exists significant improvement/change in the ratio of cost of borrowings which is again not desirable as the increase is in undesirable value (cost of borrowings ratio). Considering the year-wise cost of borrowings ratio and also the 16-year annual average, it is inferred that the branches of FBs are more cost efficient/effective as they have kept the ratio at the lower level (4.36%) followed by PSBs (7.21%) and PVSBs (7.87%). However, the calculated value of 'f' of 5.1086 is higher than the critical value of 3.2 (á = 0.05, and

df = 2 and 45). Even, 'p' value, 0.01001 <á, 0.05. Therefore, the first null hypothesis is tested and rejected accepting the alternative hypothesis, '$H_{a1:}$ *There exists significant difference between the funding costs* (in terms of cost of borrowings ratio) *of PSBs, PVSBs and FBs*'.

Consequent to the changes in both the cost of deposits ratio and cost of borrowings ratio, cost of funds ratio moved in both the directions during the study period. In the case of PSBs, the ratio declined marginally from 4.93% to 4.92% during this 16-year period and therefore, CAGR is negative at 0.02% which is desirable. But the skewness value is positive at 0.02. On the other hand, in other two groups, the ratio increased during the 16-year period and therefore, the CAGRs are positive at 0.66% and 0.16% for PVSBs and FBs respectively.Skewness values are 0.16 and 0.39 for PVSBs and FBs respectively. However, cost of fund ratio is lowest in the case of FBs for all years than for both the groups of domestic SCBs. Between two groups of domestic SCBs, it is lower in the case of PSBs for 12 years. Besides, in all three groups of SCBs, improvement/increase is significant as the calculated values of 't' are (34.695, 33.236 and 31.087 for PSBs, PVSBs and FBs respectively) are higher than the critical value of 't' of 2.131 (á = 0.05 and df = 15). As already stated, this significant improvement is not desirable as it is an indication of significant increase in the cost of funds ratio.However, the calculated value of 'f'of 1.8301 is lower than the critical value of 3.2 (á = 0.05 and df = 2 and 45). Besides, 'p' value, 0.1721 >á 0.05. Therefore, the first null hypothesis, 'H_{01}:*There exists no significant difference between the funding costs* (in terms of cost of funds ratio) *of PSBs, PVSBs and FBs*' is tested and accepted.

5.2. Interest Income – Returns on Advances, Investment, and on Advances and Investment

As already stated, interest income accounts for a major portion of total income of banking companies. In this regard, the following points should be noted:

(a) Interest on advances made and discount earned on bills account for a major portion of total interest income of banking companies (for 2019-20 for PSBs, it works out to 68.66%). And income from investment accounts for about a quarter of total interest income of banks(27.24% for 2019-20 for PSBs).

(b) As is known, interest income depends upon the amount lent/invested and the interest rate which differs from one sector to another.

(c) Similarly, the rate of interest on advances differs from that on investment.

In this backdrop, three interest income ratios are used, as presented below, for the purpose of this study:

$$\text{Return on Advances} = \frac{\text{Interest and Discount on Advances and Bills}}{\text{Average of Amounts of Advances at the end of current and previous years}} \times 100 \quad (4)$$

$$\text{Return on Investment} = \frac{\text{Income from Investment}}{\text{Average of Amounts of Investment at the end of current and previous years}} \times 100 \quad (5)$$

$$\text{Return on Advances and Investment} = \frac{\text{Total Interest Income}}{\text{Aggregate of Advances and Investmentat the end of the current year}} \times 100 \quad (6)$$

In the light of the above, details of returns on advances, investment, and on the aggregate of advances and investment are presented in Annexure 2, and a few descriptive statistics calculated and the summary of tests carried out (based on data in Annexure 2) are presented below (Table 2).

It is evident from the content of Annexure 2 and Table 2 that all three income ratios moved in both the directions – changing the direction every few years. In spite of these changes, there is no wide variation in the ratios for all the three groups of SCBs from one year to another as both the SD and CV are on the lower side higher CV is 14.13% in the case of Return on Advances and Investment of FBs.

As far as the return on advances ratio (RoA ratio) is concerned, although there is no consistency,the banks have improved their performance over the years. The ratio is higher in the last year when compared to the first year and therefore, CAGR is positive for all the three groups of SCBs(PSBs: 0.15%, PVSBs: 1.09% and FBs: 0.23%).

Table 2: Returns on Advances, Investment, and on total of Advances and Investment – Descriptive Statistics and Test Results

Descriptive Statistics and Test Results	Return on Advances (%)			Return on Investment (%)			Return on Advances and Investment (%)		
	PSBs	PVSBs	FBs	PSBs	PVSBs	FBs	PSBs	PVSBs	FBs
Mean	8.97	10.20	9.31	7.37	6.92	7.40	8.25	8.69	8.56
SD	0.84	0.93	1.17	0.44	0.43	0.73	0.45	0.74	1.21
CV	9.38	9.12	12.55	5.96	6.20	9.91	5.46	8.50	14.13
Skewness	0.10	0.24	1.63	0.21	0.38	0.01	0.47	0.71	2.10
CAGR	0.15	1.09	0.23	1.12	0.42	0.24	0.13	1.10	0.02
t value	42.697	43.882	31.843	67.113	64.325	40.369	73.282	47.083	28.312
f value	0.1781 (0.8374)			3.925 (0.02684)			2.026 (0.1437)		

Source: Compiled the table based on calculations made using the data in Annexure 2

This is a sign of improvement in the performance of SCBs which is desirable. The ratio for FBs is higher only for three years (2006-07 and 2008-09 to 2009-10) and in all other 13 years, it is higher for PVSBs. The ratio is also higher in the case of PVSBs than that of PSBs for all 16 years. Further, annual average (for 16-year period) is highest in the case of PVSBs (10.20%) followed by FBs (9.31%) and PSBs (8.97%).Even the 't' test results show the existence of significant improvement in the RoA ratio of all the three groups of SCBs as the calculated values of 't' (PSBs: 42.697, PVSBs: 43.882 and FBs: 31.843) are higher than the critical value of 't' of 2.131 (á = 0.05 and df = 15). But the difference in the ratio for three groups of SCBs is not significant as calculated value of 'f' of 0.1781 is lower than the critical value of 'f' of 3.2 (á = 0.05, and df = 2 and 45). Further, 'p' value of 0.8374 >á 0.05. Therefore, the second null hypothesis, 'H_{02}:There exists no significant difference between the return on advancesof PSBs, PVSBs and FBs' is tested and accepted.

Return on investment ratio (RoI ratio) has also moved in both the directions during the study period. However, it is lower for all years (except for 2004-05 for PSBs) than the RoA ratio of SCBs. In the case of PSBs,the RoI ratio, for all other years, is lower than in the first year.But the RoI ratio of PVSBs, for all other

years, is higher than in the first year signifying the improvement in their results. But the ratio of PSBs, for all years except for 2016-17,is higher than that of PVSBs.However, the RoI ratio of PSBs and FBs for the last year is lower than for the first year and therefore, CAGRs are negative (PSBs: 1.12% and FBs: 0.24%) which is a sign of decline in the performance. But in the case of PVSBs, the CAGR is positive at 0.42%. And the 16-year annual average is highest in the case of FBs (7.40%) followed by PSBs (7.37%) and PVSBs (6.92%). In spite of this, all the three groups of SCBs have improved their RoI ratio as evident from the results of 't' test. As the calculated values of 't' of 67.113, 64.325 and 40.369 for PSBs, PVSBs and FBs respectively are higher than the critical value of 't' of 2.131 (á = 0.05 and df = 15), there exists significant improvement in the RoI ratio in all three groups of SCBs. However, the improvement differs from one group of SCBs to others significantly as evident from the results of Levene's test. As the calculated value of 'f' of 3.925 is higher than the critical value of 'f' of 3.2 (á = 0.05, and df = 2 and 45), and as 'p' value (0.02684) <á 0.05, the second null hypothesis, 'H_{02}: There exists no significant difference between the return on investment of PSBs, PVSBs and FBs', is tested and rejected accepting the alternative hypothesis,'H_{a2}: There exists significant difference between the return on investment of PSBs, PVSBs and FBs'.

As far as the return on advances and investment ratio is concerned, one can observe changes in the direction every 2 – 3 years. The ratio registered increase for more number of years (when compared to their immediately preceding years and also when compared to the results in the first year) during the study period. In the case of PVSBs and FBs, CAGR is positive at 1.10% and 0.02% respectively signifying improvement in their performance. But in the case of PSBs, CAGR is negative (0.13%). In the first year, PSBs had the highest ratio and the PVSBs, the lowest. But for the last 11 years, the PVSBs had higher ratio than other two groups of SCBs. However, as the calculated values of '*t*' of 73.282, 47.083 and 28.312 for PSBs, PVSBs and FBs respectively are higher than the critical value of '*t*' of 2.131 (á = 0.05 and *df* = 15), there exists significant improvement in the return on advances and investment ratio of all three groups of SCBs. Further, as the calculated value of '*f*' of 2.026 is lower than the critical value of '*f*' of 3.2 (á = 0.05, and *df* = 2 and 45) and as '*p*' value, 0.1437 >á 0.05, the second null hypothesis, 'H$_{02}$: There exists no significant difference between the return on advances and investment ratio of PSBs, PVSBs and FBs' is tested and accepted.

5.3. Interest Income adjusted to Cost of Funds – RoA adjusted to Cost of Funds, RoI adjusted to Cost of Funds, and Return on Advances and Investment adjusted to Cost of Funds

The third set of measures use the returns on advances and/or investments adjusted to cost of funds as detailed below:

$$\left[\begin{matrix} \text{Return on Advances} \\ \text{adjusted to Cost of Funds} \end{matrix}\right] = \left[\begin{matrix} \text{Return on} \\ \text{Advances} \end{matrix}\right] - \left[\begin{matrix} \text{Cost of} \\ \text{Funds} \end{matrix}\right] \dots (7)$$

$$\left[\begin{matrix} \text{Return on Investment} \\ \text{adjusted to Cost of Funds} \end{matrix}\right] = \left[\begin{matrix} \text{Return on} \\ \text{Investment} \end{matrix}\right] - \left[\begin{matrix} \text{Cost of} \\ \text{Funds} \end{matrix}\right] \dots (8)$$

$$\left[\begin{matrix} \text{Return on Advances and Investment} \\ \text{adjusted to Cost of Funds} \end{matrix}\right] = \left[\begin{matrix} \text{Return on Advances} \\ \text{and Investment} \end{matrix}\right] - \left[\begin{matrix} \text{Cost of} \\ \text{Funds} \end{matrix}\right] \dots (9)$$

The details about the above three ratios are presented in Annexure 3, and the summary of a few descriptive statistics calculated and the testscarried out in the following table (Table 3).

Table 3: Returns on Advances, Investment and on total of Advances and Investment adjusted to Cost of Funds – Descriptive Statistics and Test Results

Descriptive Statistics and Test Results	RoA adjusted to Cost of Funds (%)			RoI adjusted to Cost of Funds (%)			Return on Advances and Investment adjuste to Cost of Funds (%)		
	PSBs	PVSBs	FBs	PSBs	PVSBs	FBs	PSBs	PVSBs	FBs
Mean	3.25	4.26	5.25	1.65	0.98	3.34	2.53	2.75	4.50
SD	0.34	0.37	0.99	0.76	0.55	0.60	0.37	0.52	0.96
CV	10.38	8.76	18.9	45.91	56.32	17.89	14.56	18.78	21.37
Skewness	0.40	-0.96	1.66	0.74	?0.18	0.61	-0.39	-0.21	2.29
CAGR	0.42	1.63	0.29	-3.21	-0.57	-0.71	-0.33	1.82	-0.11
t value	38.487	45.676	21.164	8.708	7.151	22.329	27.47	21.299	18.722
f value	7.2728 (0.00183)			0.8518 (0.43350)			2.4981 (0.09359)		

Source: Compiled the table based on calculations made using the data in Annexure 3

A close observation of content of Annexure 3 and Table - 3 show movements in the ratios in both the directions during the study period. However, the variations are not wide (except for PVSBs with regard to RoI adjusted to cost of funds where CV is 56.32%) as both the SD and CV are on lower side.

As far as RoA adjusted to cost of funds ratio is concerned, it is higher for the branches of FBs for all years compared to both the groups of domestic SCBs. And between two groups of domestic SCBs, the PVSBs had achieved higher net results compared to PSBs.Further, CAGR is positive for all three groups of SCBs (PSBs: 0.42%, PVSBs: 1.63% and FBs: 0.29%) signifying higher ratio in the last year compared to first year of the study period. The 16-year average is highest for FBs (5.25%) followed by PVSBs (4.26%) and PSBs (3.25%). And all three groups of SCBs have improved the ratio significantly as evident from 't' test results that the calculated values of 't' of 38.487, 45.676 and 21.164 for PSBs, PVSBs and FBs respectively are higher than the table value of 't'of 2.131 (á = 0.05 and df = 15).Further, Levene's test carried out to test the third null hypothesis,'H_{03}: There exists no significant difference between the net interest margin rates (from the point view of return on advances adjusted to cost of funds) of PSBs, PVSBs and FBs' shows that the calculated value of 'f'of 7.2728 is higher than the critical value of 'f' is 3.2 (á = 0.05, and df = 2 and 45). Further, 'p' value, 0.00183 <á 0.05. Therefore, the null hypothesis is tested and rejected accepting the alternative hypothesis, 'H_{a3}: There exists significant difference between the net interest margin rates (in terms of return on advances adjusted to cost of funds) *of PSBs, PVSBs and FBs*'.

Even inthe case of RoI adjusted to cost of funds, the SCBs achieved mixed success/results as the ratio moved in both the directions during the study period. But the ratio in the last year is lower than for the first year, and therefore, the CAGR is negative – PSBs: 3.21%, PVSBs: 0.57% and FBs: 0.71%.However, the 16-year average is highest in the case of FBs (3.34%) followed by PSBs (1.65%) and lastly, PVSBs (0.98%).Performance of FBs is better/higher than both

the groups of domestic SCBs for all years (except for 2004-05). And between PSBs and PVSBs, the performance of PSBs is better than that of PVSBs for all 16 years. In spite of these differences, what is common is that, all the three groups of SCBs have improved the ratio significantly as the calculated values of 't' (PSBs: 8.708,PVSBs: 7.151 and FBs: 22.329) are higher than critical value of 't' of 2.131 (á = 0.05 and df = 15). Besides, Levene's test is carried to test the third null hypothesis, 'H_{03}: There exists no significant difference between the net interest margin rates of PSBs, PVSBs and FBs'. As f_{cal}0.8518<f_{tab} 3.2 (á = 0.05, and df = 2 and 45) and 'p' value, 0.4335 >á 0.05, the null hypothesis is tested (from the point of view of RoI adjusted to cost of funds) and accepted.

The pattern of changes in return on advances and investment adjusted to cost of funds is similar to that of RoA adjusted to cost of funds and RoI adjusted to cost of funds. However, the ratio moved in both the directions in all the three groups of SCBs during the study period. But the ratio in the last year, in the case of PSBs and FBs, is lower than for the first year, and therefore, in these two groups, the CAGR is negative (PSBs: 0.33% and FBs: 0.11%). Contrarily, the CAGR is positive at 1.82% in the case of PVSBs which is desirable. Even from the point of view of this ratio, the branches of FBs have earned higher rate of return than PSBs and PVSBs for all years. Between PSBs and PVSBs, the PSBs have earned higher return for five years (2004-05 to 2007-08 and 2011-12) whereas the PVSBs earned higher rate of return in the remaining 11 years. Besides, all the three groups of SCBs have improved their performance/ratio significantly as evident from the calculated values of 't' of 27.47 (PSBs), 21.299 (PVSBs) and 18.722 (FBs)which are higher than the critical value of 't' of 2.131 (á = 0.05 and df = 15). In order to test the third null hypothesis, 'H_{03}: There exists no significant difference between the net interest margin rates of PSBs, PVSBs and FBs', Levene's test is carried out. The test results (Table 3) show that the calculated value of 'f' of 2.4981 is lower than the critical value of 'f' of 3.2 (á = 0.05 and df = 2 and 45). Further, 'p' value is, 0.09359 >á

0.05. Therefore, the null hypothesis is tested and accepted.

6. Conclusions

From the above factual analysis, it is obvious that the performance of SCBs differs from one group to another. However, this difference is either statistically significant or not significant. These findings, based on their performance evaluation from the point of view of each of nine parameters, are presented above at the appropriate places. However, summary of these findings is presented below:

- Among three groups of SCBs, based on 16-year average, the branches of FBs are more cost efficient (from the points of view of all three cost ratios) followed by PSBs and lastly, PVSBs.In terms of returns, PVSBs are more profitable from the point of view of RoA ratio, and return on advances and investment ratio. In terms of RoI, branches of FBs are more profitable followed by PSBs. From the point of view of returns adjusted to cost of funds (from the points of view of all three ratios), the branches of FBs are more profitable. Overall, the branches of FBs are efficient not only in minimizing interest cost but also in maximizing interest income which enabled them to post higher returns adjusted to cost of funds.

- From the point of view of all nine measures, there is a significant improvement in the performance of all three groups of SCBs as $t_{cal} > t_{tab}$. However, significant improvement in three cost measures is not desirable as the 'improvement' is in the form of 'change' which may take the form of either increase or decrease.

- As far as the difference among three groups of SCBs, there exists no significant difference with regard to six measures (two measures from each of interest cost, interest income and net interest margin ratios) viz., cost of deposits, cost of funds, RoA, return on advances and investments, RoI adjusted to cost of funds, and return on advances and investment adjusted to cost of funds as $f_{cal} < f_{tab}$

(also, 'p' value>á 0.05). Hence, in these cases, the null hypotheses are tested and accepted. Contrarily, there exists significant difference with regard to the remaining three measures (one each from interest cost, interest income and net interest margin ratios) viz., cost of borrowings, RoI, and RoA adjusted to cost of funds as $f_{cal} > f_{tab}$ (also, 'p' value<á 0.05).

It is, therefore, necessary for the PSBs to exercise necessary control over their interest costs and also to maximize their interest income. Even the PVSBs have to exercise control over their interest costs. This enables them to increase the gap between interest income and interest cost which in turn enables them to improve their profits and profitability.

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Annexure 1 - Funding Costs – Average Rates of Interest on Deposits, Borrowings and Total Funds

Year	Cost of Deposits (%)			Cost of Borrowings (%)			Cost of Funds (%)		
	PSBs	PVSBs	FBs	PSBs	PVSBs	FBs	PSBs	PVSBs	FBs
2004-05	4.70	4.14	3.11	10.02	9.90	5.20	4.93	4.87	3.63
2005-06	4.58	4.46	3.16	10.07	10.52	5.74	4.93	5.14	3.82
2006-07	4.91	5.37	3.59	11.11	10.93	6.38	5.29	5.97	4.30
2007-08	5.97	6.47	4.20	11.64	11.17	6.27	6.30	7.00	4.70
2008-09	6.26	6.60	4.58	9.23	9.19	5.20	6.47	6.96	4.74
2009-10	5.68	5.36	3.10	6.57	6.58	2.76	5.75	5.55	3.02
2010-11	5.12	4.97	3.30	6.99	7.00	3.52	5.27	5.29	3.35
2011-12	6.36	6.43	4.34	7.10	7.54	3.52	6.42	6.62	4.10
2012-13	6.63	6.72	4.67	6.15	7.42	4.06	6.59	6.85	4.47
2013-14	6.47	6.40	4.78	6.36	7.40	4.00	6.46	6.58	4.53
2014-15	6.43	6.39	4.61	5.90	6.41	4.87	6.39	6.39	4.68
2015-16	6.19	6.08	4.46	5.27	6.27	4.00	6.11	6.11	4.36
2016-17	5.70	5.59	4.24	4.80	6.56	4.26	5.62	5.76	4.24
2017-18	5.12	4.94	3.85	4.72	6.23	2.96	5.08	5.16	3.70
2018-19	5.01	5.14	3.79	4.81	6.64	2.93	4.99	5.40	3.61
2019-20	4.96	5.26	3.65	4.56	6.17	4.07	4.92	5.41	3.73

Source: Compiled the Annexure based on the data collected from, Reserve Bank of India,
Report on Trend and Progress of Banking in India, 2004-05 to 2019-20, Mumbai.

Annexure 2 - Returns on Advances and on Investments

Year	Return on Advances (%)			Return on Investment (%)			Return on Advances and Investments (%)		
	PSBs	PVSBs	FBs	PSBs	PVSBs	FBs	PSBs	PVSBs	FBs
2004-05	7.97	8.49	8.15	8.29	6.16	6.98	8.00	7.65	7.74
2005-06	8.01	8.72	8.54	7.84	6.64	8.30	7.97	7.12	8.16
2006-07	8.68	9.55	9.78	7.26	6.50	8.61	7.82	7.88	8.98
2007-08	9.52	11.01	10.93	7.25	7.22	8.24	8.23	8.91	12.23
2008-09	10.08	11.41	12.61	6.95	6.93	7.63	8.34	9.65	10.24
2009-10	9.10	9.89	9.99	6.65	6.23	6.39	7.81	8.39	8.17
2010-11	9.09	9.65	8.75	6.80	6.53	7.39	7.90	7.93	7.89
2011-12	10.31	11.06	9.61	7.54	7.26	8.02	8.98	9.01	8.36
2012-13	10.08	11.52	9.55	7.60	7.28	8.13	8.88	9.39	8.60
2013-14	9.69	11.24	9.38	7.69	7.32	7.34	8.75	9.48	8.31
2014-15	9.50	10.90	9.27	7.64	7.16	7.73	8.85	9.39	8.70
2015-16	9.02	10.46	8.95	7.80	7.49	7.28	8.76	9.06	8.12
2016-17	8.44	9.99	8.77	7.49	7.49	6.83	8.34	9.09	8.99
2017-18	7.77	9.45	8.12	7.06	6.92	6.61	7.72	8.31	7.62
2018-19	8.07	9.78	8.15	7.20	6.99	6.23	7.89	8.65	7.13
2019-20	8.16	10.10	8.45	6.92	6.59	6.71	7.83	9.12	7.77

Source: Compiled the Annexure based on the data collected from, Reserve Bank of India,
Report on Trend and Progress of Banking in India, 2004-05 to 2019-20, Mumbai and calculations made based on these details.

Annexure 3 - Returns on Advances and on Investments adjusted to Cost of Funds

Year	Return on Advances adjusted to Cost of Funds (%)			Return on Investment adjusted to Cost of Funds (%)			Return on Advancesand Investment adjusted to Cost of Funds (%)		
	PSBs	PVSBs	FBs	PSBs	PVSBs	FBs	PSBs	PVSBs	FBs
2004-05	3.03	3.62	4.52	3.35	1.29	3.34	3.07	2.78	4.11
2005-06	3.08	3.58	4.71	2.92	1.50	4.47	3.04	1.98	4.34
2006-07	3.39	3.58	5.48	1.97	0.53	4.32	2.53	1.91	4.68
2007-08	3.22	4.01	6.23	0.95	0.22	3.54	1.93	1.91	7.53
2008-09	3.61	4.45	7.87	0.48	0.03	2.89	1.87	2.69	5.50
2009-10	3.35	4.34	6.97	0.90	0.69	3.37	2.06	2.84	5.15
2010-11	3.83	4.36	5.40	1.53	1.24	4.04	2.63	2.64	4.54
2011-12	3.89	4.44	5.51	1.12	0.64	3.92	2.56	2.39	4.26
2012-13	3.49	4.68	5.08	1.01	0.43	3.67	2.29	2.54	4.13
2013-14	3.23	4.66	4.85	1.23	0.74	2.81	2.29	2.90	3.78
2014-15	3.12	4.51	4.59	1.25	0.77	3.05	2.46	3.00	4.02
2015-16	2.92	4.35	4.60	1.70	1.37	2.92	2.65	2.95	3.76
2016-17	2.82	4.23	4.53	1.87	1.73	2.58	2.72	3.33	4.75
2017-18	2.68	4.29	4.42	1.98	1.76	2.91	2.64	3.15	3.92
2018-19	3.07	4.37	4.54	2.21	1.58	2.62	2.90	3.25	3.52
2019-20	3.24	4.69	4.73	1.99	1.18	2.98	2.91	3.71	4.04

Source: Compiled the table based on the data collected from, Reserve Bank of India,
Report on Trend and Progress of Banking in India, 2004-05 to 2019-20, Mumbai and calculations made based on these details.

A Contemporary View on Employee Training and Development that Plays a Strategic Role in Organisational Performance at a Service-Based Firm

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Abstract

The employee training and development on the organizational effectiveness is investigated. The study establishes the association among training and development and organizational efficiency to highlight the advantages of training and development at service based firm; and to measure the effect of training and development in organizational efficiency. The data is collected by a structured questionnaire was distributed to the employees in the service based firm and the sample size (N=100) is collected. The research concluded that increasing job satisfaction and reducing the turnover of employees benefit training and development. The study's result may be helpful in implementing successful workforce development programs that foster cherished ideals of the company. Due to time constraint it was not possible to interact with employees in detail. The answers given by the respondents may be biased due to the disinterest on their part.

Keywords: Employee Training and Development, Organizational Effectiveness, Organizational Performance, Organizational Sustainability, Etc.,

1. Introduction

Preparing is the primary territory of human asset the board; it is the quickest developing classification of human asset exercises. Preparing, which is all included to as an eating routine and exercise to enhance physical, psychological and aptitudes of the labourers or employees, help companies with building up a basic instrument aimed at the worker to support his performance. Training and Development of personnel is the most critical part of enterprise. It is an axis in which sustainability of the company is performed. The training process is one of the most common strategies of increasing employee performance and communicating organizational goals with workers.

One of the foundation of all the capital and essential methods of transforming different asset into utilization and advantage of man.Building and operate HR abilities is serious and determining the amount we used to succeed as an enterprise. Preparing both Physical, social, intellectual and mental learning is viable in advancing the degree of profitability as well as the headway of workers in any association **(Sundaray, 2011).**

For run both large and small organisations, they need to be staffed with competent staff. For a place in a particular organization, the formal education program doesn't properly teach specific job skills. Few employees are required to work with the expertise, information, abilities and competencies required to work. As the outcome, many require large training to obtain the required to make a significant growth of the organization.

There is an affirmative link between training, development,and organizational performance. Rising job fulfilment and rising staff turnover were benefits for training and development. Personal and collaborative activities are the impact of training and development on organizational performance **(Song et al., 2009).** Maximizing the contribution of workers to the aims and the priorities of the businesses to withstand economic growth and productivity.

Training is therefore an important element in improving organizational efficiency; it upsurges the level of individual versus organizational skills. It supports bridge the gap between what's going to happen and what's going on - about desired goals or aspirations and actual work performance levels.

Training plans are targeted at continuing and improving present job quality, though growth is aimed at improving capabilities for future jobs. In the face of technological progress, certain workers have become obsolete with the introduction of computers in the modern day.More training and expertise is required for those in current positions and those who want to be advanced in the future **(Laing, 2009).**

The purposeis to observe the effect of training and development in the organization. Education is a very commonly used word, usually' fits' to the instructor or the organisation, it should be about the creation of the whole individual–not just the acquisition of knowledge, the conventional definition of education at work.While practical, organizational views and perceptions about what ' learning ' does not shift immediately, and most organisations perceive ' Education ' as being restricted to work skills, however, progressive attitudes to people's advancement beyond and conventional skills training.The objectivity in training and development and its constant learning cycle have always been the driving force of an institution and has now become more of an overriding phenomenon for social needs, arguing that organisations will in still a philosophy of learning as a social accountability.

2. Literature Review

Impact of learning on the performance of workers in the company. This research indicates that learning is an important role in improving the performance of workers.Here researcher directly focuses towards the role training play in enhancing employee performance as this will expand the scope of the existing body of knowledge. Training helps employees to keep on getting new knowledge a well-trained employee play his job effectively than others **(Abdullateef and Baharom, 2019).**The integrative analysis study it

absolutely was initiate that overall banking sector is prosperous everywhere around the globe and it's burgeoning in Asia isn't any exception. Improved equity funding, reduced proceedings expenses and increasing revenues are the most reasons for the expansion.Human resource management helps to advance the potential of banks in these nations, in specific training and learning programs that help workers to relinquish their best to organisations and acquire the newest strategies to tackle new market problems **(Anjum and Ali, 2018).**

In the stage of rapidly altering occupational environments as well as in the world of work, real employee training practices and their growth are the important to achieving the best performance of employees in different industrial sectors. The present research undertaken as predictors of employee performance (EP) to explore worker training (ET) associations, employee development (ED).The study was conducted using an exploratory research design and deductive method and an examination was used to gather primary data **(Akter, 2016).**

The disciplined screening method resulted in a very final sample of 117 papers published in thirty-one journals from 1995 to 2014. The mixture of the empiric and theoretical studies unconcealed that: (a) the literature uses a small variety of theoretical and abstract viewpoints; (b) the human resource development is being studied across the board.Effectiveness of organisation training using meta-study. This offers 34 ranges for management training. This clarifies that we have heard about managerial staff, the quality of one or more training programs and the comparison group. Characteristics of the study, such as sample size and test reliability, were collected and coded to correct reported results for artifacts such as sampling error and attenuation. An effort was also made to include all relevant information applicable to management training studies **(Burke and Day, 2015).**

The result of the objective direction on training incentive and results is measured observed evidence favours that the state goal alignment is a three-dimensional concept and forecasts motivation for

training outcomes. The training programs in administrations of knowledge and less explored' non-learning 'outcomes. Learning inspiration often mediates the interaction between target alignment and both results. The consequences of these new understandings for researchers then clinicians were explored **(Rasool, Bashir and Nasir, 2015).**

Training and development on organizational effectiveness shows the association between training and development in the field of organizational efficiency and administration. When using the questionnaire method, the data is collected and the sample size is 66.If a positive association occurs between learning and employee performance, this decreases the retention of workers and provides benefits to the company. The organization must manage training programs more effectively in order to achieve the organizational objectives and personal objectives of the employees. In order to benefit from learning in order to gain a competitive benefit, the company would generally perceive education as a means of creating intelligent capital **(Obi and Ekwe, 2014).**

The entrepreneurial mindsets and skills may be learned has given rise to the sector of entrepreneurship education and coaching. While programs serving active entrepreneurs specialize in strengthening entrepreneurs' data, skills and business practices, that whereas unlikely to remodel AN enterprise within the close to term, might accrue edges to entrepreneurs over time. The study conjointly offers implications for policy and program implementation, accenting the importance of clarity regarding target teams and desired outcomes once creating program decisions, and sound understanding of extent to that publicly-supported programs provide a broader public sensible, and compare favorably to policy alternatives for supporting the targeted people furthermore because the overall economic and social objectives **(Valerio, Parton and Robb, 2014)**. The employee Training and employee productivity. According to his study Training and growth program upgrade individual abilities and it increase wellbeing of the organization.

Thus organization needs to invest on training of employees on continuous basis to improve the technical ability of employees. There he argued that education is seen as a methodical approach to learning and growth that strengthens people, groups and organizations **(Nda and Fard, 2013).**

Employee productivity depends on numerous factors, such as motivational training promotions,and development, etc. Through taking part in educating and improvement, one can enhance one's ability and knowledge relevant to the required work to be done in one's organisation.Training provide a chance to improve their skills which helps them to achieve great in their career by providing quality information's related to their tasks. The outcome of the training is always be positive to both employee and organization **(Kenny, 2019).**

Learning and development shall function in such a manner as to allow workers to decide whether training and development activities are successful and produce the desired outcomes. Education assessment should be a standard process due to the fact that trainees were seasonal classes. They participate in the training platform to obtain precise services and come back to work in order to relate them. New information and skills are important become necessary over time; they return to the training programme. The quality of any training program is measured not only by the efficient development of essential information, but also by the ability to effectively translate the expertise to the performance context **(Rama and Shaik 2012).**Compare the quality of workers who engage in the training program and hear about the shift in the mind-set of employees by contrasting pre-training and post-training results **(Chimote, 2010).**

The Training professionals and other HR practitioners who are responsible for development of people at their work place. The book unfolds the subject of Training & Development systematically, starting with concepts, rationale for capacity building and competency building of people in the organization. Training Need Assessment, the starting point of all trainings. Numerous models and methods were provided, such

as learning requirements questionnaire, skill assessment, performance analysis, job analysis, input and management decisions **(Thomas, 2008).**Education goals have three key aspects, including strengthening working relationships, resolving knowledge differences and developing skills. SOEs have a tendency to emphasis additional on skill growth, whereas non-SOEs prioritize both improving working relationships and developing abilities.Associating the standards of learning and the expected accomplishment of training goals, the difference is seen to be low across all categories of companies, and the efficiency of training is seen to be comparable. The estimation of the production function shows that there is a positive relationship amid training expenditure and enterprise output **(Ng and Siu, 2004).**

Factors affecting the transition of learning.Pertinent academic work on transition through leadership, education, adult learning, performance improvement, Human Resource Development (HRD), and psychology literature is incorporated into the study.They synthesize information creation on the main factors that affect learner traits, program structure and execution, and work environment influences **(Burke and Hutchins, 2004).**Training effectiveness research used to be reviewed to construct a built in model of coaching comparison and effectiveness. Training variables associated with post training attitudes have been pre training self- efficiency experience learning and investigation **(Alvarez, Salas and Garofano, 2004)**. Corporate training and growth strategies and activities in India and the UK.In this research researcher collect data from both Indians and British companies. The total sample size is 246 in that 252 are Indian and 174 British companies. The method used by the questionnaires to collect the questionnaire data is sent to the samples **(Yadapadithaya and Stewart, 2003).**

The value of training and development methods used in an enterprise. Based on a survey of 425 sample size, awareness of the organization's opinion of development and training was used.The optimisticassociation between training and

development practice variables **(Chand and Ambardar, 2010)**. Throughout modern situations, workplace learning is widely viewed as a means of competitive advantage.The findings of the qualitative review showed that, though some workers are not conscious of and are not contributing in training platforms, the mainly employees confirmed that they are conscious of and are involved in numerous training platforms. The findings of the association study showed that there is a moderately strong connection amid employee training and organizational success **(Quartey, 2012).**

The relationship between training opportunities and together work presentation and citizenship attitudes were entirely mediated in the cross sectional study, and that the association between perceived training opportunities and retention expectations were partly mediated by worker encouragement.Percent of the variability in the intent of turnover. Implications for training for future research were discussed. Variance of 13 percent in organizational citizenship activity and Variance of 24 percent in mission results, 19 per factor included as predictors in our analysis **(Dysvik and Kuvaas, 2008).**

Experimental research approach comprises of Comparison of two related samples, data on cognitive abilities before and afterward training of the experimental group, the comparison of two self-determining samples of cognitive abilities data subsequently after training of the experimental group with the control group, analysis of data **(Widodo, Rahman and Prihatin, 2015).**

Global competition and rapid change reinforce the reputation of human resources within organisations, as well as the pace and methods for gaining knowledge of that resource. Modern companies then utilize their capitalfor the continuous learning and development of their employees.Establishments that are constantly developing new know-how, expanding it across the whole organization and quickly applying it within new skills, developing good products and providing excellent services **(Vemic, 2007).**

The capacity for people and establishments to learn and develop new understanding has become a vital relative advantage. The idea of knowledge of people in the organisation, in particular the purpose of employee training and development within the learning organization, is concerned with the basic reserve of modern business, i.e. knowledge and its use Reintroducing information is a must for establishments, not an option. The speed of education must be higher than the rate of transition. The prosperity of organizations is made explicit by the intellectual capacity of their employees and their skill to change and adapt to the active business environment **(Panneerselvam, 2018).**

Informal knowledge is considered to be the prevailing ability development technique for the majority of workforces in India and numerous other carefully emerging countries, and there is a great deal to learn from studying the strengths and weaknesses of this method of training. A case-by-case research learning was conducted in north part of India to explore these strengths and weaknesses, as well as to recognize factors and triggers that might be of interest to those seeking to comprehend the informal learning procedure **(Barber, 2004).**

The reputation of training as an instrument to assist establishments grow competitive advantages based on their human resources. Nevertheless, spending by businesses in learning programs is still very small. There is also a lack of academic research to study this problem, particularly at the methodological level. This report analyses the impact of learning on quality. Our results show some evidence of a significant association between training and performance **(Sánchez, Aragón, and Sanz, 2003).** The association between employee satisfaction and the desire to stay. Likewise, recent research in the arena of human resources cantered on the result of human resource policies on different organizational results. In this report, the researchers discuss the partnership between training and development as well as employee satisfaction, commitment and desire to live throughout four accommodation assets. Results specify that workers who believe they have the chance to progress new skills are more pleased with their work, more committed and more likely to remain with the company **(Costen and Salazar, 2011).**

The effect of development on staff performance and efficiency at the organization. Training and development were positively association and demanded to have a statistically significant association with employee performance and efficiency **(Asfaw, Argaw and Bayissa, 2015).** The correlation between the unique development and assessment elements and the success of learning in organisations. Focus specifically on those characteristics that professionals and scientists have a fair degree of control over. We then address our use of meta-analytical methods to measure the effect of each function and end with a review of the consequences **(Arthur et al., 2003).** The issues of innovation and creativity and the links between these two issues. Four dimensions were considered, individual characteristics, institutional systems, teaching practices, training methods and learning material **(Birdi, 2005).**

3. Objective of the study

To find the impact of employee training and development on organizational development among the service based firms

4. Methodology

Organizational performance and Training and development is measured using a closed-ended questionnaire as the research instrument. Sampling technique means the method or measures employed by the researcher to choose the sample out of the entire population. The sample size is 100 respondents out of 151 employees in the service firm. SPSS ver.22 was used to perform the analysis. Regression was performed to find the impact of training and development on the organizational development and performance. It is also specific as it focuses on particular aspects or dimensions of the project being undertaken.

In order to test the objective the questionnaire is given to all the employees (n=151) in the service firm only 100 employees returned the filled in questionnaire.

The predictor variable of the research is training and development and the dependent variable is the organizational development. Inferences based on imagination or guess work cannot provide correct answer to the questions. For the purpose of analysing the data obtained from questionnaires. Assumption have been made on the inference and analysis drawn. The questionnaire collected information on the following: Form of training programs that the organisation focuses to develop individual or managerial skills and process skills; Knowledge acquisition mechanisms in place for the exchange of expertise in the reacting organization; Improvements that occurred in the organization.

5. Results and Findings

Table 1: Model Summary of Training on Organizational Performance

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.794[a]	.630	.583	.18940	.630	13.453	11	87	.000	1.978

a. Predictors: (Constant), TD12, TD4, TD9, TD7, TD8, TD1, TD5, TD11, TD3, TD6, TD2;

b. Dependent Variable: Organizational Performance

The Table 1 represents the regression results of the training of employees on organizational performance the coefficient of determination is 63 percent and the value is significant and less than 0.05 percent.

Table 2: ANOVA of Training & development on Organizational Performance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.308	11	.483	13.453	.000[b]
	Residual	3.121	87	.036		
	Total	8.429	98			

a. Dependent Variable: Organizational Performance; b. Predictors: (Constant), TD12, TD4, TD9, TD7, TD8, TD1, TD5, TD11, TD3, TD6, TD2; Training and development

The above Table 2 represents the Anova of employees training and development on organizational performance the F value is 13.45 and the significance value is less than 0.05 percent. The training and development of the employees has an effect on the organizational performance the efficiency of the employees and also the skills of the employees is increased.

The table 3 represents the coefficient of employees training and development on organizational development the significant factors of training and development TD 2 (0.016), TD11 (0.000), and TD12 (0.000). Training and development increases the efficiency of the employees, and in improving the skills.

The overall goal of this investigation was to evaluate the effect of training and development on the performance and efficiency of employees. In the last eight months, most of the respondents had completed practice. Every year, almost every worker had the chance to attend up to at least 2 training programmes. The key result of this research demonstrations a positive correlation between training and development on the outcomes of the quality and productivity of the worker. Evaluation or recognition of ability deficiencies was identified as rarely performed behaviour with respect to training needs. This could be because most of the reform activities in the civil service are derived from high-level decision-making.

Table 3: Coefficients of employee Training and Organizational performance

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.981	.154		6.365	.000
	Training1	.010	.022	.042	.471	.639
	Training2	-.071	.029	-.211	-2.464	.016
	Training3	-.006	.025	-.018	-.254	.800
	Training4	.025	.015	.123	1.753	.083
	Training5	-.001	.027	-.001	-.019	.985
	Training6	-.010	.014	-.051	-.710	.479
	Training7	.000	.018	-.001	-.010	.992
	Training8	.108	.038	.190	2.812	.006
	Training9	.005	.012	.029	.408	.684
	Training10	.224	.029	.539	7.700	.000
	Training11	.213	.022	.670	9.890	.000

a. Dependent Variable: Organizational Performance; TD: Training & Development

Training programs are targeted at sustaining and improving current job quality while growth is meant at improving capabilities for future jobs. With the introduction of computers in the modern days, some workers are obsolete given the advances in technology. For those in current positions and those who want to be advanced in the future, further training and expertise are essential. The issue statement contained various factors such as understanding the workers 'training and development facilities and also recognizing the company's best attempts to improvise the results. Classified, tabulated, and calculated for the purpose of analysing the data obtained from questionnaires. The method of measuring percentages was used to obtain a better view of the results. The research collection was built on the basis of the inferences taken. Analysis and recommendations were made on the drawing of inference and examination.

6. Conclusion

It is a certain element that effective training is an asset among the professionals in an organization, it creates instant and long range revenues. The asset is not adequate for administrations necessity to accomplish developmental programs more efficiently in order to get the highest revenues since their investment. The goal of each development and training program remains worth to individuals in the organization. The program of training and development that will not add value should be abandoned. The theme of workforce training and development is observed with happiness and indifference, and there is this confusion of workforce training target because it is realised as a tool or method of staff recruitment slightly than as a tool for employee development, quality improvement and retention from a holistic perspective. Training facilitation approaches were most often staff education (demonstration) and re-demonstration by employees. The facilitation model of training has a successful outcome that has been demonstrated in the productivity of workers and the efficacy of organizations. Finally, the investigation results shows that training and growth programs have good results and outcomes for the organizational development. However, it needs to enhance the structured recognition of employees' need for learning and

capacity deficit, track and assess using realistic metrics or standards as the plan helps optimize the effectiveness of the administration office's education and growth activities.

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Effective Work Environment: The Foremost Arbitrator to Persuade Job Satisfaction Using NIPM-WE Model

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Abstract

The dynamic nature of working environment leads to many confronts in the organizations. The major confront that organizations want to focus is the satisfaction of their employees as well as to cope up with changing environment. In order to reach the efficiency and effectiveness, organization should provide very good working environment which in turn emphasis the employees to work towards their goal. The research paper reveals the impact of work environment towards job satisfaction of employees working in manufacturing industry. A valid sample of 239 respondents was selected from different categories of job profile from the manufacturing industry and the collected data were analyzed by using the SPSS through correlation and regression analysis. The findings revealed that there is a close association as well as impact of Job Satisfaction with Work Environment. The manufacturing industry necessitates its focus on the reshuffle of roles and the responsibility of individual employee's which in turn helps to attain the competitive advantage without forfeiting the basic objective.

Key Words: Job Satisfaction, Work Environment, Organizational Culture

1. Introduction:

Job Satisfaction is imperative for the efficiency and effectiveness of organizations for long-term in any Organization. Job satisfaction is regarding to one's feeling or state of mind regarding nature of their work. To emphasis the opportunities and to continuously enhance the human resource management process job satisfaction plays a vital role. Job satisfaction represents one of the most complex areas when it comes to managing their employees. The failure of identification of working importance of an organization leads to employee job dissatisfaction which in turn the organization may not be able to outshine itself while comparing with their competitors **(Aiken, Clarke, & Sloane, 2002)**. To ensure the quality of the work put forth by the organization, performance criteria to be accomplished by the employee. To accomplish the expected standards good working environment is require, so that it will help the employee to perform up to their full prospective.

1.1. Job Satisfaction

Farhan Saputra & M Rizky Mahaputra (2022) conducted a human resource literature study titled "Effect of Job Satisfaction, Employee Loyalty and Employee Commitment on Leadership Style" with an aim to build a research hypothesis on the influence between variables which will be used in further research, within the scope of Human Resource Management. The researchers adopted the library research method. The results of the review showed that Job Satisfaction had an effect on Leadership Style followed by Employee Loyalty had an effect on Leadership Style and lastly Employee Commitment had a significant effect on Leadership Style.

Sven Winkelhaus Eric H. Grosse & Christoph H. Glock (2022) in the article "Job satisfaction: An explorative study on work characteristics changes of employees in Intralogistics 4.0" carried out a research work with an aim to examine the influences of the

transition toward Intralogistics 4.0 on work characteristics of intralogistics employees. A qualitative, explorative methodology was employed to examine the perception of work characteristics that impact job outcomes such as job satisfaction, motivation, and performance at different Intralogistics 4.0 maturity levels. The results indicated that the development toward Intralogistics 4.0 - implemented workplaces does not have a simple or predefined impact on humans; instead, the individual design is relevant and can improve the workplaces with more opportunities for satisfying and motivating jobs.

Kevin A. Hoff et al (2020) conducted a research study on the title "Interest fit and job satisfaction: A systematic review and meta-analysis" with the aim of performing a comprehensive meta-analysis on interest fit and job satisfaction. The results revealed a statistically significant, positive relation between interest fit and overall job satisfaction that was slightly lower than expected and suggested a need to re-conceptualize the importance of vocational interests.

Davidescu A et al. (2020) in the research work "Work Flexibility, Job Satisfaction, and Job Performance among Romanian Employees" showed that sustainable HRM is seen as an extension of strategic human resources, presenting a new approach to human resource management. The study aimed at investigating the link between employee development and worktime and workspace flexibility as relevant characteristics of sustainable HRM, job satisfaction and job performance among Romanian employees in order to identify how to redesign HRM in the face of "future work" challenges. The results revealed that these new types of workspaces were highly appreciated by employees, generating a growing interest among them and analysis of logistic regression analysis pointed out the role of functional flexibility, working time, and workspace flexibility along with the flexibility composite indicator in increasing the level of job satisfaction in employees.

According to **Hoppok & Spielgler (1938)** Job Satisfaction is defined as the integrated set of psychological, physiological and environmental conditions that encourage employees to admit that they are satisfied or happy with their jobs. Majority of the research studies showed that the major impact of job satisfaction rest on employee's perception towards work nature and financial compensation. Previous research study also states that the job satisfaction influences the motivation of the worker in an organization. The business performance in an organization increases by increase in the level of motivation. The key factors contributed towards employee job satisfaction include pay, promotion, fairness and working condition **Rashid Saeed et al., (2014).** The research study reveals that salary occupies the first rank in job satisfaction in contrast other determinants which is influencing job satisfaction **Gurusamy & Mahendran (2013)**. There is a significant relationship with respect to nature of employee's job and job satisfaction in Tourism Industry **Rumman (2011)** and Organization Climate shows impact towards Job satisfaction **Adeniji (2011).** The research evidence shows that pay, promotion opportunities, rewards, relation with boss and coworkers shows positive effect towards job satisfaction **Yasir Kamal and Fawad Hanif (2009).**

Job satisfaction of employees shows high degree of relationship with company's policy and administration **Afroze (2008).** Empirical research findings propose that job satisfaction is positively correlated with pension benefits, family conditions and the personal characteristics, number of hours worked; work environment and type of job **Isuo Ohashi (2005).** The positive relationships exist between job satisfactions with organizational financial, market performance **Schneider (2003).** High degree of work culture shows positive effect towards job satisfaction **Ali & Akhtar (1999)** and the impact of family tension towards job satisfaction level **Gohil (1999).** Job satisfaction plays a major role in managerial or organizational effectiveness point, in any of the organization **Karl & Sutton (1998)** and the factors such as administrative support, leadership, a positive atmosphere and autonomy closely associated with higher job satisfaction. In a personality determinations of job satisfaction the researcher found that there is no

significant impact towards job satisfaction on the basis of demographic variables such as age and gender **Bhatt (1987).** The major five key attributes in a job includes ability to balance work and personal life, work that is truly enjoyable, security for the future, good pay or salary and enjoyable co-workers **Yankelovich Partners (1998).** The factors such as company policies, administration, relationships with supervisors, compensation and the negative impact of work on their personal lives leads to job dissatisfaction among the employees **Cardona (1996).** There exists significant correlation between job satisfaction and work culture **Rajendran (1987).** The increase in job satisfaction among the employees indicate trend of decreasing anxiety among them **Jawa (1971).** The nature of work and supervision adequacy is associated with job satisfaction **Lodahl & Kejner (1965).** The job satisfaction shows positive relationship with the factors such as salary, management, working condition, welfare facilities and union management relations, there is no significant relationship with job nature and coworkers **Rajgopal (1965).** Job satisfaction increases with increase in experience of the demographic profile of an individual employee **Prasad (1964).**

1.1.2. Work Environment

Junoš Lukan, Larissa Bolliger et al (2022) in the article "Work environment risk factors causing day-to-day stress in occupational settings: a systematic review" did a research study with the objective to identify work environment risk factors causing day-to-day stress. The researchers assessed stress exposures as work environment risk factors and stress outcomes, measured via self-perceived questionnaires and physiological stress detection via Ecological Momentary Assessment (EMA) or similar methods carried out in real-world work environments followed by correlational analyses. The findings showed the most commonly measured work environment risk factor was work intensity, while stress was most often framed as an effective response.

Rui Yang, Vicente García Díaz, Ching-Hsien Hsu (2021) in the article "Use of emotional intelligence to promote innovation among employees in the work environment through qualitative and quantitative analysis" analyzed different mediating effect factors on relationship among EI and creativity with the help of Qualitative analysis in terms of the meta-analysis of correlations. Findings demonstrated a significant impact on creativity & behavioral factors from EI. Proposed partnerships seemed to be reduced by personal achievement.

Yuan Badrianto & Muhamad Ekhsan (2020) carried out a research work titled "Effect of Work Environment and Job Satisfaction on Employee Performance in Pt. Nesinak Industries" with the objective to find out whether there is an influence of the work environment and job satisfaction variables on employee performance at PT. Nesinak Industries. The researchers uses quantitative methods and collected and analyzed data with the help of multiple linear regression analysis method. The findings showed that the variable work environment and job satisfaction bring a positive and significant effect on employee performance partially and simultaneously.

Yunianto Agung Nugroho et al (2020) performed a research work titled "Transformational Leadership and Employees' Performance: The Mediating Role of Motivation and work Environment" with objective to measure the effect of a transformational leadership and on employees 'performance in an Indonesian manufacturer through motivation and work environment as mediating variables. Data were collected by using simple random sampling and were processed by using SEM with Smart PLS 3.0. The findings revealed that transformational leadership has a positive and significant effect on employees performance both directly and indirectly through a mediating effect of motivation and work environment.

The summation of employee's feeling such as Job-nature, Management policy, Social Relations and Personal adjustment encompass Job Satisfaction **Pestonejee (1979).** There is an adverse consequence on employee's performance if the organization disregards the work environment **Spector (1997).** The researcher includes safety to employees, job security,

and interpersonal relation with co-workers, good appraisal, motivation and participation in decision making as variables of work environment. The higher level of employee commitment and engagement will be there if the employees realize the importance given to them by the organization. The employees hesitate to share the innovative idea with their supervisor because of their harsh behavior **Arnetz (1999).** The appropriate attention towards interpersonal relationships, recognition from supervisor increases the job satisfaction levels among the faculty members of colleges **Castillo & Cano (2004).**

Ruman (2011) in his research found that there is statistical significant and correlation exists between the employee's nature of job and interpersonal relationship **Uddin et al., (2005).** The factors such as employee relations, salary and supervision influence the job satisfaction **Saeed et al., (2014)**. **Afroze (2008)** found in his research that management policy, administration and salary act as a major contributor towards employee job satisfaction.

2. Background and Hypotheses

As analyzed in the literature review number of quantitative studies have studied the impact of variables as pay, promotion opportunities, rewards, relation with boss ,coworkers, pension benefits, family conditions and the personal characteristics, number of hours worked; work environment and type of job with job satisfaction. But to the best, this particular research determined the impact of variables of Work Environment such as Nature of Work, Inter personal Relationship, Pay and allowances, Management Policies which are affecting the job satisfaction among the employees.

3. Proposed Conceptual - NIPM-WE Model for Job Satisfaction

The objective is to determine the effect of working environment towards employee job satisfaction. To analyze the individual impact of working environment factors such as nature of work, interpersonal relationship, pay & allowance and management policies towards job satisfaction. Based on the review

of literature and conceptual framework the following hypothesis has been formulated to investigate the impact of independent variable work environment towards dependant variable job satisfaction. The researcher derived the following hypothesis based on the in-depth analysis of the review of literature.

3.1. Conceptual Framework
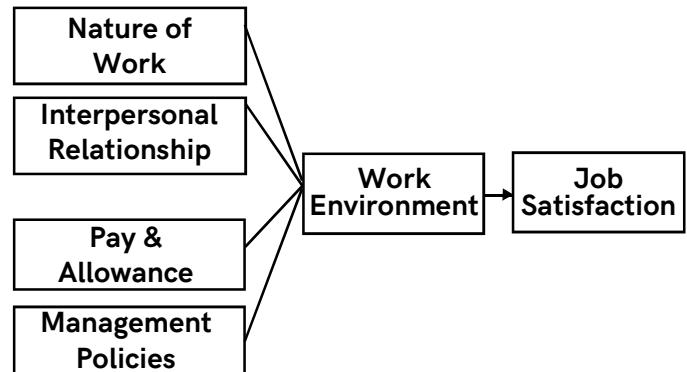
Fig.No.01. Proposed Research Model – NIPM-WE Model for Job Satisfaction

3.2 Hypothesis Testing:

- **Hypothesis Testing (H_{01})** : There is a strong positive correlation between environment variables and job satisfaction

- **Hypothesis Testing (H_{02})** : There is a significant impact of work environment variables towards job satisfaction.

4. Research Methodology

The participants of study were employees of manufacturing industry. A pilot test study was conducted in order to ensure that the participants were able to understand the question. Based on the pilot test study and employee comments about questions, changes were made in order to increase the accuracy of survey by removing certain questions which were confusing the respondents. The questionnaires were checked manually and the missing data points were updated. The incomplete questionnaire was discarded.

To test the hypotheses and to draw meaningful inferences bivariate as well as multivariate techniques such as correlation and regression is applied. To check the collected data purification, reliability and validity,

the collected data is analyzed with the help of SPSS. The reliability of the data was analyzed by using Cronbach's á test.

The output of the report shows that Cronbach's á and composite reliability exceeded the threshold value of 0.6 **(Malhotra; 2004)**, which shows good internal consistency among the different variable. The validity of the questionnaire was done by getting valuable inputs from research experts, academicians, corporate HR and eminent scholars.

5. Results and Discussions:

The primary data collected was analyzed and computed through Statistical Package for Social Sciences (SPSS) Software and also those analysis are interpreted accordingly as follows.

5.1. Relationship between Work Environment Variables and Job Satisfaction

Relationship between Work Environment Variables & Job Satisfaction		Job Satisfaction	Nature of Work	Interpersonal Relationship	Pay & Allowances	Management Policies
Job Satisfaction	Pearson Correlation	1	.741**	.831**	.850**	.822**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	239	239	239	239	239
Nature of Work	Pearson Correlation	.741**	1	.524**	.475**	.596**
	Sig. (2-tailed)	.000		.000	.000	.000
	N	239	239	239	239	239
Interpersonal Relationship	Pearson Correlation	.831**	.524**	1	.667**	.556**
	Sig. (2-tailed)	.000	.000		.000	.000
	N	239	239	239	239	239
Pay & Allowances	Pearson Correlation	.850**	.475**	.667**	1	.626**
	Sig. (2-tailed)	.000	.000	.000		.000
	N	239	239	239	239	239
Management Policies	Pearson Correlation	.822**	.596**	.556**	.626**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	239	239	239	239	239

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

Table.No. 1: Relationship between Work Environment Variables and Job Satisfaction

To identify the strong association and degree of relationship between the job satisfaction and work environment Pearson correlation analysis was applied. The value of (r) nearer to +1 indicates the stronger relationship between the dependent and independent variables and vice-versa. The table 1 indicates the results of Pearson Correlation and reveals that there is high degree of positive correlation between the job satisfaction and work environment. There exists positive correlation between job satisfaction (JS) and the work environment variables Nature of Work (NW), Interpersonal Relationship (IR), Pay & Allowances (PA) and Management Policies (MP) with a correlation value of 0.741**, 0.831**, 0.850** and 0.822** at 0.000 significant level. Thus the null hypothesis is rejected and alternate hypothesis is accepted.

Table.No. 2 : Validating the Model Fit

Model Summary				
Model	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**
1	.976[a]	.953	.952	.0488

a. Predictors: (Constant), Nature of Work, Interpersonal Relationship, Pay & Allowances, Management Policies

Table.No.03: Model Fit

ANOVA[a]						
Model		**Sum of Squares**	**Df**	**Mean Square**	**F**	**Sig.**
1	Regression	5.388	4	1.347	565.658	.000[b]
	Residual	.264	111	.002		
	Total	5.653	115			

a. Dependent Variable: Job Satisfaction
b. Predictors: (Constant), Nature of Work, Interpersonal Relationship, Pay & Allowances, Management Policies.

To compute the impact of work environment variables towards employee job satisfaction regression analysis is carried out. The R value of linear regression model summary is 0.976 which indicates 97.6% of positive relationships exist between job satisfaction (dependant variable) and the work environment (independent variable). The R2 value 0.953 indicates that around 95% of the total variation in the dependent variable job satisfaction can be explained by the independent variable work environment. The value of R2 will increase if any other independent variable is added to the existing variable.

Table.No. 4 : Model Fit

Coefficients[a]						
Model		**Unstandardized Coefficients**		**Standardized Coefficients**	**T**	**Sig.**
		B	**Std. Error**	**Beta**		
1	(Constant)	.260	.062		4.194	.000
	Management Policies	.201	.020	.271	10.047	.000
	Pay & Allowances	.240	.017	.360	14.041	.000
	Interpersonal Relationship	.244	.019	.326	13.106	.000
	Nature of Work	.233	.022	.286	10.664	.000

a. Dependent Variable: Job Satisfaction

The value R (0.976) which is closer to the value 1 indicates that there exist higher positive relationship between job satisfaction and work environment. The significance value from Anova table is lesser than 0.0 and hence the regression model is statistically significant and predicts the job satisfaction. The regression analysis output revealed the impact of the work environment determinants (independent variable) towards the job satisfaction (dependant variable). From the table the predicted regression model can be given in regression equation as follows:

Regression Equation = Y (JS) = 0.260 + 0.201(X$_1$) + 0.240(X$_2$) + 0.244(X$_3$) + 0.233(X$_4$)

Where,

JS = Job Satisfaction,

X$_1$ = Management Policies,

X$_2$ = Pay & Allowances

X$_3$ = Interpersonal Relationship,

X$_4$ = Nature of Work

From the above regression equation it is justified that increase in the value of the various work environment determinants such as nature of work, interpersonal relationship, pay & allowance and management policies will have an impact towards the job satisfaction. The table value of the output shows significant in terms of work environment variables such as nature of work, interpersonal relationship, pay & allowance and management policies.

The regression analysis shows that there is high degree of positive correlation as well as impact between job satisfaction and work environment. To maximize the organization output as well as quality of the product delivered, organization should provide a conducive as well as friendly environment which will enforce the employees to deliver their best. The research output projects that employees concern towards job satisfaction increases on the basis of the work environment variables such as nature of work, interpersonal relationship, pay & allowance and management policies.

6. Conclusions, Limitations and Future Research

Good work environment leads to increase in productivity as well as attainment of organizational objective. There is tremendous benefit in providing good work environment. The study reveals that work environment is positively related to job satisfaction. The job satisfaction leads to employee commitment, employee commitment leads to employee loyalty, employee loyalty leads to employee retention which in turn this process leads to overall growth of organization eventually stakeholders as well as organization will be mutually benefited.

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A Conceptual Framework on Circular Business Models in the Textile and Clothing Industry

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Abstract

The circular economy is a basic alternative to the linear economic framework of take-make-consume-dispose. This linear model seeks to preserve the greatest value of products and materials. The transformation to a circular economy is not only necessary, but also evolving into a social and economic model. Instead, the circular model aims to cut resource inputs to the economy by minimizing the usage of new materials for manufacturing and expanding the lifetime of existing products. The Indian textile and apparel industries are the fastest growing and the most promising areas that fall under the larger textile industry. Implementing innovative business models in the textile and garment industry is thus a difficulty that the industry faces. To comply with the principles of the circular economy, manufacturers, particularly those in quickly emerging industries, will need to establish innovative business models. This study explains the advantages of adopting a circular economy in textile and clothing industry.

Key Words: Circular Economy, Business Models, Environmental Benefits, Textile and Clothing, Zero Waste

1. Introduction

The circular economy concept is a new approach of establishing relationships among sectors, customers, and natural resources. The circular economy is a regenerative economy that seeks to conserve the maximum value of goods and resources. This method should result in a closed system that allows for long-term reuse, refurbishment, re-manufacturing, and recycling of goods and materials. Presently, the transition to a circular economy is not only essential, but also emerging into an economic and social paradigm. The majority of research is focused on waste, resource consumption, and environmental effect, with little emphasis on economic and business aspects. Without pointing to economic and business benefits, this type of study may restrict firms' transition to the circular economy due to a lack of knowledge and motivation.

2. Literature Review

Voicu D et al (2022) provided extensive empirical evidence on circularity solutions used by the top fast fashion firms. Six worldwide players' sustainability reports were examined using a full value chain circular model. Product design, virgin raw material extraction and processing, textile and material production, manufacturing, auditing and certification, packaging and retail, customer use, post-consumer garment collection, recycling fibres and materials, partnerships, and transparency are the eleven stages of this model. The findings are presented in five phases of implementation: strategies, research and development, large-scale implementation, quantitative indicators, and objectives. According to the report, prominent companies in this industry developed a complicated system to reduce their environmental effect while applying strict rules in their upstream supply chain. These businesses educate their clients about circularity and encourage consumers to recycle or reuse. The current contribution presents numerous configurations of circular models as applied by

prominent fashion shops, in addition to providing practical examples of strategy, product, and process design. Given that fast fashion is commonly perceived as having a negative influence on the environment, the findings have important implications for theory, management, and standard-setting.

Coscieme et al (2022) studied the European Commission has identified textile manufacturing and consumption as a priority product-value chain in its 2020 Circular Economy Action Plan. The Action Plan envisions a European Union strategy for sustainable textiles in a circular economy, with the goal of generating markets for circular textile goods, services, and business models. According to the **European Environment Agency (EEA)** and its **Topic Center** on **Waste and Materials in a Green Economy (ETC/WMGE),** consumption of clothing, footwear, and household textiles in Europe is the fourth highest category of environmental and climate impacts from a consumption and life cycle perspective. The fashion sector accounts for more than 60% of overall textile consumption, and apparel is anticipated to be the most important application of textiles in the future. A revolution in fashion production and consumption is required to allow a sustainable and circular textiles system. This transition necessitates innovation in business-model design, technology, and social behaviours, as well as the implementation of specialised policy, education, and behavioural change enablers. The study provides a methodology in this Brief Report to map and progress the implementation and scaling of circular business models. This is demonstrated by investigating four distinct circular business-model approaches for fashion and textiles, including models based on product durability, access models based on renting, leasing, and sharing, garment collecting and resale, and material recycling and reuse. Study discussed enablers based on technical and social breakthroughs and legislation, behavioural change, and education for each business model type.

Dano et al (2020) demonstrated the potential of Slovak textile and clothing producers, in accordance with the transition to the new economic model, with a focus on incorporating new circular business models into their activities, the benefits and drawbacks of this procedure, and the limitations of incorporating new business models into the activities of entities operating in Slovakia's textile and clothing industry.
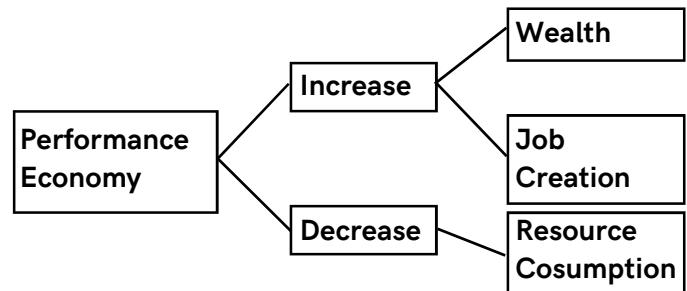
3. Concepts that Lead to a Circular Economy

3.1. Performance economy

The economy has been divided into three categories: Stone Age, Industrial Economy, and Performance Economy. Goods or products have been characterised as bulk goods or smart goods based on the value they bring with the least amount of resources used. Bulk goods transactions were discovered in the Stone Age and Industrial economies, whereas smart goods transactions occurred in the Industrial and Performance economies. Bulk products are those that are kept, transported, and sold in vast amounts without packaging but have a low value, such as sand, gravel, and coal; smart goods are high-value commodities sold in small or specialised quantities, such as pharmaceuticals and enzymes. In the Industrial Economy, the risks or liabilities for quality and use are held by the customer or service provider. The burden of risk or liability has been moved from the customer to the producer in the Performance Economy.

The Performance Economy strives for employment development and improved resource utilisation. This may be accomplished through increasing the life span of goods, conserving materials, and substituting renewable resources for non-renewable ones. Thus, the fundamental goal of the performance economy is to grow income and employment creation while consuming fewer resources than the Stone Age and Industrial Economy.

Figure.No.1. Objectives of Performance Economy

Source: Radhakrishnan (2022)

1.1. Cradle to Cradle Design Philosophy

Natural resources are developed with the idea of disassembly and reuse, with the goal of returning to the soil or parent population as biological or technological nutrients or resources.

Any organic material that can decompose into the natural environment and serve as food for microbiological life, thereby preventing pollution, is referred to as a 'biological nutrient'; inorganic or synthetic materials that have been manufactured, such as plastics, that can be reused many times with no/minimal loss in quality as a continuous cycle are referred to as 'technical nutrients.' The Cradle-to-Cradle Principle draws attention to potential for design innovation and creativity that benefit society and the environment.

3.3 Bio Mimicry

Many living species in nature confront the same issues as humans, but they are able to meet them through sustainable techniques, such as handling forces, moving water, creating colour, safe energy distribution, and connecting things. Nature, with its huge store of information, may serve as an example, a standard, and a mentor. Bio mimicry is a design tool that mimics the strategies adopted by nature or living creatures. Design inspiration from nature may be used to develop forms, processes, and eco systems.

3.4. Industrial Ecology

This method focuses on three areas: flows of materials and energy for industrial and consumer activities; the impact of these flows on the environment; and the economic, political, social, and regulatory impacts on resource flow, use, and conversion. Type I, II, and III eco systems are distinguished. The Type I eco system is linear and highly dependent on external resources, resulting in unlimited waste; the Type II eco system is partially cyclic, utilising limited energy and resources, resulting in limited waste; and the Type III eco system is cyclic, relying heavily on recycling and reuse, resulting in zero waste.

3.5. Natural Capitalism

Natural resources were bountiful during the commencement of the Industrial Revolution, but manpower was limited. Nowadays, the situation is inverted, with an abundance of people but a scarcity of natural resources and eco systems. It has been anticipated that the next Industrial Revolution would be oriented upon scarcity, and many businesses have begun to emulate the new business model—Natural Capitalism. Natural Capitalism's infrastructure is environmental quality. Environmental quality is built on technology that connects economics and ecology, on innovation and entrepreneurship, and on the connection of eco systems and the economy. Resource productivity conserves resources, reduces pollution, and gives meaningful employment to people all around the world.

3.6. Blue Economy Systems

The idea focused the integration and interdependence of many production systems by using the resources that are available in cascading systems—the waste of one production system becomes the input for the next system. Many organisations are recognised for lowering pollution levels through changes in industrial technology or procedures. Temporary remedies are insufficient, and additional methods to solve day-to-day challenges must be sought.

The issues that the Linear Economy encountered resulted in the development of new technologies, which eventually gave rise to the Circular Economy and the extractive paradigm has been turned into a regenerative one, with an emphasis on economic, environmental, and societal advantages, as well as innovative designs that incorporate recycling, reuse, and zero waste. The textile sector has expanded rapidly and has seen varying levels of productivity and economic development. The textile sector has made a significant contribution to the economy in terms of foreign exchange revenues and job creation. As a result, the industry's influence should be examined in order to comprehend the distinctions between linear and circular economies, as well as the industry's progress toward the circular economy **(Radhakrishnan, 2022).**

4. Textile and Clothing Industry in India
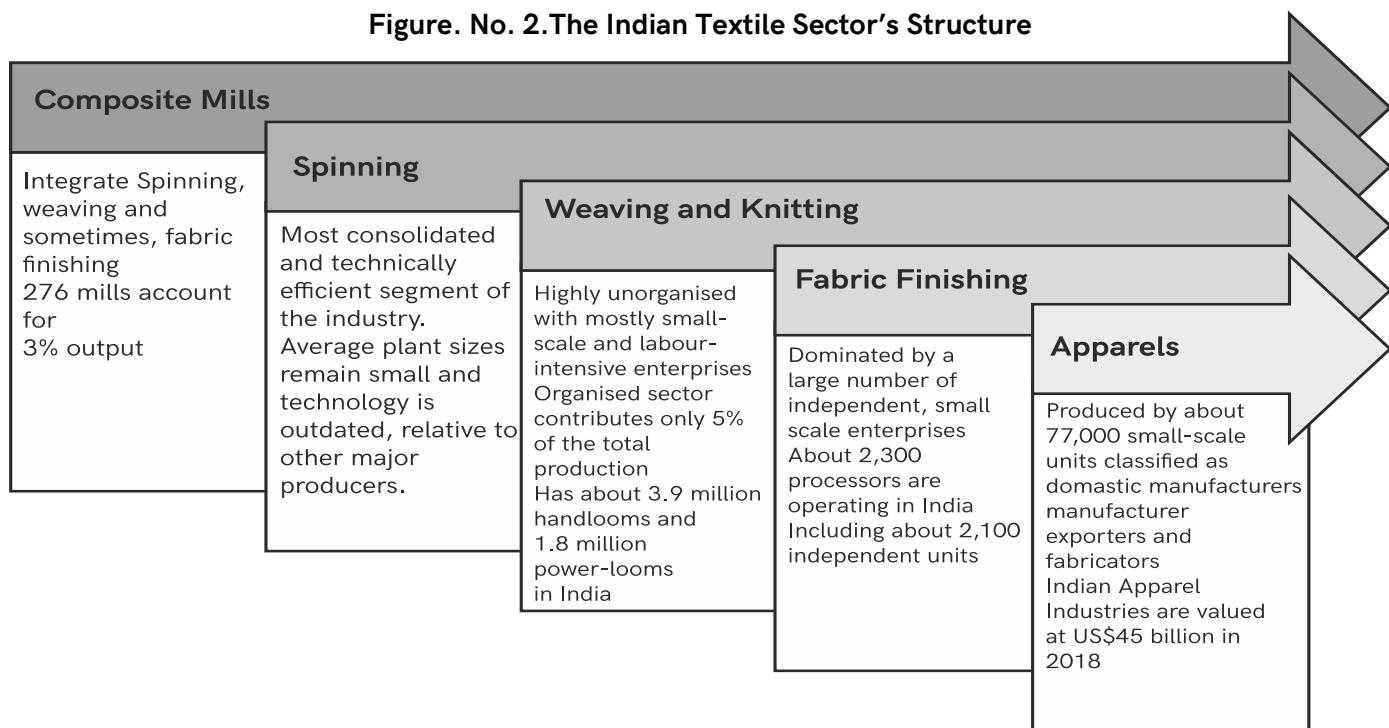
The textile and apparel sector in India is critical to employment creation and the 'Make in India' initiative. According to Economic Survey 2019-2020, textile industries employs 45 million people directly and 60 million in allied sector. However, with a greater emphasis on yarn and fabric to final goods, potential applicants' abilities and qualities are likely to alter. Tamil Nadu employs around one-quarter of the entire labour force in this industry, making it the highest by proportion of any Indian state, followed by Gujarat, Karnataka, Maharashtra, West Bengal, and Punjab. The Indian Textile and Apparel Industry are mostly made up of small-scale non-integrated spinning, weaving, and knitting, fabric finishing, and apparel-making businesses. In contrary, large scale mills with contemporary technology and machinery that integrate spinning, weaving, and, in some cases, fabric finishing dominate the textile business in industrialised nations.

4.1. The Indian Textile Sector's Structure

Large scale mills with advanced technologies and machines that incorporate spinning, weaving, and, sometimes, fabric finishing dominates the textile sector in developed nations such as North America and Western Europe. This enables for greater efficiency and the usage of process by-products in-house. The Indian Textile and clothing Industry, on the other hand, were extremely fragmented. It is mostly made up of small-scale non-integrated spinning, weaving, and knitting, fabric finishing, and clothing manufacturing businesses. This distinct sector structure in India is mostly the product of government tax, labour, and other restrictions that have favoured labor-intensive, small-scale enterprises while discriminating against larger size firms (ASSOCHAM, 2018).

Figure. No. 2. The Indian Textile Sector's Structure

Composite Mills
Integrate Spinning, weaving and sometimes, fabric finishing
276 mills account for
3% output

Spinning
Most consolidated and technically efficient segment of the industry. Average plant sizes remain small and technology is outdated, relative to other major producers.

Weaving and Knitting
Highly unorganised with mostly small-scale and labour-intensive enterprises
Organised sector contributes only 5% of the total production
Has about 3.9 million handlooms and 1.8 million power-looms in India

Fabric Finishing
Dominated by a large number of independent, small scale enterprises
About 2,300 processors are operating in India
Including about 2,100 independent units

Apparels
Produced by about 77,000 small-scale units classified as domastic manufacturers manufacturer exporters and fabricators
Indian Apparel Industries are valued at US$45 billion in 2018

Source: The Textiles and Apparels Industry contributing to make in India, ASSOCHAM

4.2. Important challenges faced by the Indian Textile and Clothing Industries

Due to structural deficiencies, the Indian textile and apparel sector has a variety of issues, including a highly fragmented business, a lack of product diversity, a restricted customer base, and inefficient productivity when compared to rivals (China, Bangladesh, Vietnam, etc). Cotton is a major component of textile and apparel

exports. Due to a variety of socioeconomic circumstances, the price of cotton yarn produced in India is among the highest in the world.

4.3. Scope for Circular Economy

The garment and textile business is extremely fragmented, with many MSME companies. Furthermore, there is a limited pace of technological advancement, and the industry is still heavily labour intensive. Because the sector is dispersed, it lacks collective bargaining strength and is exposed to intense competition. The circular economy presents a unique potential for MSME enterprises **Textile and Clothing** sector, as it will not only help build new businesses

focused on closed-loop manufacturing and provide services such as collecting, recycling, sorting, and so on both inside clusters and outside of clusters. Following the ideas of the circular and closed-loop manufacturing paradigms will assist small firms in connecting with global value chains, as well as better coordinating with other businesses to aggregate their goods and services for greater competitiveness. According to the Economic Survey of India (2019-20), the use of e-commerce to connect handicrafts firms with worldwide customers is also mentioned; online aggregation would be a feasible option for MSME clusters to market their products.

Figure. No. 3. The Inputs, Stages and Output of Circularity in the Fashion Industry
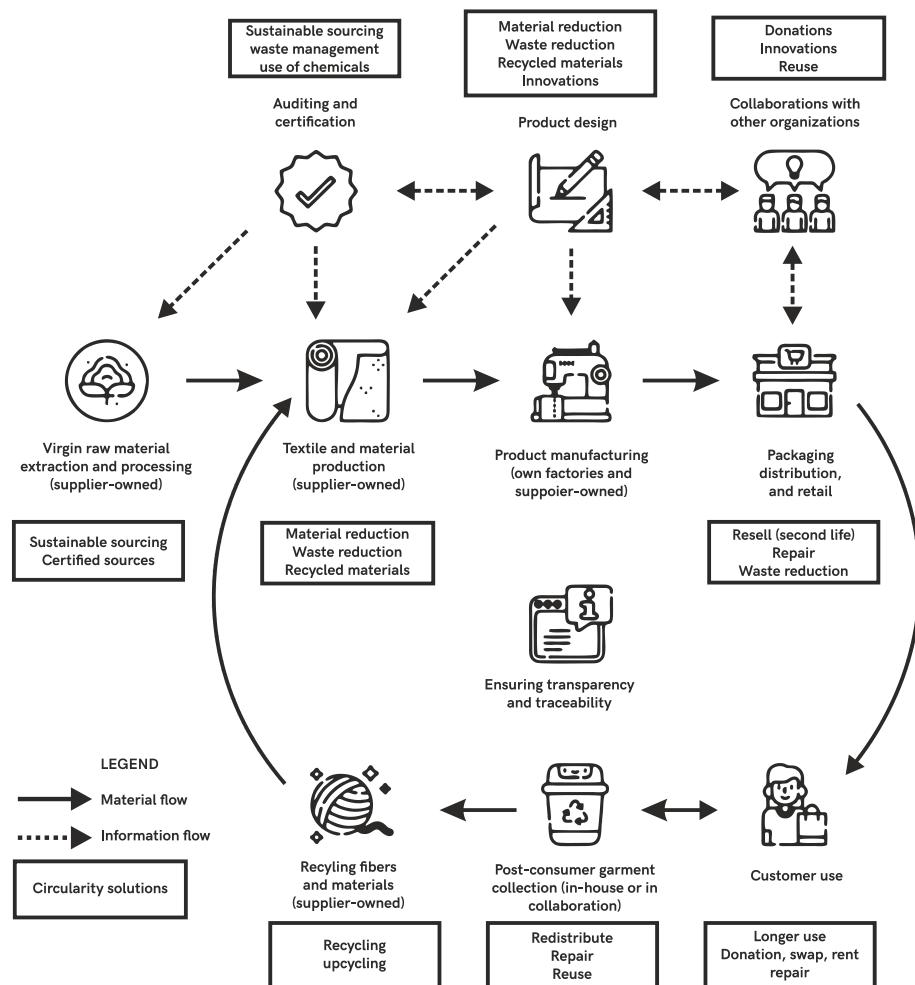

Fig. 1. The inputs, stages and outputs of circularity in the fast fashion industry.

Source: Voicu et al. (2022)

4.4. Expected Benefits from a Circular Textile and Clothing Sector

The garment and textile business in India contributes to wide spread pollution, which must be addressed in order for India to maintain its international competitiveness. Globally, the fashion industry, particularly fast fashion, is under intense criticism owing to its negative environmental and ecological implications.Given the growing demand for visibility and customer awareness in developed nations, the industry is beginning to investigate strategies to control and mitigate its negative consequences. The concepts of circular economy provide a potential alternative, In contrast to a linear system of take-make-dispose; the Circular Economy is an economic system in which resources and energy cycle in loops and remains within the value chain. Material is reduced, reused, recycled, and repurposed in a circular economy.

Indian manufacturers and suppliers stand to earn significantly if they proactively adopt good practices, innovate through circular business models and methods, and prepare to be a part of the global change.Some of these benefits are listed below.

Figure. No. 4. Benefits of Adopting Circular Business Model

Improved access to Western markets	controlled by high quality standards and human rights laws Product differentiation may be achieved by exhibiting best	practises (climate and socially conscious) Improve brand value by cultivating goodwill among many stakeholders.

Source: Hari and Mitra (2022)

It is vital to emphasise that brands and retailers may help to promote the move from the linear paradigm of take-make-dispose to more circular designs, practises, and business models. Furthermore, in order to complete the shift to circularity, consumers must

be encouraged to engage in responsible consumption. Rental, recycling, and reuse business models should be encouraged. Such consumer tendencies and preferences are already visible. Needless to add, technology and innovations will be critical to the development of eco-systems, cost reduction, quality development, and material redesigns, highlighting the shift to circularity.

The circular economy has the potential to transform Indian suppliers and manufacturers. However, global talks on the circular economy must be contextualised for India. India is a significant producer and consumer of textiles and clothing; hence any circular economy intervention must be tailored to the needs of Indian value chain participants **(Hari and Mitra, 2022).**

5. Conclusion

As the industry gets disaggregated, an integrated strategy is required to facilitate the transition to a circular economy. Every cluster must implement best practises in water, energy, and other areas critical to circularity. Because most manufacturing units are micro and small, this is challenging at the individual business level; cluster management authorities and organisations must be involved in the transition, and shared infrastructure must be developed. For the textile and clothing sector to enhance environmental and social performance, as well as competitiveness and market access, a methodical, human-centered transition to a circular economy is required. Adopting a circular economy has a strong commercial justification; Opportunities for recruiting foreign and local sources of sustainable financing are increasing, particularly as the Government of India develops a framework for Sustainable Finance in India. To build an enabling environment for circularity, continued and consistent assistance from diverse sectors of government at all levels is needed.

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Emergence of Artificial Intelligence (AI) Enhances the Core Competency of Supply Chain Management Process in the Dynamic Business Environment

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ABSTRACT

In this modern world, perspectives and practices of doing businesses changes often in order to sustain, grow and compete in the dynamic business environment. On going through this aspect, each and every business practices has its major importance, through which one can be able to rule the business world similarly supply chain management of a business plays a major and crucial role in the success of the business where it is directly or indirectly meets the customers' expectations and satisfaction. Ironically, these supply chain management plays a crucial role and acts as a back bone for E-Commerce Businesses. In order to maintain the momentum of competitiveness, every businessman started to adapt the technological transformation into their business and its related core business processes. One among them are the emergence of Artificial Intelligence (AI), a hybrid technology which could bring and develop a lot of sustainability and competitiveness in to the business but it is very important to identify the core competence and that needs to be matched with the current business practices according to changing business needs then only one can be able to feel the attainability and adaptability. Here, in this conceptual paper, the researcher tries to find out the major competency on the adaptation of Artificial Intelligence (AI) in to the core supply chain management process of a business. By doing such so, the researcher can find out what kind of technological impact that could be produced in the supply chain management could be portrayed for future implications on various dimensions of business and its related practices.

Keywords: Artificial Intelligence (AI), Supply Chain Management (SCM), Etc.,

1. Introduction

Artificial Intelligence (AI) offers a more benefits to supply chain management professionals based on strong basic fundamentals that enlightens on the dynamic and diverse business nature of today's modern business practices of supply chain management. More importantly, time availability and data accuracy is needed to make smart decisions. In this context, AI is decisions made by machines which decide which chess piece to move where, or how to adjust an order forecast based on changing demand. The return on AI investments has severely been suppressed by these SCM limitations. For example, 60-75 days of inventory is carried by typical Retail/CPG supply chains. With promoted item service levels much lower at the 80 percent range, the average service level in the store is about 96 percent. With relatively high waste and high cost-of-goods-sold, the Casual Dining segment on the other hand, carries around 12 – 15 days of inventory. So, it's simply non deliverable until & unless AI can make a significant impact on these metrics.

2. Artificial Intelligence in the Global and Dynamic Business Environment
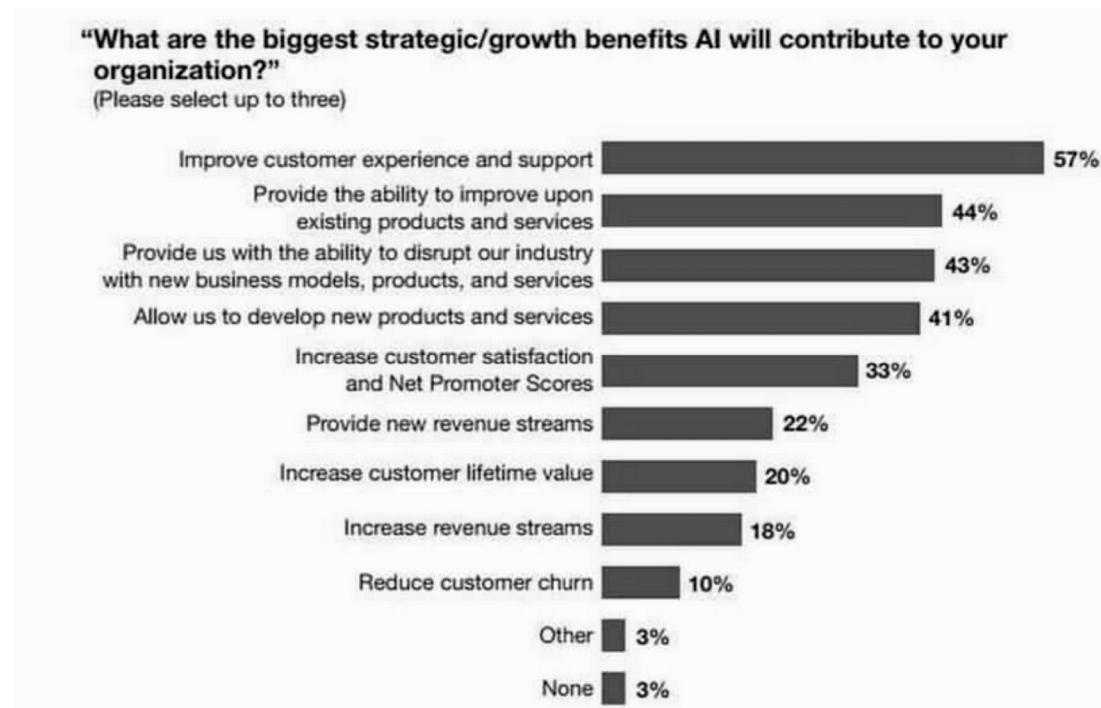
Sounding good in theory, let's see how does it work out in practice? Having addressed the key fundamentals, let's look at how some actual companies have achieved applying these criteria. For example, the major problems in casual dining are anticipating and meeting demand for the restaurants, corporate

owned or franchised. This is especially important during **Limited Time Offers (LTOs).** Using the eight criteria mentioned above, a global, casual dining company connected to a real-time, multi-party network was able to rapidly achieve their objective function - excellent customer service at the lowest cost.

The company continuously monitors **Point-of-Sale (POS)** data, and is using AI agents to recognize and predict consumption patterns of consumers. In addition to this, intelligent AI agents create the demand forecast and then they compare it to the actual existing demand in real-time. When there is a significant deviation, the AI agents make the firm decision to adjust the forecast, and additional agents adjust replenishments. They then propagate these adjustments across the supply chain to trading partners in real time at all times considering the cost of change and the propagation impact. This drove to a remarkable development in forecast accuracy. During the time of promotions, at the store level and even higher at the DC level, the company achieved over 85% forecast accuracy. This represents at least 25% improvement over traditional approaches.

Restaurant orders are optimized autonomously by recognizing the impact of projected restaurant traffic trends and impact on LTOs and therefore the orders by intelligent agents. The system runs on an exception basis but it allows the managers to review their decision criteria and override the orders where they have local information such as inventory issues or local store traffic issues. This has resulted in much faster placement of order and order accuracy of over 82%, which reduces both the inventory and waste dramatically while increasing the service levels to the consumer. This is a significant improvement to all other implementations in the marketplace. Because the algorithms cited are highly scalable, they are being processed over 15 million stocking locations continuously throughout the day time. Restaurant managers had to interact with nine different ordering systems and manually create their own orders based on general guidelines, rules of thumb, and spread sheet-based or manual calculations, prior to the AI-based multi-party execution system.

Figure No.1. Base: 598 Businesses and Technology Professionals

"What are the biggest strategic/growth benefits AI will contribute to your organization?"
(Please select up to three)

Improve customer experience and support	57%
Provide the ability to improve upon existing products and services	44%
Provide us with the ability to disrupt our industry with new business models, products, and services	43%
Allow us to develop new products and services	41%
Increase customer satisfaction and Net Promoter Scores	33%
Provide new revenue streams	22%
Increase customer lifetime value	20%
Increase revenue streams	18%
Reduce customer churn	10%
Other	3%
None	3%

Source: Forrester Q2 - 2016 Global State of Artificial Intelligence Online Survey

With AI implementation on a sound foundation, this company can now anticipate, handle, and serve demand at the lowest feasible cost. Intelligent agents monitor demand in real time, and autonomously coordinate the supply chain to align supply with demand during LTO's, when demand fluctuations would overwhelm a restaurant manage. Thus, the company can achieve its goal and maintain high service levels while skimming the cost to serve. These are not confinement results. CPG-Retail implementation achieved 99 % in-stock, with 25 Days of Supply (DOS) across the supply chain in the food marketplace. The inventory results are less than half the standard DOS in this marketplace and 3%point's high in-store and in-stocks.AI-based solutions are being deployed at two large automotive tier one suppliers with results ranging from 16 – 40 percent reductions in inventory as well as notable reductions in accelerate freight costs.

3. Artificial Intelligence (AI) Delivers Value and adds competency to the SCM

As we can see, laying the proper groundwork for AI fetches you huge dividends. There's no doubt that AI offers even greater promise in the coming years, but, as these results show, there dramatic results and constant benefits waiting for companies that focus on the fundamentals and put AI for the best use it can fetch.

The prettiness of AI-based solutions is that they learn and drive continuous development over time. They get more sophisticated and precise as they gather more data and more exposure. The sooner you start, the better the results you'll find in the coming years, and the further ahead you will be. With the right AI solution in place, you can outpace your adversary today, and be well positioned for reaping even bigger rewards of AI's promise in the coming days.

4. Emerging Technology Increases the Core Competency of Supply Chain Management

The emergence and introduction of various technologies has provided a faster and reliable, smarter decisions in the supply chain management process, which in turned increased the profitability of

the business in the global business environment. In the present scenario, Technological Transitioning has provided a uniqueness which brings down the dreams to reality. One among the evolving and emerging technological transformation is Artificial Intelligence (AI). Moreover, Artificial Intelligence is gaining an increased importance and providing rich momentum across various industries. It also creates an explosion in Computing Power and Storage, Big Data, Internet of Things (IoT) and Algorithmic Advances. This technological advancement has provided a higher sustainable competitive advantage to the existing supply chain management process, where it is providing an improved business focus in terms of profitability by faster and smarter execution of such important process. The Business Practioners needs to understand these technological advancement and they have to make use of it their business practices in a most appropriate manner, which will take the core competency of the business to the next higher level. **Alexa Cheater (2018)**

5. Emerging Technologies Related To Supply Chain Planning

Business Practioners need to understand their core business process in a most skeptical manner, so that they could be able to know, where do they can make use of evolving and emerging technologies in to their business core process accordingly to the nature and importance, which would certainly provide a higher competitiveness and unique drive which will run the business in a most reliable and profitable manner. Here are the few examples as follows: **Alexa Cheater (2018)**
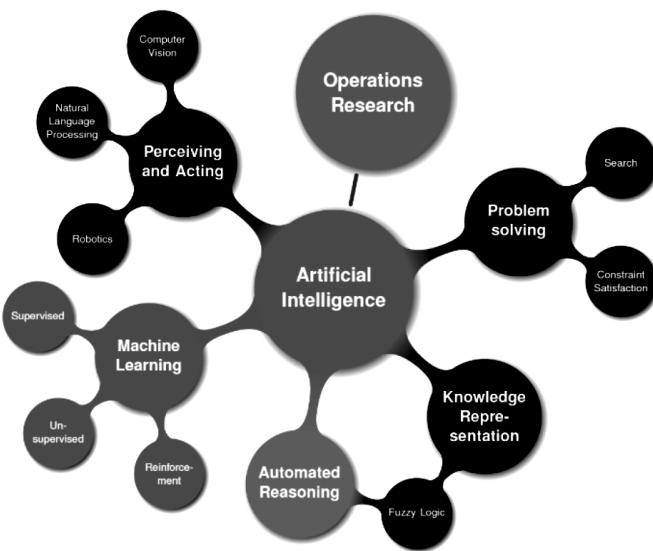
5.1. Usage of Artificial Intelligence in Supply Chain Planning Process

It certainly amplifies and increases the core value of their existing business processes and people along with the machine-assisted planning, which would certainly help and bridge the knowledge gap between planners of high experience with that of low experience and also with the help of machine assisted planners, we could gain real-time competitive recommendations based on past historical with that of the current data analysis

made through machine-assisted planning. **Alexa Cheater (2018)**

Usage of Artificial Intelligence would certainly improves a higher visibility and risk insight to their existing supply chain management process and where do they predict possible disruptions based on inputs provided in their supply chain process and provides a higher correlations across the available various multiple data sources including weather forecasts, sources available through social media. **Alexa Cheater (2018)**

Figure No. 2. Application of Hybrid Model of Artificial Intelligence in SCM

5.2. Usage of Machine Learning in Supply Chain Planning Process

By implementing a high impact oriented self-healing supply chain methodology and at the same time unlocking the major sources of revenue savings, whereas it can continuously monitor, observe, and correct out-of-tolerance with the Progressive lead times related to all products based on past historical data. **Alexa Cheater (2018)**

On using this algorithms based methodology and with the help of early-sell signals it would certainly optimize various inventory levels and thereby Increases the customer service levels among their major clients with more accurate demand for their new products and accordingly offers various replenishment plans. **Alexa Cheater (2018)**

5.3. Usage of Deep Learning in Supply Chain Process

With the benefit of using deep learning methodology, it certainly saves money and time and also in addition to automated planning agent will automatically handles these low impact exceptions as they arise in the initial stage and later it delivers an detailed reports based on their observations and then certain corrective actions will takes place and sends automated alerts to the right concerned people when issues arises in larger manner. **Alexa Cheater (2018)**

6. Major Requirements for Adapting Artificial Intelligence in Supply Chain Management

I have studied the AI issue a lot having worked with hundreds of supply chain executives, on dozens of software implementations. What I have found is that there are eight criteria that are required for a successful AI implementation. Miss one of these and you'll be lucky to achieve mediocre outcomes, you can indeed achieve world class results when you meet them all. It is important to ensure the following, for the AI solution to offer optimal value in supply chain.

6.1. Access to Real-Time Data

New AI systems must eliminate the stale data problem, to improve on traditional enterprise systems with older batch planning systems. Nowadays most supply chains attempt to execute plans using data that is days old, but this result in poor decision-making that sub-optimizes the supply chain, or requires manual user intervention to address. An AI tool is just making bad decisions faster, without real-time information.

6.2. Access to Community (Multi-Party) Data
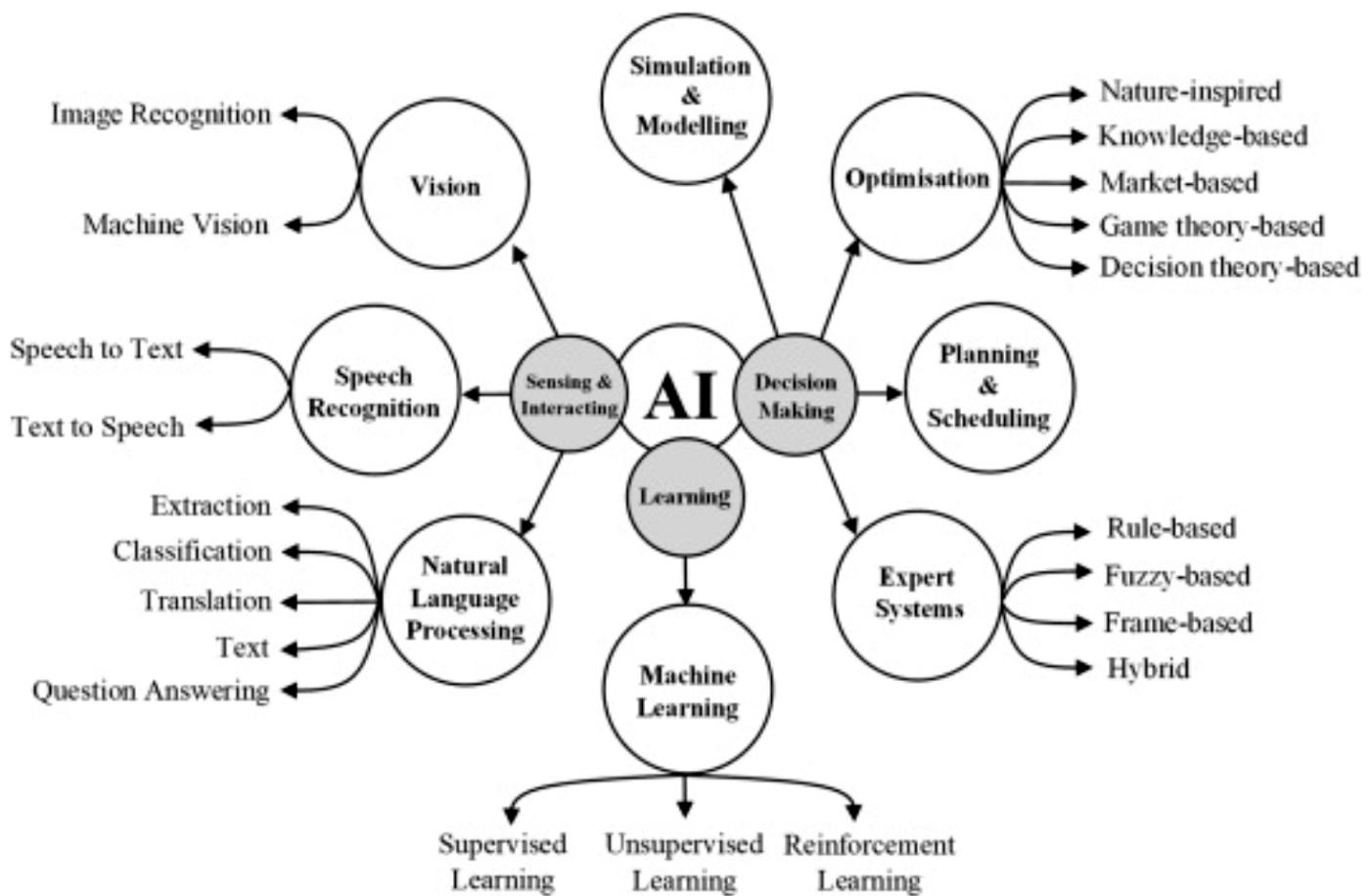
The ability to receive permission to see the data that is relevant to your trading community or, more importantly, access data outside of the enterprise, must be made available to any type of AI, Machine Learning algorithms or Deep Learning. The results will

be no better than that of a traditional planning system until and unless the AI tool can see the forward-most demand and downstream supply, and all relevant constraints and capacities in the supply chain. Unfortunately, community data is the norm in over 99 percent of all supply chains due to this lack of visibility and access to real-time. Needless to say, this must change for an AI tool to be successful.

6.2.1. Support for Network-Wide Objective Functions

The primary function, or objective goal, of the AI engine must be consumer service level at the best possible lower cost. This is because the final-consumer is the only consumer of true final goods products. Trading partners will not get the complete value that is derived from optimizing service levels and cost to serve, which is important as increased consumer sell-through drives value for everyone, if we ignore this fact. The decision algorithm should be further enriched to support enterprise level cross-customer allocation to address product scarcity issues and individual enterprise business policies. Though faced with constraints within the supply chain, AI solutions must support global consumer-driven objectives.

Figure No. 3. Applications of AI in Supply Chain Management

6.2.2. Decision Process Must Be Incremental and Consider the Cost of Change

Nervousness in the community can be created by Re-planning and changing execution plans across a networked community in real time. Constant change without weighing the actual cost of the change creates more costs than savings and reduces the ability to effectively execute. An AI tool must chew over trade-offs in terms of cost of change against incremental benefits when making decisions.
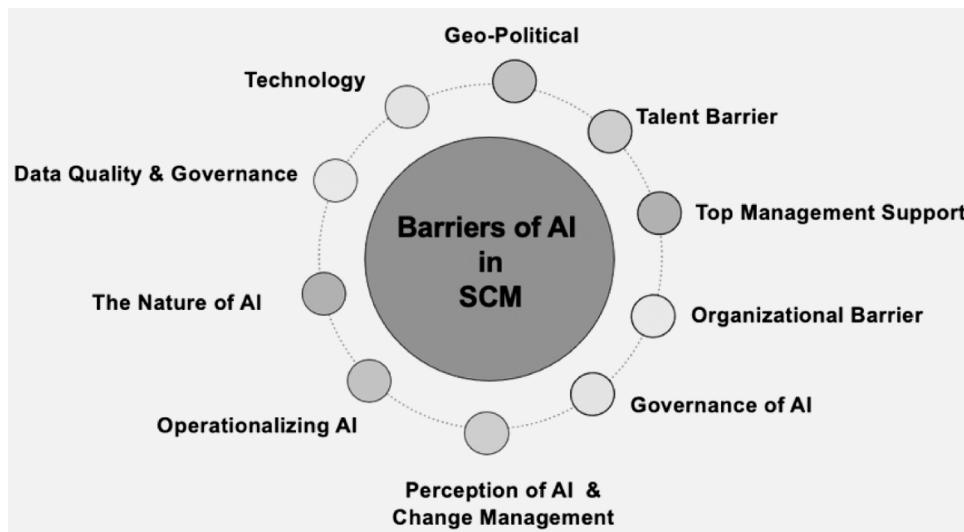
6.2.3. Decision Process Must Be Continuous, Self-Learning and Self-Monitoring

Real-time network is always changing because of data in a multi-party. Latency and Variability is a recurring problem, and execution efficiency varies constantly. Not just periodically, the AI system must be looking at the problem continuously, and should learn as it goes on how to best set its own policies to fine tune its abilities. Part of the learning process is to accent he effectiveness "analytics," then apply what it has learned.

6.2.4. AI Engines Must Be Autonomous Decision-Making Engines

Significant value can be achieved if the algorithm can not only make intelligent decisions but can also execute them. Moreover, they need to execute not just around the enterprise but, across trading partners. This requires underlying execution system and your AI system to support multi-party execution workflows.

Figure No. 4. Barriers to AI Implementation in Supply Chain Management

6.2.5. AI Engines Must Be Highly Scalable

For the chain of supply to be optimized over an entire networked community of suppliers to consumers, the system must be able to process huge volumes of data very quickly. Millions if not hundreds of millions of stocking locations will have large community supply chains. Smart decisions will have to be made by AI solutions, fast, and on a massive scale.

6.2.6. AI Must Have a Way for Users to Engage with the System

AI should not administer in a "black box." The UI must give users propagation impact, visibility to decision criteriaand enables them to understand issues that the AI system cannot solve. The users, regardless of type, must to be able to handle and provide additional information input to override AI decisions when necessary.

However, the system of AI must be driven itself and only engage the user on an aberration basis, or to allow the user to add new information that AI may not know at the accent of the user.

7. Conclusion

The role of Artificial Intelligence (AI) in various business practices are growing in demand and its adaptability, applicability is based on the efforts you inculcate the technology and its involvement in to real time business scenarios. Here the researcher would like to highlight the various benefits been offered to the Supply Chain Management into the adaptation of such hybrid technology. Also, the researcher accepts that there are certain difficulties occurs and arises into this technology adaptation and implementation, But how beyond these difficulties, one who adapts such technology would certainly gets a competitive business practices, which keeps them alive always in this dynamic business environment. Hence, the acceptance and Adaptation of using such technology would certainly enhance the core competency and provides a unique kind of momentum into their business practices.

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Bayesian Analysis for Estimation of Mediation Model in Identifying Major Impact and Bond Linkage among Customer Satisfaction, Loyalty and Behaviour Patronage Intention among Organized Retail Stores

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Abstract

In the world of global competitiveness, the retailers had to focus more specifically on to their marketing strategies in order to achieve greater satisfaction among their customers which in turn leads to customer loyalty. Here the researcher main objective is to find out the bond linkage and relationship between satisfaction and loyalty factors through their behavioural outcomes. Also for this research study the researcher had choosen and selected More Stores (Supermarkets) in Chennai City in the organized stores retail segment to carry out his extensive research and also he had done a descriptive research style by adopting an Probability Sampling Method and collected samples from 300 respondents. Finally researcher on going through analysis using SPSS and AMOS Software's, it clearly reveals the close relationship and bond linkage among customer satisfaction, Loyalty and the success of these two can be revealed their positive behavioural outcomes towards the organized retail stores.

Keywords: Customer Satisfaction, Organized Retail Stores, Behavioural Patronage etc.

1. Introduction

The Indian retail industry has emerged as one of the most dynamic and fast-paced industries due to the entry of several new players. It accounts for over 10 per cent of the country's Gross Domestic Product (GDP) and around 8 per cent of the employment. India is the world's fifth-largest global destination in the retail space. Indian retail market is estimated to reach $2tn by 2032, driven by socio-demographic and economic factors such as urbanisation, income growth and rise in nuclear families. On the other hand, the Indian e-commerce industry is expected to cross $350 bn mark by 2030, growing at a CAGR of 23%.

In first half of 2021, e-commerce accounted for nearly a third of several electronic categories, almost half of smartphones sold, and about a fifth of all apparel sales in India. Consumer internet and e-commerce companies raised US$38 billion in 2021, an increase from US$8 billion in 2020, driven by large-size investments across fintech, hyperlocal and e-commerce sectors as the Indian start-up ecosystem continues to mature. India will become the 3rd largest online retail market by 2030, with an estimated annual gross merchandise value of $350 bn.

The Indian retail market is largely unorganized. However, over the next 3-5 years, share of modern retail (including e-commerce) will increase to 30-35% with share of traditional retail coming down to 65-70%.. Both organised and unorganised retail companies have to work together to ensure better prospects for the overall retail industry, while generating new benefits for their customers. Nevertheless, the long-term outlook for the industry is positive, supported by rising incomes, favourable demographics, entry of foreign players, and increasing urbanisation.

Organized retail is a new and emerging phenomenon in India and despite of these downturns, the Indian market is growing exponentially, as economic growth brings more of India's people into the consuming

classes and organized retail lures more and more existing shoppers into its open doors. The growing middle class is an important factor contributing to the growth of retail in India.

The new buzz word in retail is Omni-Channel. The Omni-Channel offers a seamless experience to the customers across various channels. The strategic objective here is to merge various channels (departmental stores, online stores) and link them to a multichannel retailer. This strategy makes a brand always available to the customer and gives an impetus to sales by increasing visibility, consumer base across various geographies. It also optimizes inventory holding costs, operating costs and real estate cost. With modern retail gaining ground in India, there remains a lot of scope for the Omni-Channel to expand. There is also an upward trend seen in modern retailing. Driven by western culture and urbanisation, it has become a part of day to day lifestyle. There are more than 500 operational shopping malls in India having thousands of brands across food, fashion and lifestyle which are offering best of national & international brands to better educated consumers. The current size of modern retail is around US$ 46.5 billion, which is 9% of total retail market. As per industry estimates, by 2020, it is likely to see business worth US$ 150 billion.

2. Objectives of the Study

- To identify the demographic profile of the customer.
- To know the customer experience and its impact over its purchasing decision.
- To identify the behavior intention among the customer towards more retail store.
- To measure the level of customer satisfaction towards products and services offered.
- To know the level of customer loyalty towards the more retail store.

3. Literature Review

RTLA De Silva, TP Ekanayake, HPDSN Karunasekara, WGAL Wijerathne, WDH De Mel(2022) Carried out an exploration study fastening on the impact of service quality over client satisfaction in retail supermarket perspective, where the experimenter major ideal was concentrating on how colourful service quality confines been delivered to the guests of retail supermarkets? And also the experimenter would like to know what kind of impact it creates towards the client satisfaction among them? For which experimenter acclimated a descriptive exploration and collected a primary data sample of around 153 repliers among colourful supermarkets in Srilanka. Using the data samples collected, they do performed a detailed data analysis with retrogression analysis, it easily shows the outgrowth of the data analysis as there's a strong and significant impact of certain service quality confines like tangibility, trustability and empathy reflects more on the satisfaction of the guests, whereas the remaining service quality confines responsiveness and assurance shows further insignificances over client satisfaction.

Yi- Chan Chung, Shu- Fang Lin and Wei- Lun Chung (2021) performed an exploration study fastening on the major factors impacting the quality of services offered in hypermarkets of Taiwan. Then, the experimenters used Significance-Performance-Analysis (SPA) in order to validate and identify the service quality confines which needs to concentrated and bettered further. After going through this **Significance-Performance-Analysis (SPA)**, the experimenters espoused KANO Model, where it easily identifies the service quality particulars of outgrowth advancements for the hypermarkets and it easily shows the demands for these service quality constructs in perfecting the functional effectiveness and effectiveness among the hypermarkets. Also the experimenter acclimated a descriptive exploration study with a structured exploration questionnaire and collected a primary sample from 175 repliers, out of which 158 repliers are valid and out of error. After going through the data analysis with a collected samples it's been linked that by going through **Significance-Performance-Analysis (SPA)** it easily states that the workers of the hypermarket's need to

concentrate and concentrate on the client conditions on quicker manner so that the workers could be suitable understand the conditions and give services to their guests in a most effective manner, in turn it increases the client satisfaction. On the other hand, KANO's Model helped the experimenters to find out the major five areas where services needs to be bettered and concentrated they are, 'Workers responsiveness towards client queries and conditions', 'More and bettered client services', 'Workers has to guests satisfaction as major precedence which in turn brings profit ', where in the below are all areas are set up as a major focus area and it needs to be bettered in order to insure quality services offered to the guests of hypermarket.

Padmalini Singh, Ranjith PV, Nuramalin Fathihah, Daisy Mui Hung Kee, Nuralina, Nurdiyanah, Nursyahirah(2021) performed a exploration work on relating the relationship between the service quality confines and client satisfaction in Tesco Hypermarket in Malaysia. The experimenter acclimated a descriptive exploration study and collected a primary sample of 300 repliers using a structured questionnaire by conforming a SERVQUAL Scale for measuring the relationship through their effectiveness and effectiveness being among them. Further the data collected were anatomized with the statistical tools and ways. The outgrowth of the exploration easily reveals that all the service quality confines show a negative impact which means that still services needs to be bettered in their delivery as there's a strong gap exists between the prospects and perception.

P.S. Venkateswaran, Suja Sundram (2021) performed a research study concentrating on the various Impact of Retail Service Quality (RQS) and Store Service Quality (SSQ) on Patronage Intention (PI) towards Organized Retail Industry. Here the researchers major objectives to find the impact and their relationship exists among the three variables Retail Service Quality (RQS), Store Service Quality (SSQ), Patronage Intention (PI) in the organized retail industry. To find their empirical relationships, researcher collected a primary data sample of around 419 using a standard structured

questionnaire as a research instrument. The Outcome of the research findings clearly shows that Retail Service Quality (RSQ) and Store Service Quality (SSQ) plays a major role in Customer satisfaction in the organized retail setttings. Also the store employees should deliver their services more unique way so that customers would get delighted and becomes highly satisfied and loyal towards them.

Abdul Rashid, Varsha Rokade (2021) has come out with research study focusing on the Multi-Criterion Decision Making Approach (MCDA) in order to assess the quality of services offered in the retail stores in Iraq. In this research study, the researchers major objectives was focused on how these Service Quality(SQ) dimensions plays an important role in impacting customer satisfaction (CS) for which the researcher especially adapted an Analytical Hierarchy Approach Process with Multi-Criterion Decision Making as a central process embedded in it. In the initial stages of MCDM process, the researcher identifies the correlation exist between the service quality variables and later these sub themes of MCDM focused more on technological factors such as Mobile Applications for placing the orders plays an essential role in online retailing, later the researcher found that web based mobile application has been one among prominent factors in achieving customer satisfaction among retail food and grocery in the major cities of Iraq.

Wantao Yua, Ramakrishnan Ramanathan (2012), performed a research study towards the Retail Service Quality, Corporate Image and Behavioural Intentions and their mediating effects of Customer Satisfaction. For this research study, the researcher mainly focuses on the major supermarket customers in china and also the researcher employed a structural equation modelling approach and collected over 404 samples for this research study. The End results and outcome of the study clearly says that the retail service quality significantly influences customer perception and corporate image, also the research reveals that there is relationship between brand intentions is fully mediated through greater satisfaction.

Maxwell K. Hsu, Yinghua Huang, Scott Swanson (2010), carried out a research study on Grocery Store Image, Travel Distance, Customer Satisfaction and their relationship over Behavioural Intentions among the customers, where as the researcher concentrated mainly on Midwest College Town Area of United States Of America and collected over 400 samples by using questionnaire as a research instrument. The Findings of the research shows that the store image has been considered as the major driving force towards Behavioural Intention Factors and Store Image's indirect influence over customer satisfaction was found to be substantially greater when compared to its direct influence over Behavioural Intention. On the other side, Travel Distance gives a positive relationship and creates major impact over customer satisfaction.

Hafedh Ibrahim, Faouzi Najjar (2008) carried a research on Assessing the effects of Self-Congruity, Attitudes and Customer Satisfaction on Customer Behavioural Intentions in Retail Environment. The researcher's main objective is to develop and come out with a model that will include self image congruence, satisfaction, attitudes, and further he had explained their role on behavioural intentions. Here the researcher carried out a qualitative survey followed by a quantitative study; which was conducted in two different stages to clarify the self congruity scale and then the results were used to lead an exploratory investigation of a conceptual model of behavioural intentions. It's been observed and proven results that Ideal self-image congruity had a direct and stronger effect on attitude. Finally this study outcome reveals that behavioural intentions had either direct or indirect influence by shopper's attitudes, self-congruity and satisfaction.

Gael M. McDonald (1991) carried out a research on the influence of supermarket attributes over perceived customer satisfaction. The researcher carried out an empirical research approach and here the study mainly concentrates on the influence of the supermarket attributes on Chinese customers moderated by the factors like income, occupation and age. The Outcome of the research study shows that the various store

attributes were significant. Various Independent like Store location, variety of products and cost of the products indicated and perceived by the respondents as being the most important attributes of the retail store which greatly influences customer satisfaction.

4. Research Methodology

The researcher adapted a descriptive research study in order to find the bond linkage between customer satisfaction, customer loyalty and the behavioural intention among the customers of various More Supermarkets in Chennai city. Where in they used probability sampling method and collected the primary data samples using a structured questionnaire by the personal interview method. Finally researcher on going through analysis using SPSS and AMOS Software's, it clearly reveals the close relationship and bond linkage among customer satisfaction, Loyalty and the success of these two can be revealed their positive behavioural outcomes towards the organized retail stores.

5. Date Analysis and Interpretation

5.1 Gender Wise Classification among the Respondents

Gender Classification	No.of Respondents	Percentage (%)
Male	155	51.7
Female	145	48.3
Total	**300**	**100.0**

Table 5.1: Gender Wise Classification among the Respondents

Inference:

From the above Table.5.1, It reveals that, Majority 51.7% of the respondents belongs to the male gender category and remaining 48.3% of the respondents belong to the female gender category.

From the below Table.5.2, It reveals that, Majority 34% of the respondent's belongs to the age group of between 25 yrs to 35 yrs, 24.3% of the respondent's belongs to the age group of between 36 yrs to 45 yrs,

5.2 Age Wise Classification among the Respondents

Age Wise Classification	No.of Respondents	Percentage (%)
Between 20 yrs to 24 yrs	40	13.3
Between 25 yrs to 35 yrs	102	34.0
Between 36 yrs to 45 yrs	73	24.3
Between 46 yrs to 60 yrs	53	17.7
Greater than 60 yrs	32	10.7
Total	**300**	**100.0**

Table 5.2 Age Wise Classification among the Respondents

17.7% of the respondent's belongs to the age group of between 46 yrs to 60 yrs, 13.3% of the respondent's belongs to the age group of between 20 yrs to 24 yrs and remaining 10.7% of the respondent's belongs to the age group of Greater than 60 yrs.

5.3 Occupation Wise Classification among the Respondents

Occupation Wise Classification	No.of Respondents	Percentage (%)
Business	48	16.0
Professional	57	19.0
Student	44	14.7
Housewife	129	43.0
Others	22	7.3
Total	**300**	**100.0**

Table 5.3 Occupation Wise Classification among the Respondents

Inference:

From the above Table.5.3, It reveals that, Majority 43% of the respondent's occupation are housewife, 19% of the respondent's occupation are professional, 16% of the respondent's occupation are business, 14.67% of the respondent's occupation are students, and remaining 7.33% of the respondent's occupation are belongs to other category.

5.4 Income Wise Classification among the Respondents

Income Wise Classification	No.of. Respondents	Percentage %
Less than Rs.10,000	44	14.7
Between Rs.10,001 to Rs.25,000	80	26.7
Between Rs.25,001 to Rs.50,000	68	22.7
Between Rs.50,001 to Rs.75,000	62	20.7
Greater than Rs.75,000	46	15.3
Total	**300**	**100.0**

Table 5.4 Income Wise Classification among the Respondents

Inference:

From the above Table.5.4, It reveals that, Majority 26.7% of the respondents income ranges are Between Rs.10,001 to Rs.25,000, 22.7% of the respondents income ranges are Between Rs.25,001 to Rs.50,000, 20.7% of the respondents income ranges are Between Rs.50,001 to Rs.75,000, 15.3% of the respondents income ranges are Greater than Rs.75,000 and remaining 14.67% of the respondents income ranges Less than Rs.10,000.

5.5 Respondents Pleased with the Retail Store's Environment

Pleased with the Store Environment	No.of Respondents	Percentage %
Strongly Agree	69	23.0
Agree	75	25.0
Neutral	54	18.0
Disagree	48	16.0
Strongly Disagree	54	18.0
Total	**300**	**100.0**

Table 5.5 Respondents Pleased with the Retail Store's Environment

Inference:

From the above Table.5.5, It reveals that, Majority 25% of the respondents said that they agree to the statement of Pleased with Stores Environment, 23% of the respondents said that they strongly agree to the statement of Pleased with Stores Environment, 18% of the respondents said that they neither agree or not disagree to the statement of Pleased with Stores Environment, 18% of the respondents said that they strongly disagree to the statement of Pleased with Stores Environment and remaining 16% of respondents said that they disagree to the statement of Pleased with Stores Environment.

5.6 Customer Happy With the Services provided by the Retail Store:

Customer Happy with the Services	No.of Respondents	Percentage %
Strongly agree	108	36.0
Agree	64	21.3
Neutral	52	17.3
Disagree	46	15.3
Strongly disagree	30	10.0
Total	**300**	**100.0**

Table.5.6 Customer Happy With the Services provided by the Retail Store:
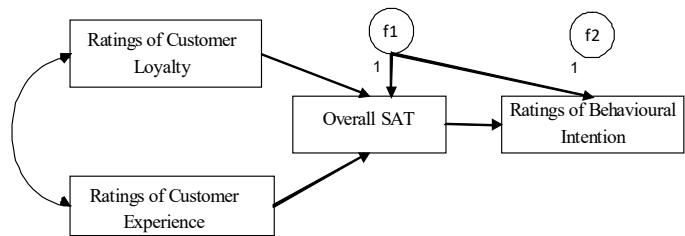
Inference:

From the above Table.5.6, It reveals that, Majority 36% of the respondents said that they strongly agree to the statement of customers are happy with the retail stores services, 21.3% of the respondents said that they agree to the statement of customers are happy with the retail stores services, 17% of the respondents said that they are neutral to the statement of customers are happy with the retail stores services, 25.3% of the respondents said that they disagree and Strongly Disagree to the statement of that the customers are happy with the retail stores services.
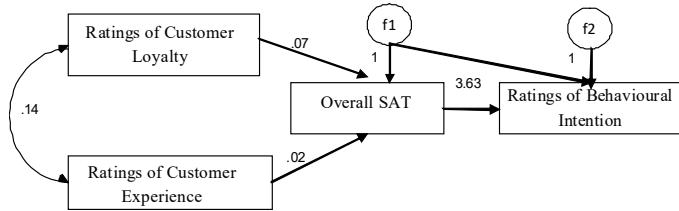
5.7 Mediating Model for the Factors Affecting Overall Satisfaction

5.7.1 Testing of Hypothesis

The hypothesis related to impact of factors like customer loyalty customer experience, behaviour intention leads to the overall satisfaction of the customer. The two independent variables like customer experience, customer loyalty, have an impact on will act as a mediating variable leads to the positive or negative effect on the behaviour intention of the customer, which is having low RMSEA value. For checking the data originality or real applications, convergence is assessed by applying Maximum Likelihood Estimate with a large data set. The Bayesian analysis is applied for determining the convergence statistic value

During the iteration of Bayesian estimation, **Unhappy face (red)** is appeared in the Bayesian window due to the large value of Convergence Statistic (C.S). Reflecting the satisfactory convergence, AMOS displays **"a happy face" (Yellow)** values of C.S is smaller are sufficient and it is conservative. Judging that the MCMC chain has converged by this criterion does not mean that the summary table will stop changing. As the overall convergence statistic (C.S.), C.S. value on the toolbar approaches 1.000. Finally the posterior dialog box displays a frequency polygon (like normal distribution) of the distribution shows that samples collected for the structural model is more precision.

5.7.2. Regression Weights: (Group number 1 - Default Model)

Structural Paths	Estimate	P
Overall Customer satisfaction <—- experience	0.016	0.004
Overall Customer satisfaction <—- loyalty	0.072	0.002
Behaviour Overall intention <—- satisfaction	3.628	0.001

The above table represents AMOS text output for unstandardized maximum likelihood estimates for the structural paths. Three are significant in the structural paths among the exogenous and endogenous latent variables .the probability of getting the maximum mediating value is applied in the AMOS software.
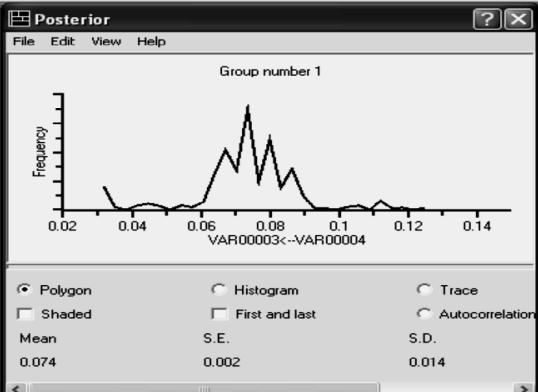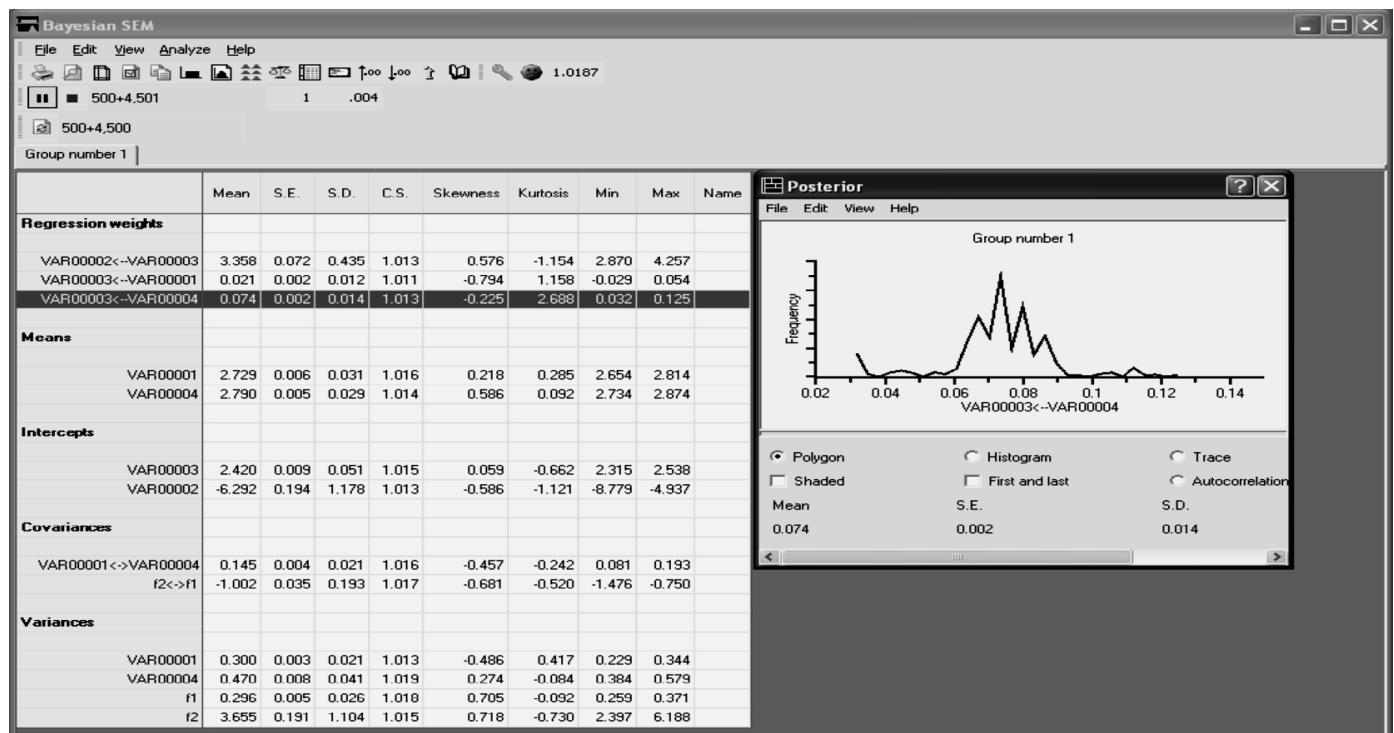
5.7.3. Comparative Fit Indices for Path Analysis
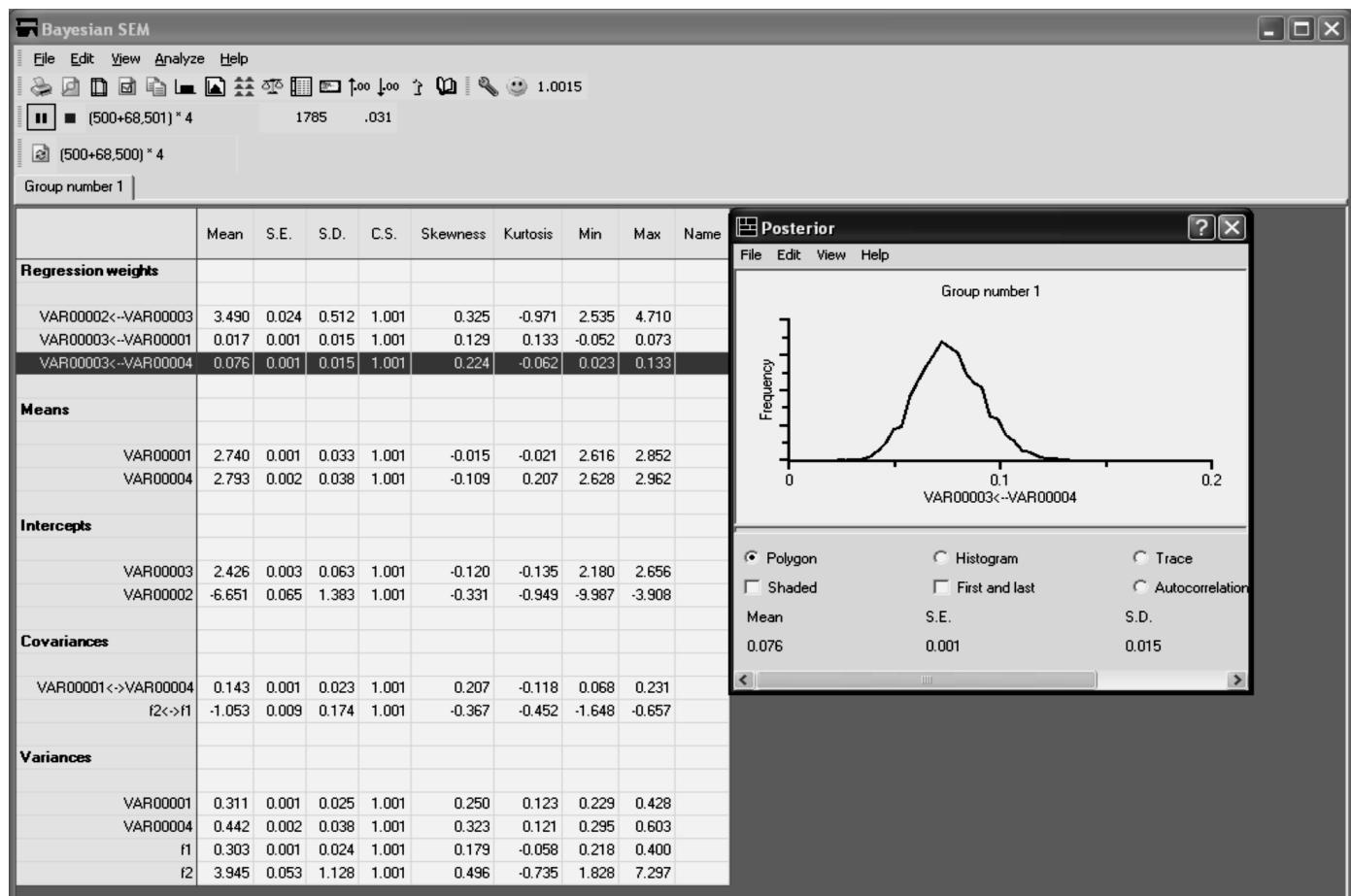
Statistics	Suggested Value	Actual value
Chi-square/ df **(Wheaton et al 1977)**	≤5.00	2.307
Goodness of Fit Index (GFI) **(Joreskog and Sorbom 1988)**	≥ 0.90	0.996
Adjusted Goodness of fit Index (AGFI) **(Joreskog and Sorbom 1988)**	≥ 0.80	0.830
Comparative Fit Index (CFI) **(Bentler 1990)**	≥ 0.90	0.986
Root means square of approximate (RMSEA) **(Hu and Bentler 1990)**	≤ 0.08	0.066

Based on the GFI and CFI indices, it can be concluded that there is a relatively good fit between the structural model and the primary data collected.

5.8. Bayesian Analysis for Estimation of Mediation Model:

AMOS provides several diagnostics that help to check convergence. Notice the value will be 1.0187 on the toolbar of the Bayesian SEM window. AMOS displays an "unhappy face" when the overall C.S. is not small enough.

Reflecting the satisfactory convergence, AMOS now displays a "Happy Face" (YELLOW) in the above. The value of C.S will be 1.0015 and overall C.S. value on the toolbar approaches 1.000, there is more precision to be gained by taking additional samples, so it might stop as well. The Posterior dialog box now displays a frequency polygon of distribution of customer experience, customer loyalty, behaviour intention, and overall satisfaction level across the samples is proved.

6.   Findings and Suggestions for Further Research

The Outcome of the research study clearly depicts that there is a strong impact and bond linkage and relationships among the customer satisfaction, loyalty and behavioural intention among the customers of More Supermarket in Chennai city. Since this research was pilot in nature and concentrated on certain urban areas of Tamil Nadu, it is most important to widen the scope of this study both geographically and sample-wise to allow for generalization of the findings. With great expansion of supermarkets in Tamil Nadu, witnessed by divided loyalty across various organised retail formats, it is important to determine why consumers divide their purchases across different organised retail stores that apparently stock similar goods. Hence the researchers in near future have wide scope to explore themselves into the different aspects of various organized retail store format.

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Employee Perception of Organizational Culture and its Relative Influence on their Attitude and Behaviour

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Abstract

The cultural-dimensional attitude of employees towards organizational learning. The objective of the study is also to compare employee work experience, job changes and their perception of culture in order to enhance organizational learning readiness. This research expands inadequate research into the influence of organizational culture on employee perceptions of their workplaces. This emphases on the specific importance of employee answers to comprehensive, open-ended questions about their perceptions of cultural dimensions.The study sheds light on the cultural dimensions that employees report the most inspiration on their perceptions of corporate life. Research indicates that the social aspects of traditions, business practice and fundamental beliefs have shaped respondents ' attitudes of their organizations. 64 workers of the logistics company gathered the primary data. The connection between consistency, job shifts and awareness of the cultural aspect were discussed through enhancing organizational learning.In order to determine the important relationship between the working shifts and the experience of responsive, variable employees in enhanced organizational training, a comparison was created. For the evaluation of the theories, the questionnaires are analyzed. The research shows that the social aspects of beliefs, interpersonal practices and fundamental principles have shaped the viewpoint of the participants in the study limited to Bangalore in their organizations, and may not apply to other contrapositions.

Keywords: Organizational Culture, Attitudes, Behavior, Values, Beliefs, Learning

1. Introduction

The perception of employees may be described as a brand and a personality organization. It is based on faith and standing for what makes the enterprise singular. It can be associated to corporate culture and the way prospective employees view the company and the general public. A company culture is a social reality that tells employees what they should do, feel and think. Organizational culture is a system of common values, and convictions that regulate how people conduct themselves within organizations.

The climate and atmosphere in companies have a main impact on the productivity of their workers. Each organization has its own cultural standards that are intended, supported and accepted behavioral methods. Becker (1982) correctly said that the culture of company relates to a specific sense scheme for the employee's group which differentiates from one enterprise and one organization. Such expectations can be made known to the staff in either written or unwritten way.Once workers join or enter into a partnership with their employer and their company in order to respond in the expectation of a welcoming environment for their economic, social and psychological needs.A well-developed organizational culture cultivates a healthy and productive work environment in which workers is happy and has a high level of performance, which in turn is beneficial to the company itself. In literature review, it was found that

employees have a better perception of the organizational culture in which workforce is ethnically dynamic. While the organizations that carry homogeneity in the workforce for ethnicity, the employees perceive that less attractive organizational culture to work in.

Employees have opinions or beliefs on many facets of their jobs, professions and institutions, which are important in terms of the company's success. Positive behaviors are infectious, and the morale of their workers and even superiors will be improved by strong morals. Bad employees have a profound influence on business ethics. Their actions will weaken the integrity of their colleagues, and their usually unacceptable behavior may cause stress to their colleagues. The attitude of workers towards any situation or quality is one of the most visible actions in any workplace. Attitudes have been defined by many authors on the basis of how people behave or react. Certain forms of actions of workers allow the company to work unimpeded, while some employees with a negative psychological outlook become pessimistic in their attitude and are counterproductive for the accomplishment of the goals of the enterprise.

This study aims to investigate the employee's perception of the effect of corporate culture on behaviors and attitudes to corporate culture. As the culture of the organization's, regardless of the changes, is a necessity for survival in the competitive world, this study should become useful for future studies. The purpose of this work is to understand better the micro effects of corporate culture. In capturing a small group of employees ' thoughts and feelings while they experience the diversity of cultural dimensions, we evaluate the way these thoughts and feelings reflect their understanding, behavior and attitudes in a social environment.

2. Literature Review

Darryl and McCarthy (2006), the work was performed in an industry in a medium-sized manufacturing business to investigate an employee's understanding of the creation of a learning environment. An extensive interview with the organizational development executive of the Company, a validated learning organization questionnaire with an intersection of 80 employees and semi-structured interviews with a stratified sample of twenty. This research leads to a better knowledge of the views of workers in the creation of a learning enterprise, as well as incorporating empirical data in the theorized on learning organizations, rather than from organization's or management viewpoints that tend to dominate literature.

Linda et al (2015), the field research concentrated on two systems designed to represent an ethical atmosphere in organizations: ethical culture and ethical climate. It included an analysis of the effects on employee attitudes and behaviors. First, through factor analysis and correlation analysis they discussed issues of conjunction and divergence between these constructs. Results indicated that two methods evaluate the moral context quite differently but closely linked. Regression results indicated that the ethical dimension of the culture was closer to unethical behavior observed in code organizations, while climatic dimension was more strongly related to the non-ethical behavior observed in non-code organizations.

Peter and Wilderom (2004), the research that identifies the literature about organization's culture was undergoing a clear lack of extensive surveys that led to comparative studies. They proposed a definition and a number of dimensions to make organizational cultures more comparable. We had five dimensions on the basis of empirical studies: flexibility, outward orientation, interdepartmental cooperation, human resources orientation and design orientation. The use of this concept and of such generically proportions will encourage the correlation and aggregation of research results between coordinated cultures.

Alharbi Et Al (2013), Investigations were conducted to examine the association between organizational culture and performance and certain investigators identified a clearly-defined connection between them. The primary purpose of the research paper is to define

and quantify strong relationships between success and corporate culture. Literature review is used as a methodology to evaluate the impact on processes, employees and systems of an organization's culture. The strong culture of a management and leaders-based organization contributes to improved performance. Managers link organizational performance and culture, helping to give companies competitive advantage.Deborah and Iles, (2000) discusses the problems of diversity of human capital and multicultural atmospheres in organizations, and introduces a theoretical' healthy environment of inclusion' framework. This refers to the extent to which the organizational climate is valued and employees are welcome and included in human resources diversity. These provide a pattern of indices of a supportive environment of inclusion and the implications for organizations and people, in particular the occupations and behaviors and expectations of the individuals.

Meriam (2005), a study was supported out in order to study the impact on creativity independently and at the same time for two independent variables: innovative environment and learning organization. Multiple regression analyzes were performed on the recorded data. In contrast, the compares the means of the variables among three categories of employees of the levels, namely the senior, the middle or lower and supporting employees. A selection of eighteen private organizations from 165 corporations from different core sectors was selected at random. Qinghua, Et Al. (2012), the conceptual structure measuring employee satisfaction was developed and empirically evaluated as a mediator and moderator on the relationship between employee understanding and loyalty to companies in CSR. On the basis of 438 functional questionnaires from four generic businesses, they observed that the allegiance of workers can be counterproductive to workplace morale by ensuring money-related benefits and changing their working environment.

Eric and Doherty (2009), conducted a study, exploring the effect on job satisfaction of organizational culture and the desire to quit the organization through a fitness

workers survey. In order to measure the organizational culture in fitness industry in particular. Form mapping was used to analyze friendships, job satisfaction and desire to leave between the organization's cultural factors. The findings created a partly controlled corporate environment template that accounted for 14.3 percent of the job satisfaction variance and 50.3 percent of the disparity intended to leave the company.The findings highlight the heterogeneity and complexities of organizational culture in the fitness industry.

Raymondet al., (2017) explores the relation between corporate ethical culture and judgment on moral admissibility, hypothesizing that a judgment on moral acceptability is an important stage in the decision-making process. There was no evidence for the argument that organizational architectural features were correlated with the intensity identified by unethical conduct against customers.This is the first research to record the disparate impacts of institutional structure and moral behavior on workers ' alleged unethical conduct against clients in the area of wholesale banking. Implications are being addressed for administrators and future research.

Matthias and Mueller (2019), discusses the information on specifications for a change management micro-Macro Framework, which differ from existing models in other areas. The emerging field of micro foundations requires frameworks that explicitly take into account interconnections between micro-and macro-organization.Change management analysis frequently explores such structures, but very few methods refer to the specific interdependences between macro and micro rates of organizations. The study of these interdependencies shows that shifts at the micro level have often positive as well as unfortunately undesirable effects on the performance of the product. **Ramdhani, et al. (2017)**, explains the aspect of corporate culture affects employee engagement. The work was based on an analysis in certain previous research. This study uses a test model based on previous literature reviews and hypotheses

were subsequently made available as a methodology. The results of the study show that employee commitment to organization, which consists of teamwork, communication, training and recognition can be improved through corporate culture. The definition of employee organizational engagement is defined in a causal relation to the corporate culture that is decomposed through collaboration, interaction, learning and awards.**Daulatram (2003)**, evaluated the marketing professionals through cross-companies in the USA explores the effect of organizational culture on the job satisfaction. **Cameron and freeman (1991)** have been used as the theoretical empirical structure for the corporate communities comprising of the family, the adhocracy, the hierarchy and the business. The results show that the rates of job satisfaction differ across the cultural typology of the business.In this philosophical analysis, job satisfaction was invoked in the vertical axis correlation between societies, which reflects a spectrum between organic processes (insisting on mobility and spontaneity) and mechanistic processes (emphasizing power, continuity and order). Employment performance was linked favorably to clan and adhocracy cultures and to business and patriarchal cultures.

Yafang(2011) establishes the connection between leadership,organizational culture, and employee satisfaction has been undertaken. A cross-sectional research centered on clinical nurses in Taiwan has been completed. The interactions between organization cultures, leadership behaviour and job satisfaction were used as a comparison study. Organizational cultures (positive) are strongly related to management and job satisfaction and leadership activity were important.**Brian,et al.(2009)** offered a detailed insight into partnership, the study into organizational culture affects company effectiveness is an observation indirectly created by various managers and leadership scholars. A potential mediator of the relationship between organizational culture. Results from this study, conducted in 99 medical facilities throughout the USA, show that employee attitudes mediate the relationship between

culture and efficiency.**Sharon (1999)** indicates that a key feature of a corporate security culture is a common understanding of the value of safety amongst managers and employees. This study showed the perceptions of the relative importance of 25 railway factors by 312 British Rail drivers, supervisors and executives. The scores from each level were also calculated at the other grades. The study found that intergroup perceptions were not realistic, although there was a shared sense of the value of security.The argument goes that correct intergroup impressions are crucial to the creation, and form the basis for a positive culture of protection, of reciprocal trust and understanding across grades.

The aim of this paper is to provide a re-evaluation of the idea in terms of its possible relevance to brand-laded cultural shifts and customer experience management. The aim of brand management has always been to provide a consistent and distinguished customer experience. However, due to the increased complexity in managing brand experience, this task has been especially difficult for service brands.Employer product administration's approach is more comprehensive in defining the organizational culture by ensuring that every frame of reference in handling employer is compatible with the brand's philosophy. Through offering a comprehensive framework to match worker product interactions and a shared marketing / HR system, workplace brand management is an important step towards the credibility of company products.The power may also be obtained from private property. The researchers have been examining whether control can be due to the health **(Richard, 2007; Anderson, 2008)**. **Kathrynet al. (2015)** this study included three aspects of information security decision-making, namely, policy and procedural knowledge, policy and procedural attitude, and self-reported behavior.The results of a survey of 500 Australian workers showed an important, positive relationship between information security decision-making and the environment of corporate information security.The difficulty of applying successful incentives and fines and recommendations for further study was addressed

to explain sufficiently the many factors influencing the decision-making of information security.

Tang, et al.(2019) Work has been carried out and high turnover in hotels and academia has been recorded. The purpose of this study is to examine the psychological processes that influence employee loyalty to attitudes and actions of hotels. The study uses principles of organization, which believes that the hotel staff should construct and check a conceptual framework as an internal client. Many primary effects have been reported. These findings have important consequences for hotel turnover management and for improving employees ' psychological accomplishments to thus improve attitude and behavior.

Zohar and Hofmann (2012) organizational culture and the interrelationship between these two constructs. To provide some clarification, all systems have been analyzed in depth and a framework explains how the corporate environment can be seen from the outset as an indication of the basic values and assumptions underlying the atmosphere of the business (i.e. from employee perceptions).

Linda (2003), this paper explores the relevance in institutional research of the idea of culture. In the five current research themes: comparative leadership, corporate culture, behavioral awareness, abstract structure and subconscious structures and organization, the convergence between social and organizational philosophy is apparent. Such concepts are explored by scholars with different purposes and their analysis is focused on numerous hypotheses regarding the nature of society and organization. In this assumptive sense must be carried out the job of determining the strength and limits of the definition of culture.

Gershon, et al. (2004) investigates the interaction between the institutional structures and effects in health services is highly invasive, data on the accuracy and quality of the measurement tools used in these frameworks is scarce. Twelve instruments that can apply in the measurement of organizational structures in the health care environment were identified. Such

instruments are identified by the researchers and defined and their effects are addressed. **Martins (2003)** this paper aims to present the determinants of organizational culture that influence creativity and innovation through a model. The determinants of corporate culture have been identified against the background of this model. The creativity and innovation can either promote or hinder ideals, principles and attitudes that play a part in creativity, based on how they affect individual and group actions.

Marilyn (2001) explores the cultural perceptions of employees in order to assess how their views vary according to backgrounds and organizational divisions. The research location is one of the largest companies in the healthcare sector in the long term. The administrative group, the age of the worker, the sex of the workers and their race found significant variations in views using the ten cultural dimensions. Ironically, it was found that work experience and cultural values are related even more closely.

Yu, et al. (2011) this study examined the context, understanding of the external environment and its connection to organizational learning, as well as the correlation between corporate learning and success in innovation at two scales, including the quality of innovation in person and institutional levels. The results indicated that the background of organizational development, public understanding and institutional learning are important for the success of individual and corporate innovation, and related more to the individual level of the enterprise than to the quality of organizational innovation. Mike (2003)enhances the Mergers and acquisitions success rates, innovative approaches suggested in the field of institutional transformation, corporate leadership and operational growth and management analysis are also discussed.

Victoria (2010) this report explores the effect of principles that include corporate culture on employee satisfaction, including gender and age. The study was performed in all three public hospitals in one of Greece's major cities, the indicators introduced include the Cultural Organization Profile and the Job

Description List. The quantitative analyzes include descriptive statistics, slowly evaluating the regression and t testing. Such results lead to a better understanding of work performance and the association to corporate culture. **Onne Janssen (2011)** explores managers are perceived as promoting workplace creativity, workers are encouraged to make use of their power to carry out innovative work, whereas supervisors do not believe they are supportive. **Susan (2009)** the conception of organizational culture suggests that organizations, of which ethics is part, have identifiable cultures. Through nature, culture is the common belief of the leaders of an institution, so that an organization's moral culture is expressed in the views that its participants hold about the morality of an organization. Thus the principles of various organizations, as it already resides in a spectrum surrounded on the one side by moral businesses and on the other hand by highly ethical corporations, is rational. This research evaluates the effectiveness of the existing measure of the ethical culture of organizations in the determination of the ethical condition of organizations.

Michael (2002) Analysis and risk management leadership and several other aspects have been reported to affect employee views of the protection management system. In addition, such beliefs seem to affect workplace decisions concerning dangerous behavior and decision-making in the work. Industry Impact: Studies show that workers ' safety system expectations contribute to management's protection involvement, which tends to be linked to injury rates in effect.Management will concentrate on how well these key factors can be used to have a more positive impact on their business injury rates.

Alexandros, et al. (2008) the relation between performance and happiness, inspiration and engagement in expected employee training. Employee perceptions towards the earned education and on employee attitudes. In the report, workers ' emotions are analyzed, and their specific traits are not taken into account.

Adel, et al. (2007) in his research is aimed at examining the role of certain issues in the success of knowledge sharing in the organizational culture. It work aims to help companies understand and promote the essential function of the corporate culture to cultivate awareness to become pioneers in using their know-how and thereby achieving success. The findings of this report were based on an interview with workers from different public and private sector organizations in Bahrain and the outcomes of a survey. Research results show that the exchange of expertise in organizations is beneficial. Transparency, collaboration, information systems, incentives, and function of the enterprise.

3. Objectives of the Research Study

The objective of the study is:

- The effect of the corporate culture on distribution companies ' attitudes and behavior.
- The impact of corporate culture influences on the logistics company's attitudes and behavior.

4. Research Methodology

The study was conducted at a logistics company. After it was circulated to 88, the key information was obtained from 64 employees. The full survey was sent out to only 64 workers.The data were collected using pre-tested and well-structured interview schedule consisting of five components, namely Demographic Profile, Job Satisfaction, Organizational Culture and Organizational Climate, Problems and Measures for Suggestion. A scale of 24 statements was used to identify key components and sub-components of organizational culture by experts and by available literature.

The respondents ' questionnaires are focused upon the Likert Scale from strong agreement=1 to deep discord=5, centered on the organizational culture and attitude and behavior.Regression was performed using the SPSS ver. 22 to find the impact of organizational culture and its impact on attitude and behavior. Through interviewing the respondents individually, the data were collected and analyzed through applying correct statistical tests.

5. Data Analysis and Interpretation

Table.No.1: Regression of Organizational Culture on Attitudes and Behaviour

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics						Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change		
1	.666[a]	.444	.285	.27640	.444	2.796	14	49	.004		2.431

a. Predictors: (Constant), OC12, OC9, OC14, OC10, OC5, OC8, OC2, OC7, OC1, OC4, OC13, OC6, OC11, OC3
b. Dependent Variable: Attitudes and behaviour

Table.No.1 represents the regression results of organizational culture on attitudes and behaviour of the employees in a logistics firm. The coefficient of determination is 44.4 percent and is significance, the value of significance is less than 0.05 percent.

Table.No.2: Anova of Organizational Culture on Attitudes and Behaviour

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.991	14	.214	2.796	.004[b]
	Residual	3.743	49	.076		
	Total	6.734	63			

a. Dependent Variable: Attitudes and behaviour
b. Predictors: (Constant), OC12, OC9, OC14, OC10, OC5, OC8, OC2, OC7, OC1, OC4, OC13, OC6, OC11, OC3

The Table.No.2 represents the Anova of organizational culture on attitudes and behaviourthe F value is 2.796 and the significance value is less than 0.05 percent. The organizational culture is having an impact on the employees in the logistics firm.

Table 3: Coefficients of Organizational Culture on Attitudes and Behaviour

	Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.620	1.157		1.401	.168
	OC13	.242	.061	.455	3.950	.000
	OC14	.184	.074	.278	2.470	.017
	OC1	.123	.055	.256	2.256	.029
	OC2	.101	.047	.247	2.175	.034
	OC3	.035	.055	.076	.634	.529
	OC4	.011	.074	.017	.145	.886
	OC5	.029	.066	.054	.437	.664
	OC6	.040	.059	.078	.665	.509
	OC7	-.038	.067	-.066	-.572	.570
	OC8	-.011	.050	-.026	-.230	.819
	OC9	.034	.058	.066	.588	.559
	OC10	-.007	.059	-.013	-.112	.911
	OC11	.006	.083	.008	.067	.947
	OC12	-.124	.083	-.188	-1.492	.142

a. Dependent Variable: Attitudes and behaviour

Table.No.3 represents the coefficient of organizational culture on attitudes and behaviourthe significant factors of training and development OC13 (0.000), OC14 (0.017), and OC1 (0.029), OC2 (0.034) Training and development increases the efficiency of the employees, and in improving the skills.

Table.No.4: Overall Regression of Organizational Culture on Attitudes and Behaviour

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.692ª	.479	.471	.23784	.479	57.047	1	62	.000	1.951

a. Predictors: (Constant), Organizational culture

b. Dependent Variable: Attitudes and behaviour

Table.No.4 represents the overall regression results of organizational culture on attitudes and behaviour of the employees in a logistics firm. The coefficient of determination is 47.9 percent and is significance, the value of significance is less than 0.05 percent.

Table. No.5: Overall Anova of Organizational Culture on Attitudes and Behaviour

ANOVAª

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.227	1	3.227	57.047	.000ᵇ
	Residual	3.507	62	.057		
	Total	6.734	63			

a. Dependent Variable: Attitudes and behaviour

The Table.No.5 represents the overall Anova of organizational culture on attitudes and behaviour the F value is 57.047 and the significance value .is less than 0.05 percent. The organizational culture is having an impact on the employees in the logistics firm.

Table.No.6: Coefficients of Organizational Culture on Attitudes and Behaviour

	Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.904	.166		17.446	.000
	OC_Total	.298	.039	.692	7.553	.000

a. Dependent Variable: attitudes and behaviour

Table.No.6 represents the coefficient of organizational culture on attitudes and behaviour it is significant and the value is less than 0.05 percent.

6. Results and Discussion

The experience of companies with a recognized corporate culture points to the importance of taking into account employee desires and appreciation. In this regard, culture in interpersonal relationships can strengthen trust, improve communication and reduce insecurity. An effective culture, in other words, can promote a positive working environment.It should also be noted that the efficacy does not rely on the very existence of a

particular set of values, but rather on the consistency of organizational values, beliefs and behaviour, i.e. how they were formed in the sense that they give employees a better picture in order to promote their work in the organization. A successful culture also depends on the level at which an organization will fulfill the commitments expressed in the principles of the company and the extent to which those values represent employee desires.

Giving importance to the organizational culture can also help organizations deal with various types of changes that are inevitable and necessary, especially in today's increasingly turbulent operating environment. One general conclusion based on the findings is that businesses are more interested in internal characteristics, as opposed to the current values of corporate culture, which encourage a higher level of integration and focus on the internal stability of a business, whereas the least current values promote innovation and entrepreneurial behavior.

7. Conclusion

In this organization the planning process involves staff, exchanging knowledge and ideas with senior management and the superiors and technicians, discussing the company's financial status and workers to consider the company's current condition, inspiring them and having them show their organization skills.Employees are happy with their work and how the employee thinks about the jobs, to be dedicated to the business. The organizational culture consists of the values and beliefs behind the group's work culture within the organization. The research limits the findings to a single logistic business and greatly affects the effect of organizational culture and its effects on workers ' roles and behavior. A well-developed corporate culture promotes a healthy, productive work atmosphere in which staff are comfortable and perform at a high level that is valuable to their business itself.

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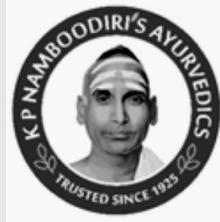
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K.P.Namboodiri Ayurvedic's Sustainable Business Practices and Framing Aggressive Marketing Strategies in acquiring Market Share in the Global Dynamic Business Environment

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1. Introduction:

K.P.Namboodiri's Ayurvedic is one of the most trusted brands in the state of Kerala which is located in the southern part of India. This is a 97yrs old company, started by Sri Kolathappally Pothayan Namboodiri (K P Namboodiri) in 1925 at Vadakkekad village in Thrissur District of Kerala State. 'Dantadhavana choornam' (Ayurvedic Tooth Powder) was the first major product manufactured and marketed by K.P.Namboodiri's Ayurvedic among their target customers and later this product 'Dantadhavana choornam' has become a flagship product of this ayurvedic company. Over the period of time, the company was run by the members of their families and the company started to grow and focus on product lines like Oral Care Products, Hair Care Products, Skin Care Products, Ayurvedic Thirst Quenchers, and Other Generic Ayurvedic Based Products. K.P.Namboodiri's Ayurvedic products are been accepted and created a wide demand for their branded products among their target customers, especially they could be able to do well in the Natural Segment.

This Ayurvedic Company started to grow over of period time and expanded its business operations in the neighboring states of Tamilnadu and Karnataka. K.P.Namboodiri's Ayurvedic acquired 40% of its Market Share in the Natural Segment in Kerala State, whereas they could not be able to acquire the market share of neighboring states as expected. So K.P.Namboodiri's Ayurvedic present Managing Director, Sri.K.Bhavadasan has planned to develop the organization to the next level by extensively concentrating on neighboring states of Tamilnadu and Karnataka. At the same time, the oral care market in these states is completely dominated by high competitors like Colgate-Palmolive (Colgate), Proctor & Gamble (PG), Unilever, and Glaxo Smith Kline PLC.

One day on a fine morning of 7th June 2022, Managing Director, Sri.K.Bhavadasan called his Marketing Head of Kerala State, Mr.Manoj Nair in order to discussthe company's near future towards market expansion. During the discussion, the managing director explained his new ideas on market expansion tohim and got his views on the same. Later on, the MD got the business updates from the Marketing Head of Tamilnadu and Karnataka and he was not satisfied with the performance of the company in these two states. Finally, the MDchanged the marketing head of

Tamilnadu and Karnataka. In order to bring a strategic change into the organization, the managing director appointed Mr. Mahesh Gowda and Mr. Siva Karthikeyan as New Marketing Heads for Karnataka and Tamilnadu State respectively. These Two newly appointed marketing heads are well qualified and have rich experience in this FMCG Sector in their states respectively.

This Strategic Change brought a lot of fresh energy and experience to K.P.Namboodiri's Ayurvedic Company. Meanwhile, Mr. Mahesh Gowda and Mr. Siva Karthikeyan, Marketing Heads for Karnataka and

Tamilnadu Stated to focus more on the products produced by their company across all product lines. These marketing heads were earlier working in one of the competitor companies and they have been performing consistently in those organizations. Considering their earlier Job performance and Potential, K.P.Namboodiri's Managing Director strongly brought these people into his organization.

On 5th July 2022, K.P.Namboodiri's Managing Director called for a meeting with all Marketing Heads of all these southern states, Tamilnadu, Karnataka, and Kerala in order to discuss something important for the growth and development of the company. As planned, the Board Meeting happened in a pre-planned manner, wherein all the stakeholders were giving their views and opinions on the various challenges faced by them in the business environment. Each and every discussion point were taken into high consideration and it's been analyzed thoroughly in order to bring down the appropriate solution to those problems. During the Meeting, Managing Director asked the marketing heads of Karnataka and Tamilnadu, Mr. Mahesh Gowda and Mr. Siva Karthikeyan to come out with extensive market research by focusing more on key factors like Consumer Brand Preference and Brand Awareness Level, Product Usage Behaviour, Consumer Buying Behavior, Factors influencing Consumers Purchase Decision, Consumer Satisfaction Level and Consumer's Switching Behaviour in order to have a better kind about the business environment in their respective states.

Further, Managing Director, informed the marketing heads, Mr. Mahesh Gowda and Mr. Siva Karthikeyan to formulatea new marketing strategy for their oral care products based on their state's respective market conditions. The managing director would like to discuss the newly formulated business strategies in their next upcoming board meeting along with all the stakeholders present in it. On hearing this both the marketing heads started to perform market research and environmental analysis so that they could able to prepare and formulate a competitive marketing strategy. So that they could be able to focus more on market expansion within a short span of time.

2. The Scenario of the Dental and Oral Care Market in India

The Market for Dental and Oral Care in India accounts for nearly Rs.200 crores, which is been growing atan increased rate of thirty percent (30%) year on year by now. India has been considered one of the fastest-growingcountries with reference to the dental and oral care markets growth and availability across the globe. In addition to that, India is the only country that is set to become the largest single market at the global level. Indian Dental and Oral Care market comprises various dental-related services, dental equipment, and its related consumables. These Dental and Oral related consumables market alone values approximately close to Rs. 97 (millions) in 2017 which is expected to grow over Rs.150 (millions) in 2025. India has a large number of dental practitioners serving a wide population across the country in different states in different compositions.

Fig.No.1. Indian Oral Care Market Size

Majority of the dentist practitioners whose dental clinics are majorly concentrating on the urban population and at the same time they are not concentrating on the rural population with a ratio of one dentist per thirty-five thousand rural people (1 Dentist: 35,000 Rural People) in comparison to that of the urban population with a ratio of one dentist per ten thousand urban people (1 Dentist: 10,000 Urban People). World Health Organization (WHO) normally recommends that the ideal ratio has to be there as

one Dentist per Seven Thousand Five Hundred people (1 Dentist: 7,500 People) and also it has clearly stated that if there is going to be an imbalance between demand and supply of dental professionals, then it would certainly lead a country to a poor state of dental health. However, India as a country has more than Thirty Thousand plus dental graduates and with more than fifteen thousand nearly starting their new practices annually shows that there is momentum being found on the growth track, which would certainly helpand concentrate on the growing population day by day.

The Dental and Oral Care Market is keep on growing day by day over a period of time and it all happened through the rising awareness and knowledge among individual consumers regarding the various dental aids and different types of dental treatments that are all available to consumers which certainly aims in improving individuals personal health and other hygiene factors. The above-said practices certainly paved the way and become a major factor towards the growth and development of this Oral Care Market also the demand for products in the Oral Care Market has impacted positively, which has become concentrating factor among the consumers to focus more on personal hygiene and health among themselves.

3. Market Overview of Global Tooth Paste Market in COVID-19 Pandemic Situation

From a global market perspective, the market for toothpaste projected to record a growth of 6.4% during the forecast period 2022-2027. In addition to that, it is been found in recent times of the COVID-19 Pandemic, there was only a limited impact been exerted majorly on the global toothpaste market. These Tooth Paste Products are been categorized under the most essential goods and services, wherein the movement of such products through borders became unrestricted. In fact, the demand for toothpaste was found to be very much higher during this pandemic period, in line with the awareness and

attention towards oral hygiene increasing and thereby increasing the usage of branded toothpaste among the consumers in a most predominant manner too. The increasing usage of branded toothpaste going higher among the consumer on one side, whereas on the otherside the same customer and consumers were more concentrating on the branded toothpaste on offers, discounts, and additional values on products such as the presence of Natural or Organic Ingredients (Neem, Tulsi, Aloe Vera, etc.,) in their products they do purchase for them and their family members. **(www.mordorintelligence.com)**

From the Consumers Perspective,dental problems among children and adults have been found to be a major one and it's been kept on increasing due to poor eating habits among these people. Even Parents started to concentrate more on the dental problems faced by the children in the earlier stage with more attention and focus on it. Even Adults too started to be more cautious and started to concentrate at earliest focus on dental problems in order to avoid serious problems arising from their oral health in the near future. This rise in the awareness level and increase in the popularity of herbal oral care products has provided a sudden rise in the awareness level, and product usage among the customers. This in turn increases the demand and supply of all the branded toothpaste products available in the market. Further, it has geared up the oral care market and it was growing higher with increased expectations that drive the toothpaste market in general. **(www.mordorintelligence.com)**

From the marketer's perspective, the rise in the oral health consciousness certainly has helped the marketers to offer a better variety of oral hygiene product categories like Mouth Refreshness, Teeth-Whitening, Tooth Sensitivity, Control of Tooth Gum Bleeding, etc. Expectations among the consumers were growing which in turn provided greater opportunities to the manufacturers of toothpaste to provide unique product offerings to their customers

rather than thinking of offering a normal toothpaste product.(**www.mordorintelligence.com**)

4. Indian Ayurvedic Tooth Paste Market

The Indian Tooth Paste Market is highly competitive, wherein the majority of the market share has been occupied by the dominant players like Colgate-Palmolive (Colgate), Proctor & Gamble (PG), Unilever, Glaxo Smith Kline PLC. In general, the leading market share holder would predominantly enjoy their global presence and market acquaintance in an aggressive manner. These global players would always keep on expanding themselves and focus more on the leveraging opportunities prevailing in the competitive global business environment and at the same time, they do focus more on business expansion by introducing a more competitive variety of product offerings to their consumers by understanding their major expectations. Another Major and Key area for the success of today's business lies in strengthening their distribution channel – How well you maintain and that much you will be more successful in your area of business. These global players concentrate on all the major areas of business in order to build strong competitive sustainable business strategies that would certainly enable them to survive, sustain and create a unique brand identity among their competitors prevailing in this business environment. (**www.mordorintelligence.com**)

Indian Ayurvedic Tooth Paste Market has a Networthof Rs.15000 Crores, which majorly comprises various segments like toothpaste, tooth powder, toothbrush, mouth wash, and denture care. Among all these above segments in the Indian market, Tooth Paste Segment is the biggest and largest one which covers 75% of the Market Share in terms of volume among the whole oral care market in India. The Market Size of the Tooth Paste is estimated to be Rs.10000 Crores to Rs.15000 Crores. **Mundra, D. D. (2022, February 14).**

5. Major Market Share Holding Companies:
- **Colgate Palmolive**
- **Hindustan Unilever (HUL)**
- **Patanjali**
- **Dabur**
- **Glaxo Smith Kline PLC**

Table 1. Indian Tooth Brands – Market Share

Year wise Market Share of Various Toothpaste Brands in India
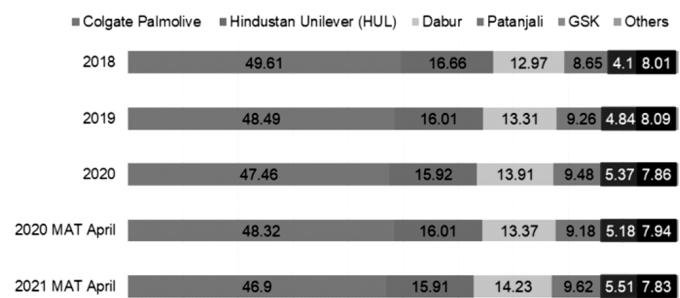
Indian Toothpaste Brand	2018	2019	2020	2020 MAT April	2021 MAT April
Colgate Palmolive	49.61	48.49	47.46	48.32	46.90
Hindustan Unilever (HUL)	16.66	16.01	15.92	16.01	15.91
Dabur	12.97	13.31	13.91	13.37	14.23
Patanjali	08.65	09.26	09.48	09.18	09.62
Glaxo SmithKline PLC	04.10	04.84	05.37	05.18	05.51
Others	08.01	08.09	07.86	07.94	07.83
Grand Total	**100%**	**100%**	**100%**	**100%**	**100%**

*MAT – Moving Annual Total

**Data Source: NielsenIQ Data Sourced From Industry (Bloomberg/Quint)

Chart. No.1.Indian Toothpaste Brands - Market Share

Yearwise Market Share of Toothpaste Brands in India

*MAT – Moving Annual Total
**Data Source: Nielsen IQ Data Sourced From Industry (Bloomberg/Quint)

6. Major Insights and Learning Outcomes from the Market Share

- The loss of market share reflects in Colgate's revenue growth. In the Financial Year 2021, the company saw its domestic revenue rise close to 8% over a year earlier, according to data shared by brokerage Systematix. By comparison, Dabur's oral care revenue rose 23.2%. **Dsouza, S. (2021, June 9).**

- Colgate's launch of herbal variants such as Vedshakti, Cibaca Vedshakti, Active Salt, Neem, and Sensitive with clove oil failed to stem the decline. The company also launched Colgate Diabetics and Colgate Charcoal Clean.**Dsouza, S. (2021, June 9).**

- Colgate, along with new launches, invested in advertisements and promotions across channels to build brands with innovation and technological superiority, Systematix said in its May note. But this strategy, it said, is yet to deliver meaningful results in terms of market share recovery in the toothpaste category.**Dsouza, S. (2021, June 9).**

- Dabur, on the other hand, has been constantly seeing a rise in demand across its toothpaste brands over the last few years, a distributor for the company told BloombergQuint on the condition of anonymity out of business concerns.**Dsouza, S. (2021, June 9).**

- Market share for other competitors in the toothpaste segment such as Pepsodent from Hindustan Unilever Ltd. remained stable.**Dsouza, S. (2021, June 9).**

- GlaxoSmithKline Consumer Healthcare Ltd., which sells a variety of toothpaste under the brand name Sensodyne for treating tooth sensitivity, has witnessed a steady increase since 2018.**Dsouza, S. (2021, June 9).**

Figure No. 3. Top 10 Toothpaste Brands in India

Source: https://www.topkaidea.com/top-toothpaste-brands-in-india/

7. K.P.Namboodiri's Ayurvedicin Kerala State

In 1925, K.P.Namboodiri's,started an ayurvedic medicine manufacturingcompany under the name K.P.Namboodiri's Ayurvediclocated in Vadakkekad Village in Thrissur District of the state of Kerala, India. Initially, the company was concentrating majorly on health care and personal care products. This company's first product is Dantadhavanachooranam (Ayurvedic Based Tooth Powder), soon its presence in the business market among its target audience, also started to attract more and more consumers by delivering its valued results, later this product became one of the most valuable ayurvedic dental care products in K.P.Namboodiri's Ayurvedic. Slowly, the

company started to grow in a phased manner, there by generations after generation the company was run by their family members. This company started to produce quality products in both health care and personal care by concentrating more on pure herbal and ayurvedic approaches which in turn provide superior value to its consumers.

Chart. No. 2 shows the detailed Organization Structure of the Marketing Department of K.P.Namboodiri's Ayurvedic

K. P. N. Ventures Group

- **K. P. Namboodiri's Ayurvedics**
- **K. P. N. Products**
- **Ramco Herbals Pvt. Ltd**
- **Hotel Devaragam, Guruvayoor**
- **K. P. Namboodiri's Auditorium**
- **Pothayan Namboodiri Charitable Trust**

Sri Kolathappally Pothayan Namboodiri Founder of K.P.Namboodiri's Ayurvedics

Sri K Bhavadasan Managing Director

Mr. Manoj Nair Marketing Head Kerala	Mr. Mahesh Gowda Marketing Head Karnataka	Mr. Siva Karthikeyan Marketing Head Tamilnadu

Meanwhile, Dantadhavanachooranam (Ayurvedic Based Tooth Powder), became the flagship product of their company, later the presence of their products in the competitive business environment provided them a good market share in Natural Segment. Then there after their company started to expand business in the most predominant manner within all the locations of Kerala State. Even today, more competitors, have entered into the natural segment, wherein this K.P.Namboodiri's Brand Values have grown over the

years passed, still their dominance in the State of Kerala has been widely spread over across different locations with their quality products presence.

This Ayurvedic Company focused more on Research and Development Department as one of their major department of concentration, as they were keenly focusing on improving their existing products in terms of all quality dimensions, and at the same time, they could able to concentrate more on improving their various product lines from time to time. This ayurvedic company has its own manufacturing units across 3 different locations in the state of Kerala and also they select contract manufacturing operations at certain times whenever and wherever they do require it.

K.P.Namboodiri's Product Lines

Oral Care Products

K.P.N's Herbal Toothpaste
K.P.N's Natural Salt Toothpaste
K.P.N's Aloe Vera Toothpaste
K.P.N's Mint Fresh Herbal Gel
K.P.N's Herbal Fresh Mouthwash
K.P.N's Ayurvedic Tooth Care Powder

Hair Care Products

K.P.N's Dasapushpam Herbal Soap
K.P.N's Neem & Tulsi Herbal Soap
K.P.N's Sandal Herbal Soap
K.P.N's Turmeric Herbal Soap / Face Cream
K.P.N's Vetiver Herbal Soap
K.P.N's Glycerin Clear Refreshing Bath

Skin Care Products

K.P.N's Ayurvedic Hair Care Oil
K.P.N's Ayurvedic Hair Care Shampoo
K.P.N's Ayurvedic Anti-Dandruff Shampoo
K.P.N's Chemparathi Thaali

Ayurvedic Thirst Quenchers

K.P.N's Dahamukthi
K.P.N's Pathimukam

Generic Product

K.P.N's Bhasmam (Scented Vibhoothi)
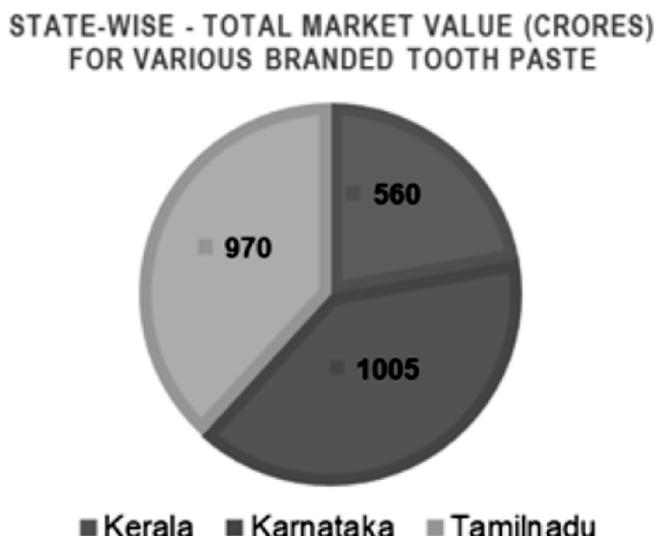
7.1. State Wise Market Value of Tooth Paste

Table No. 2 showing Total Market Value (State-Wise)

Name of the State	Total Market Value (MV)
Kerala	560 Crores
Karnataka	1005 Crores
Tamilnadu	970 Crores

From Table No. 2, it is inferred that the total market value for the state of Tamil Nadu is found to be Rs.970 Crores, whereas total market value for the state of Karnataka is found to be Rs.1005 Crores and the remaining total market value for the state of Kerala is found to be Rs.560 Crores.

Chart No.3 showing Total Market Value (State-Wise)

STATE-WISE - TOTAL MARKET VALUE (CRORES) FOR VARIOUS BRANDED TOOTH PASTE

560
970
1005

■ Kerala ■ Karnataka ■ Tamilnadu
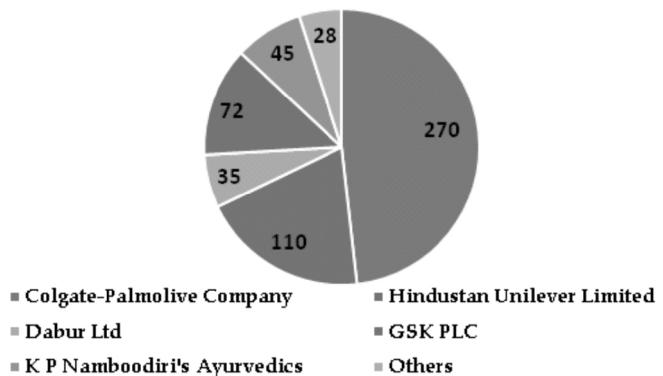
7.2. Kerala State-Market Share Value of Various Branded Tooth Pastes

Brand Name	Market Share Value (Crores)
Colgate-Palmolive Company	270
Hindustan Unilever Limited	110
Dabur Ltd	035
GSK PLC	072
K P Namboodiri's Ayurvedic	045
Others	028
Grand Total	560

Table No. 3 shows Kerala State-Market Share Value of Various Branded Tooth Pastes

Chart.No.4 showing Kerala State-Market Share Value of Various Branded Tooth Pastes

Kerala State - Market Share Value of Various Toothpaste Brands (Crores)

28
45
72
35
110
270

■ Colgate-Palmolive Company   ■ Hindustan Unilever Limited
■ Dabur Ltd   ■ GSK PLC
■ K P Namboodiri's Ayurvedics   ■ Others
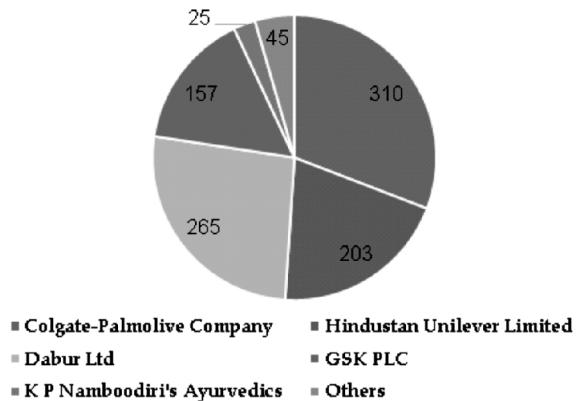
7.3. Karnataka State-Market Share Value of Various Branded Tooth Pastes

Brand Name	Market Share Value (Crores)
Colgate-Palmolive Company	310
Hindustan Unilever Limited	203
Dabur Ltd	265
GSK plc.	157
K P Namboodiri's Ayurvedics	025
Others	045
Grand Total	1005

Table.4 shows Karnataka State-Market Share Value of Various Branded Tooth Pastes

Chart.No.5showsKarnataka State-Market Share Value of Various Branded Tooth Pastes

Karnataka - Market Share Value (Crores) of Various Toothpaste Brands
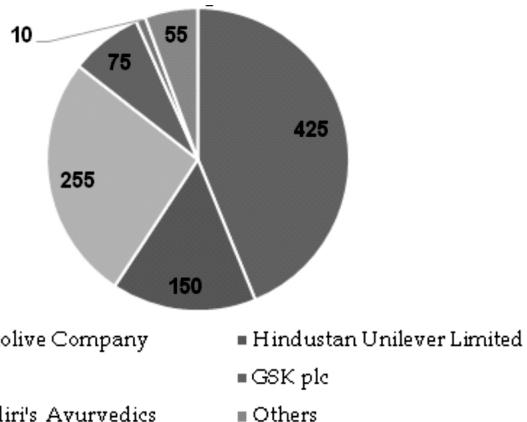
25
45
157
310
265
203

■ Colgate-Palmolive Company   ■ Hindustan Unilever Limited
■ Dabur Ltd   ■ GSK PLC
■ K P Namboodiri's Ayurvedics   ■ Others

Tamil Nadu State-Market Share Value of Various Branded Tooth Pastes

Brand Name	Market Share Value (Crores)
Colgate-Palmolive Company	425
Hindustan Unilever Limited	150
Dabur Ltd	255
GSK plc.	75
K P Namboodiri's Ayurvedics	10
Others	55
Grand Total	970

Table.5 showsTamilnadu State-Market Share Value of Various Branded Tooth Pastes

Chart. No.6showsTamilnadu State-Market Share Value of Various Branded Tooth Pastes

Tamilnadu State - Market Share Value (Crs) of Various Toothpaste Brands

As the requirement Mr. Mahesh Gowda and Mr. Siva Karthikeyan performed a market research study on their respective states, whereas Mr.Manoj Nair Marketing Head of Kerala also got interested in this market research study. A standard well-designed structured questionnaire was used as a research instrument in order to collect the primary samples for their market research study. Further, they adapted the descriptive research type was adopted in order to find out the various facts related to the business environment, consumer buying behavior, and factors influencing the purchase decision, consumer satisfaction, and consumer brand switching behavior. From this market research, there were a total of 760 primary samples were collected from 3 states namely, Kerala (228), Tamilnadu (228), and Karnataka (304). The Outcome of the market research helps the marketing head of these 3 States would be able to design and formulate a suitable and appropriate marketing strategy.

7.2 Outcome of the Market Research conducted in Tamil Nadu, Karnataka, and Kerala
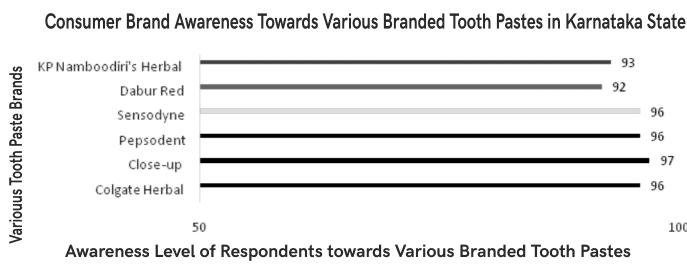
a. Consumer Awareness Level – Various Branded Tooth Paste – Karnataka State

Various Branded Tooth Pastes	Awareness Level (%)
Colgate Herbal	92
Close-up	93
Pepsodent	90
Sensodyne	88
Dabur Red	82
KP Namboodiri's Herbal	50

Table. 6 shows Karnataka State-Consumer Brand Awareness Level -Various Branded Tooth Pastes

From the above Table No. 6, it is inferred that the consumer brand awareness towards various branded toothpaste are stated as follows, 93% of consumers in Karnataka State are aware of the Close-up Tooth Paste, 92% of consumers in Karnataka State are aware of the Colgate Herbal Tooth Paste, 90% of consumers in Karnataka State are aware of the Pepsodent Tooth Paste, 88% of consumers in Karnataka State are aware of the Sensodyne Tooth Paste, 82% of consumers in Karnataka State are aware of the Dabur Red Tooth Paste, Only 50% of consumers in Karnataka State are aware of the KP Namboodiri's Herbal Tooth Paste.

Chart. No.7 shows Tamilnadu State-Market Share Value of Various Branded Tooth Pastes

Consumer Brand Awareness Towards Various Branded Tooth Pastes in Karnataka State

Awareness Level of Respondents towards Various Branded Tooth Pastes
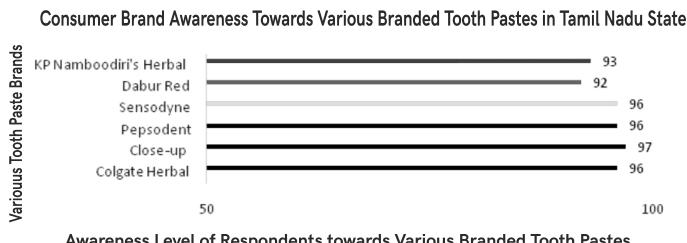
b. Consumer Awareness Level – Various Branded Tooth Paste – TamilNadu State

Various Branded Tooth Pastes	Awareness Level (%)
Colgate Herbal	89
Close-up	88
Pepsodent	89
Sensodyne	89
Dabur Red	91
KP Namboodiri's Herbal	48

Table. 7 shows Tamil Nadu State-Consumer Brand Awareness Level-Various Branded Tooth Pastes

Chart. No.8 shows Karnataka State-Consumer Brand Awareness Level -Various Branded Tooth Pastes

Consumer Brand Awareness Towards Various Branded Tooth Pastes in Tamil Nadu State

Awareness Level of Respondents towards Various Branded Tooth Pastes

From the above Table No. 7, it is inferred that the consumer brand awareness towards various branded toothpaste are stated as follows, 91% of consumers in Tamilnadu State are aware of the Dabur Red Tooth Paste, 89% of consumers in Tamilnadu State are aware of the Colgate Herbal Tooth Paste, 89% of consumers in Tamilnadu State are aware of the Pepsodent Tooth Paste, 89% of consumers in Tamilnadu State are aware of the Sensodyne Tooth Paste, 88% of consumers in
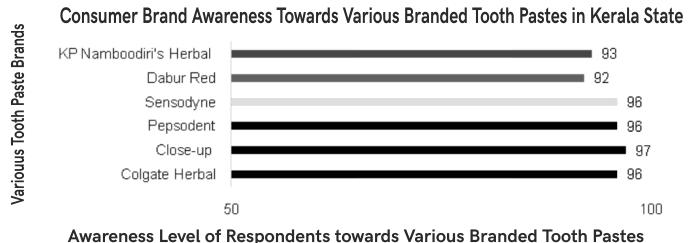
Tamilnadu State are aware of the Close-up Tooth Paste, Only 48% of consumers in Tamilnadu State are aware of the KP Namboodiri's Herbal Tooth Paste.

c. Consumer Awareness Level – Various Branded Tooth Paste – Kerala State

Various Branded Tooth Pastes	Awareness Level (%)
Colgate Herbal	96
Close-up	97
Pepsodent	96
Sensodyne	96
Dabur Red	92
KP Namboodiri's Herbal	93

Table. 8 shows Kerala State-Consumer Brand Awareness Level-Various Branded Tooth Pastes

Chart. No.9 shows Kerala State-Consumer Brand Awareness Level-Various Branded Tooth Pastes

Consumer Brand Awareness Towards Various Branded Tooth Pastes in Kerala State

Awareness Level of Respondents towards Various Branded Tooth Pastes

From the above Table No. 8, it is inferred that the consumer brand awareness towards various branded toothpaste are stated as follows, 92% of consumers in Kerala Stateare aware of the Dabur Red Tooth Paste, 96% of consumers in Kerala Stateare aware of the Colgate Herbal Tooth Paste, 96% of consumers in Kerala Stateare aware of the Pepsodent Tooth Paste, 96% of consumers in Kerala Stateare aware of the Sensodyne Tooth Paste, 97% of consumers in Kerala State are aware of the Close-up Tooth Paste, and finally 93% of consumers in Kerala State are aware of the KP Namboodiri's Herbal Tooth Paste.Data are extracted from Table.No.10, for the above analysis was taken from the primary data, which are later been computed in order conclude the above elements focusing on consumer brand awareness towards

branded toothpastes across the 3 states – TamilNadu, Karnataka and Kerala.

Table. 9 Respondent and His Families Preferred Branded Tooth Paste That They currently use on daily basis? * Native State/ Location of the Respondent

Respondent and His Families Preferred Branded Tooth Paste That They currently use on daily basis?	Native State/ Location of the Respondent						
	Karnataka	Product Usage (%)	Tamilnadu	Product Usage (%)	Kerala	Product Usage (%)	Total
Colgate Herbal Tooth Paste	**112**	37.09	**073**	31.88	**050**	21.83	235
Close-up Natural Fresh Tooth Paste	**036**	11.92	006	2.62	005	002	047
Pepsodent Tooth Paste	**025**	8.28	011	4.80	009	004	045
Sensodyne Tooth Paste	019	6.29	004	1.75	009	004	032
Oral-B Tooth Paste	013	4.30	002	0.87	004	002	019
Meswak Tooth Paste	018	5.96	003	1.31	002	001	023
Patanjali Dant Kranti Tooth Paste	**022**	7.28	000	0.00	005	002	027
Vicco Vajardanti Ayurvedic Tooth Paste	003	0.99	003	1.31	000	000	006
Dabur Red Tooth Paste	**044**	14.57	**110**	48.03	**010**	004	164
Himalaya Herbals Complete Dental Care Tooth Paste	007	2.32	002	0.87	002	001	011
KP Namboodiri's Herbal Tooth Paste	002	0.66	015	6.55	**131**	057	148
Jiva Ayurveda's Ayur Fresh Tooth Paste	001	0.33	000	0.00	001	000	002
Bio - well Tooth Paste	000	0.00	000	0.00	001	000	001
Grand Total	**302**	**100**	**229**	**100**	**229**	**100**	**760**

From the above Table 9, it is been inferred that Karnataka's respondent and his family member most preferred branded toothpaste are Colgate Herbal Tooth Paste (37.09%), Dabur Red Tooth Paste (14.57%), Close-up Natural Fresh Tooth Paste (11.92%), Pepsodent Tooth Paste (8.28%), Patanjali Dant Kranti Tooth Paste (7.28%). Similarly, the Tamilnadu respondent and his family member most preferred branded toothpaste areDabur Red Tooth Paste (48.03%), Colgate Herbal Tooth Paste (31.88%), KP Namboodiri's Herbal Tooth Paste (6.55%), Close-up Natural Fresh Tooth Paste (4.80%).

Table.No.10, shows Customer Buying Behaviour – Respondent's Purchase Frequency towards their preferred Branded Tooth Paste with that of the different locations of the respondents

10.1. Respondent purchase frequency towards their preferred branded Tooth Paste? * Location of the respondent

Respondents purchase frequency towards his preferred branded Tooth Paste	Location of the respondents			Total
	Karnataka	Tamilnadu	Kerala	
Once in 2 Weeks	046	026	011	**083**
Once in 3 Weeks	054	023	023	**100**
Once in a Month	148	171	163	**482**
Once in 2 Month	042	006	024	**72**
Occasionally	014	002	007	**23**
Grand Total	**304**	**228**	**228**	**760**

10.2. Respondents Quantity preference towards their preferred Branded Tooth Paste that they purchase every time? * Location of the respondent
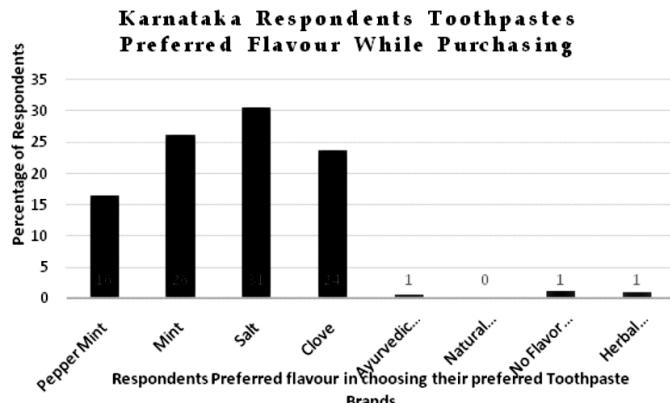
Respondents Quantity preference towards their preferred Branded Tooth Paste that they purchase every time	Location of the respondent belongs to?			Total
	Karnataka	Tamilnadu	Kerala	
50gms Pack	021	014	004	**039**
200gms Pack	072	046	029	**147**
100gms Pack	137	038	043	**218**
Value Benefit Pack (Price Off)	041	085	095	**221**
Volume Benefit Pack (Extra Quantity)	033	045	057	**135**
Grand Total	**304**	**228**	**228**	**760**

10.3. Location of the respondent * which flavor of toothpaste do respondents prefer in choosing them while purchasing?

Which flavor of toothpaste do the respondents prefer in choosing them while purchasing?	Location of the respondent						Total
	Karnataka	(%)	Tamilnadu	(%)	Kerala	(%)	
Pepper Mint	050	016	009	004	020	009	079
Mint	080	026	021	009	041	018	142
Salt	093	031	045	020	011	005	149
Clove	072	024	018	008	019	008	109
Ayurvedic Ingredients	002	001	074	032	075	033	151
Natural Ingredients	000	000	057	025	051	022	108
No Flavor Preference	004	001	002	001	004	002	010
Herbal Extract	003	001	002	001	007	003	012
Total	**304**	**100**	**228**	**100**	**228**	**100**	**760**

10.3.1. Karnataka Respondent's Toothpastes Preferred Flavour While Purchasing

Chart. No.10 shows Karnataka State-Consumer Flavour Preferences while choosing Preferred Branded Tooth Pastes
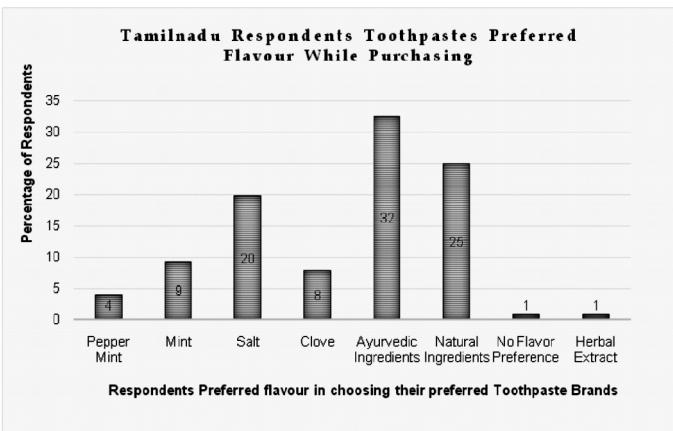
From Chart. No. 10, it is inferred that the majority 31% of the respondents from the state of Karnataka preferred Salt flavored toothpaste brands while purchasing them during their necessary shopping. 26% of the respondents from the state of Karnataka preferred Mint flavored toothpaste brands while purchasing them during their necessary shopping. 24% of the respondents from the state of Karnataka preferred Clove flavored toothpaste brands while purchasing them during their necessary shopping. 16% of the respondents from the state of Karnataka preferred Pepper Mint flavored toothpaste brands while purchasing them during their necessary shopping.

10.4 TamilNadu Respondent's Toothpastes Preferred Flavour While Purchasing

Chart. No.11 shows Tamilnadu State-Consumer FlavourPreferenceswhilechoosingPreferredBranded Tooth Pastes

From Chart. No.11, it is inferred that the majority 32% of the respondents from the state of Tamil Nadu preferred to have Ayurvedic Ingredients to be present in the toothpaste brands while purchasing them during their necessary shopping. 25% of the respondents from the state of Tamil Nadu preferred to have Natural Ingredients to be present in the toothpaste brands while purchasing them during their necessary shopping. 20% of the respondents from the state of Tamil Nadu preferred Salt flavored toothpaste brands while purchasing them during their necessary shopping. The remaining 21% of the respondents from the state of Tamil Nadu preferred Pepper Mint, Mint and Clove flavored toothpaste brands while purchasing them during their necessary shopping.

Table 11.Shows the product attributes that respondents look for while choosing their preferred Branded Tooth Paste while purchasing the product

Please mention based on its importance, which of the following attributes helps in choosing your preferred branded Tooth Paste? * Location of the respondents - Cross tabulation

Product Attributes	Please mention based on its importance, which of the following attributes helps in choosing your preferred branded Tooth Paste?	Location of the respondents			
		Karnataka	Tamilnadu	Kerala	Total
Long-Lasting Freshness	Not at all Important	001	003	001	005
	Important	010	005	004	019
	Slightly Important	023	021	013	057
	Highly Important	105	095	091	291
	Extremely Important	165	104	119	388
	Sub - Total	**304**	**228**	**228**	**760**
Prevention of Tooth Decay	Not at all Important	004	005	001	010
	Important	006	012	001	019
	Slightly Important	039	022	018	079
	Highly Important	121	108	118	347
	Extremely Important	134	081	090	305
	Sub - Total	**304**	**228**	**228**	**760**
Maintain Healthy Tooth Enamel and Gums	Not at all Important	004	004	001	009
	Important	012	005	004	021
	Slightly Important	035	022	017	074
	Highly Important	108	083	090	281
	Extremely Important	145	114	116	375
	Sub - Total	**304**	**228**	**228**	**760**
Ensures Whiteness to the Teeth	Not at all Important	009	006	001	016
	Important	012	012	001	025
	Slightly Important	046	027	020	093
	Highly Important	118	112	123	353
	Extremely Important	119	071	083	273
	Sub - Total	**304**	**228**	**228**	**760**

Availability of Herbal Ingredients	Not at all Important	011	005	001	017
	Important	015	010	004	029
	Slightly Important	059	023	021	103
	Highly Important	104	075	084	263
	Extremely Important	115	115	118	348
	Sub - Total	**304**	**228**	**228**	**760**
Colour Composition of Tooth Paste	Not at all Important	026	013	004	043
	Important	016	015	007	038
	Slightly Important	069	035	050	154
	Highly Important	114	113	106	333
	Extremely Important	079	052	061	192
	Sub - Total	**304**	**228**	**228**	**760**
Fluoride Content and Composition	Not at all Important	025	011	005	041
	Important	018	011	007	036
	Slightly Important	074	024	034	132
	Highly Important	100	096	089	285
	Extremely Important	087	086	093	266
	Sub - Total	**304**	**228**	**228**	**760**
Controls Blood Bleeding (if any)	Not at all Important	016	008	002	026
	Important	011	011	002	024
	Slightly Important	052	025	022	099
	Highly Important	101	125	129	355
	Extremely Important	124	059	073	256
	Sub -Total	**304**	**228**	**228**	760

All almost all 3 States the respondents preferred the following product attributes to be presented in their preferred branded toothpaste, which are as follows, Long-Lasting Freshness, Prevention of Tooth Decay, Maintain Healthy Tooth Enamel and Gums, Ensures Whiteness to the Teeth, Controls Tooth Blood Bleeding (if any), Fluoride Content and Composition, Availability of Herbal Ingredients.

Table. No.12. Showing the Secondary Brand Preferences among the respondents when they had the plan to switch from their existing Primary branded toothpaste

In General, If Respondents are planning to switch from your current branded paste to other branded toothpaste in the near future, Please mention your most preferred branded Tooth Paste? * Location of the respondents - Cross tabulation
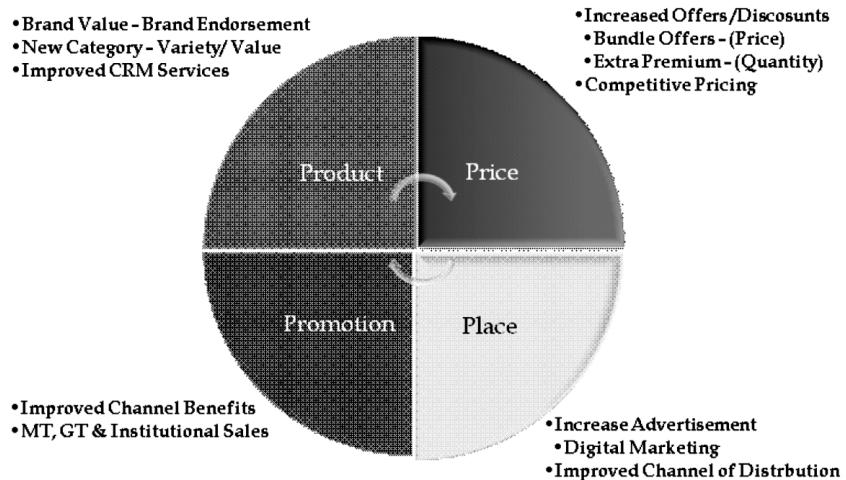
In General, If Respondents are planning to switch from your current branded paste to other branded toothpaste in the near future, Please mention your most preferred branded Tooth Paste?	Location of the respondents			
	Karnataka	Tamilnadu	Kerala	Total
Colgate Herbal Tooth Paste	055	100	030	185
Himalaya Herbals Complete Dental Care Tooth Paste	007	006	008	021
KP Namboodiri's Herbal Tooth Paste	002	016	008	026
Sri Tatva's Sudanta Tooth Paste	000	000	001	001
Kudos Ayurveda Neem+Clove Tooth Paste	001	000	000	001
Madina's Neem Tooth Paste	001	000	000	001
Himalaya Mint Fresh Herbal Tooth Paste	004	001	002	007
Close-up Tooth Paste	057	015	035	107
Pepsodent Tooth Paste	029	010	009	048
Sensodyne Tooth Paste	038	014	022	074
Oral-B Tooth Paste	027	004	007	038
Meswak Tooth Paste	025	004	003	032
Patanjali Dant Kanti Tooth Paste	024	003	002	029
Vicco Vajradanti Ayurvedic Tooth Paste	015	003	000	018
Dabur Red Tooth Paste	019	052	101	172
Grand Total	**304**	**228**	**228**	**760**

Based on the various insights received from the market research conducted by Mr.Mahesh Gowda and Mr. Sivakarthikeyan in their respective states, they could be able to come out with an effective marketing strategy with the following focus points for discusion:

8. Discusion Points for Future Development and Growth:

The Market Share and The Sales Performance of K.P.Namboodiri's Ayurvedic in these southern states - Karnataka and Tamil Nadu is found to be not good, On Keeping these things in mind, both the Marketing Head would like to propose the following strategicsolutions which would certainly bring a drastic change in the marketing performance of the company.

Key Areas to be Focused /Discussed

8.1. Major Focus Point:

- **Firstly**, the companyhas to revamp its distribution channelin these 2 markets (Tamil Nadu and Karnataka States) by bringing in new manpower and if required new distributors. The focus should be on organized as well as unorganized retail (Modern Trade and General Trade) respectively. Different teams are to be created to handle both segments in a predominant manner.

- **Secondly**, the companyneeds to promote the brand as the awareness is very poor in these 2 markets (Tamil Nadu and Karnataka States). So the company has to focus more on brand awareness activities with aggression than ever before and in addition to that certain things like Display Scheme will certainly increase the brand visibility and Bundled offers would certainly attract the customers towards the sale of that product. These Strategic Changes made for these two channels separately which will highlight the visibility of the products and also this will bring considerable level of awareness among the masses. These schemes will also engage the retail outlets as they will get pay-outs towards the same. This is a continuous process and not a one-time activity.

- **Thirdly**, Advertisements in Print and Digital Media is also very important, Key feature and to choose a brand ambassador to promote the product is equally important.

- **Fourthly**, New Avenues like Institutional Sales, Pharmacy and Dentist should also be targeted as these channelsare growing rapidly.

- **Fifth,** The pricing should also be very competitive keeping in mind of the competition prices. Trade Schemes should be well communicated to the retail outlets and this will increase retail engagement.

Exhibit.No. 01.Consumer Awareness Level Towards various Branded Toothpaste across 3 States - Tamilnadu, Karnataka, Kerala

Various Branded Tooth Pastes	Awareness Level	Karnataka	Awareness (%)	Overall Awareness (%)	Tamilnadu	Awareness (%)	Overall Awareness (%)	Kerala	Awareness (%)	Overall Awareness (%)	Total
Colgate Herbal	Not at all Aware	008	003	92	013	006	89	002	001	96	023
	Slightly Aware	016	005		013	006		007	003		036
	Moderately Aware	040	013		041	018		078	034		159
	Highly Aware	096	032		105	046		089	039		290
	Extremely Aware	144	047		056	025		052	023		252
	Total	304	100		228	100		228	100		760
Close-up	Not at all Aware	005	002	93	013	006	88	001	000	97	019
	Slightly Aware	017	006		015	007		006	003		038
	Moderately Aware	058	019		072	032		062	027		192
	Highly Aware	116	038		085	037		121	053		322
	Extremely Aware	108	036		043	019		038	017		189
	Total	304	100		228	100		228	100		760
Pepsodent	Not at all Aware	008	003	90	016	007	89	001	000	96	025
	Slightly Aware	021	007		010	004		009	004		040
	Moderately Aware	069	023		043	019		088	039		200
	Highly Aware	096	032		114	050		098	043		308
	Extremely Aware	110	036		045	020		032	014		187
	Total	304	100		228	100		228	100		760
Sensodyne	Not at all Aware	010	003	88	015	007	89	001	000	96	026
	Slightly Aware	025	008		011	005		008	004		044
	Moderately Aware	071	023		074	032		054	024		199
	Highly Aware	103	034		084	037		130	057		317
	Extremely Aware	095	031		044	019		035	015		174
	Total	304	100		228	100		228	100		760
Oral-B	Not at all Aware	027	009	81	019	008	87	007	003	90	053
	Slightly Aware	032	011		010	004		015	007		057
	Moderately Aware	072	024		058	025		099	043		229
	Highly Aware	088	029		105	046		088	039		281
	Extremely Aware	085	028		036	016		019	008		140
	Total	304	100		228	100		228	100		760

Brand	Awareness										
Meswak	Not at all Aware	035	012	**77**	019	008	**85**	023	010	**82**	**077**
	Slightly Aware	036	012		015	007		019	008		**070**
	Moderately Aware	069	023		079	035		072	032		**220**
	Highly Aware	104	034		084	037		099	043		**287**
	Extremely Aware	060	020		031	014		015	007		**106**
	Total	**304**	**100**		**228**	**100**		**228**	**100**		**760**
Patanjali Dant Kanti	Not at all Aware	031	010	**81**	020	009	**87**	008	004	**89**	059
	Slightly Aware	026	009		010	004		016	007		052
	Moderately Aware	072	024		065	029		101	044		238
	Highly Aware	093	031		099	043		093	041		285
	Extremely Aware	082	027		034	015		010	004		126
	Total	**304**	**100**		**228**	**100**		**228**	**100**		**760**
Vicco Vajradanti Ayurvedic	Not at all Aware	050	016	**71**	022	010	**86**	013	006	**86**	085
	Slightly Aware	039	013		010	004		020	009		069
	Moderately Aware	083	027		087	038		081	036		251
	Highly Aware	074	024		075	033		105	046		254
	Extremely Aware	058	019		034	015		009	004		101
	Total	**304**	**100**		**228**	**100**		**228**	**100**		**760**
Dabur Red	Not at all Aware	025	008	**82**	015	007	**91**	005	002	**92**	045
	Slightly Aware	029	010		005	002		013	006		047
	Moderately Aware	070	023		033	014		071	031		174
	Highly Aware	078	026		094	041		111	049		283
	Extremely Aware	102	034		081	036		028	012		211
	Total	**304**	**100**		**228**	**100**		**228**	**100**		**760**
HimalayaHerbals Complete Dental Care	Not at all Aware	053	17	**72**	014	006	**87**	010	004	**89**	077
	Slightly Aware	032	011		015	007		016	007		063
	Moderately Aware	092	030		061	027		063	028		216
	Highly Aware	078	026		111	049		126	055		315
	Extremely Aware	049	016		027	012		013	006		089
	Total	**304**	**100**		**228**	**100**		**228**	**100**		**760**
KP Namboodiri's Herbal	Not at all Aware	114	038	**50**	029	013	**48**	005	002	**93**	148
	Slightly Aware	039	013		089	039		011	005		139
	Moderately Aware	077	025		044	019		026	011		147
	Highly Aware	053	017		040	018		112	049		205
	Extremely Aware	021	007		026	011		074	032		121
	Total	**304**	**100**		**228**	**100**		**228**	**100**		**760**

Brand	Awareness										
Sri SriTatva Sudanta	Not at all Aware	124	041	**46**	152	067	**29**	104	046	**30**	380
	Slightly Aware	039	013		009	004		055	024		103
	Moderately Aware	074	024		029	013		039	017		142
	Highly Aware	049	016		022	010		025	011		096
	Extremely Aware	018	006		016	007		005	002		039
	Total	**304**	**100**		**228**	**100**		**228**	**100**		**760**
Jiva Ayurveda's Ayurfresh Tooth Paste	Not at all Aware	129	042	**44**	151	066	**27**	097	043	**26**	377
	Slightly Aware	040	013		016	007		072	032		128
	Moderately Aware	073	024		024	011		032	014		129
	Highly Aware	045	015		022	010		021	009		088
	Extremely Aware	017	006		015	007		006	003		038
	Total	**304**	**100**		**228**	**100**		**228**	**100**		**760**
Kudo's Ayurveda Neem+Clove	Not at all Aware	133	044	**46**	153	067	**26**	109	048	**28**	395
	Slightly Aware	031	010		015	007		056	025		102
	Moderately Aware	072	024		028	012		037	016		137
	Highly Aware	052	017		019	008		019	008		090
	Extremely Aware	016	005		013	006		007	003		036
	Total	**304**	**100**		**228**	**100**		**228**	**100**		**760**
Bio well	Not at all Aware	133	044	**45**	149	065	**26**	111	049	**25**	393
	Slightly Aware	035	012		020	009		060	026		115
	Moderately Aware	069	023		028	012		035	015		132
	Highly Aware	048	016		017	007		019	008		084
	Extremely Aware	019	006		014	006		003	001		036
	Total	**304**	**100**		**228**	**100**		**228**	**100**		**760**
Himalaya Mint Fresh Herbal	Not at all Aware	081	027	**62**	019	008	**86**	019	008	**86**	119
	Slightly Aware	034	011		013	006		013	006		060
	Moderately Aware	074	024		055	024		100	044		229
	Highly Aware	071	023		121	053		089	039		281
	Extremely Aware	044	014		020	009		007	003		071
	Total	**304**	**100**		**228**	**100**		**228**	**100**		**760**

**EA – Extremely Aware, HA – Highly Aware, MA – Moderately Aware, SA – Slightly Aware, NA – Not at all Aware

*Source: Primary Data

From the above Table.No.11, shows Consumer Awareness levels towards various Branded Toothpaste across 3 states namely Tamilnadu, Karnataka, and Kerala. Only the Top 5 Brands having high awareness have been compared with K.P.Namboodiri's Ayurvedic Products awareness and it is been computed earlier for a better understanding of consumer awareness towards various toothpaste brands in each state.

Exhibit.02. K.P.Namboodiri's Ayurvedic Oral Care Products

Source: https://www.kpnamboodiris.com/kpna-products-oralcare.html

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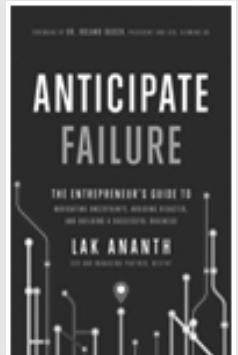
1.   Introduction

The author Lak Ananth is an Indian immigrant to the USA, who went through many hardships to become what he is today, a CEO and Managing Partner of Next 47, a global venture capital firm of Siemens AG, USA, providing venture capital to many start-ups. This is a ground-breaking book that reveals why often game-changing innovations still fizzle out. The book starts with the understanding that building a business based on innovation is a perilous endeavor, where big and small missteps are always around the corner. The author takes you through a journey of riveting collection of high-profile innovation failures and examines the root causes for why only a brilliant idea is never enough.

Failures can happen for many reasons, but they should not be catastrophic. The author opines that if failure can be anticipated, the necessary action to avoid or minimize the negative impact could be taken to ultimately succeed.

2.   Seven Patterns of Failure

The author has identified many patterns of failure in the innovation and entrepreneurship journeys. Anticipating them, preparing relentlessly for them, and navigating through them, when they do happen is the way to achieve success. The roots of failure of promising businesses run by talented people, tend to fail on seven aspects that tend to dominate. They are:

- Customer Failure
- Technology Failure
- Product Failure
- Team Failure
- Timing Failure
- Business Model Failure
- Execution Failure

The chapters that follow address each of these patterns, providing case studiesand examples of companies that failed despite the best of intentions and the many good things they had going for them. The author aims to sensitize entrepreneurs that failure could be right around the corner, especially in the execution of disruptive innovations, and be ready to take them head-on. Although failures have been put into seven different categories, the author warns that it is important to remember that companies often face some combination of these patterns of failure at the same time, not just one at a time, and this classification has been done just to identify the dominant factor for the ease of understanding the main reason of failure.

3.   Customer Failure

The vision of Tata Group Chairman Ratan Tata, who conceived the creation of a small, affordable "people's car" known as the Nano that would appeal directly to a large segment of India's population, was launched with a lot of fanfare and was predicted to be a sure winner when unveiled to the public. It turned out to be a damp squib! What went wrong?

Tata's idea to build a cheap and safe car was based on the hypothesis of an anecdote of perils that the majority populace faced in riding a two-wheeler with family and children on the Indian roads, especially in

wet weather. The company failed to test the *problem* hypothesis before testing the *solution* hypothesis. If the Tata staffers had spoken with more real customers, they would have found that their target demographic, first of all, cared a lot about their children's education, families, and buying a house. Buying a car was farther down the wish list and was considered a luxury item because their transportation problem already had solutions through public transport by buses, trains, and two-wheelers, the dangers of a few months of wet weather notwithstanding, which they had learned to tolerate as a part of the Indian psyche. Besides, there was a stigma attached to the car – a cheap car for poor people. No one wanted to be seen as part of the bottom of the pyramid, especially in urban areas where middle-class values dominate. And the pain was not high enough for the customers to pay for a new solution when the benefits of the offered solution did not outweigh the switching cost of existing 'imperfect' solutions that they had learned to live with.

4. Technology Failure

The Segway PT (Personal Transporter) was a marvel of technology: a two-wheeler, stand-up, single-rider electric scooter with a maximum range of twelve miles on a single charge at speeds of up to 12.5 miles per hour. The machine was invented for the US city to get through traffic faster than the cars the citizens were used to. The machine was the brainchild of Dean Kamenexecuted in 2002, who set his sights on creating a new form of mobility for short distancesthat he envisioned would revolutionizethe way people would travel with a fast, convenient, and inexpensive way by providing the last-mile connectivity in urban environments for public transportationfor them toto get to their offices, shopping, and other destinations for their day-to-day local tasks foregoing the need for automobiles which they were presently using. The amount of technology that went into Segway PT – the gyroscopic sensors, the on-boardcomputer, and inbuilt software doing all the calculations that adjusted the speed as there were no brakes, to turn right or left, forward or backward while balancing the weight of the scooter with a single rider standing and riding on it,

swishing its way through sidewalks silently passing people walking along to reach their destinations.

The world was not ready for such an electric scooter that required new skills for learning to ride standing with no protection from bad weather elements, especially during winter, lack of infrastructure for recharging, surprise and annoyance of pedestriansusing the sidewalkswho didn't like a 'ghost' swishing past them silently catchingthem by surprise. The traffic police in each state didn't approve the use of a contraption on the roads that they thought was unsafe for public use as it had no protectionfor rider safety while running alongside other fast-moving cars, buses, and trucks.Besides, the rider required new skills in learning to ride it to familiarize himself with the technology employed in it. And to make matters worse, there were a few accidents that caused severe injuries to the riderwhen the self-balancing mechanism failedand threw the rider off balance.In 2006, the U.S. Consumer Product Safety Commission issued a voluntary recallof the Segway scooters. The recall also revealed an uncomfortable truth about the companythat had sold only a fraction of the projected millions of units in sale resulting in an over-hyped disappointment. The company was sold off to Ninebot, a Chinese electric scooter manufacturer. By 2015, the technology applied in Segway was adopted to develop an electric scooter in China that was sold to the public at a fraction of the cost of Segway price in the U.S.A and became a huge success as an alternative to the bicycles that the natives were used to. Thus the technology that was a failure in the U.S.Abecame successful in China and later in many other countries that adopted the technology as a base to develop their versions of electric scooters.

5. Product Failure

Electric and Music Industries (EMI) was a pioneering British Company founded in 1931 to produce both sound recordings and the equipment necessary to record and play them back. The company branched from those early roots, playing a key role in the invention, development and production of television broadcasting equipment and cameras, radar, guided

missiles, stereo sound recording, and computers. However, the phenomenal success of a rock-and-roll group out of Liverpool, England – the Beatles – generated millions of dollars for the company, helping it fund initiatives on the technology side of the business. One such venture was the CT (Computed Tomography) scanner in 1967. A CT scanner uses a rotating narrow beam of X-rays combined with computer processing to create two-dimensional "slices" of the images of the body parts to create three-dimensional images that can be rotated to see the patient's problem from various angles by the doctors treating them. The product was revolutionary in 1972 with patents protecting the invention and intellectual property rights and the company was flush with resources as the product was purchased and used by almost all hospitals, the world over. The sky seemed to be the limit. EMI had the proverbial first mover advantage. Yet that alone was insufficient in a business world to sustain the market leadership.

While many entered this field employing alternative technologies but faded away in due course, two global companies with well-established medical divisions, Siemens and General Electric emerged as leaders in CT technology, introducing their own machines at competitive prices. The demand for EMI scanners that peaked in 1977, plunged in the next few years as competitors gained market share. Eight years later, EMI exited the CT business altogether selling its stakes to General Electric.

The saga of EMI and its CT scanner exploded the myth that the first mover, the creator of a product category, was preordained to win. In real life, the second mover with a better product to serve the customers' needs won. Ultimately, with CT scanners, the winner was Siemens which overtook General Electric, to become the market leader.

6. Team Failure

Hiring what you think is the best talent is a common form of team failure warns the author. Great companies aren't built by lone geniuses. Instead, they are built by incredible collections of talent. The history

of businesses is littered with failures because an inventor could not assemble the critical mass of talent to get the project started or could not scale up because of leadership, and culture setbacks to keep up with growth and competition. Even a lone genius like Jeffrey Katzenberg at Disney succeeded by assembling a talented animation team that produced some of the company's most enduring films, including *The Little Mermaid, Beauty and the Beast,* and *The Lion King.*

Ideally, people like to grow with the company and the company needs to create headroom to bring in others who can add more to the talent pool and can take the company farther. As the company scales up the new person recruited should be more talented than the existing team members to bring fresh ideas, and technology, and better fit to work with existing teams to strengthen people's capabilities to avoid failure. A case in point is Steve Jobs and his vision for the future that set Apple's direction. He depended on teams of talented people to turn his remarkable vision into reality. Recruiting the very best people can become a disaster if they cannot get along with other people. So it is the attitude, talent and people skills in the right balance who can work in teams and provide leadership that can contribute to success in any organization. The success of Google, Microsoft, and Cisco, to name a few, has a critical mass of talent to scale new heights with a work culture to keep up growth and take on competition.

7. Timing Failure

The product idea that a company has needs to be tested thoroughly to decide whether it is a solution to the pain point the company has identified. Very often companies are so obsessed with the product and the solution it is going to provide, that they fail to see the associated problems the product is creating for the consumer. When smartphone technology was established and apps for many ventures were created and loaded onto the phone, many services such as transport, food, clothing, and location maps, to name a few, were established as solutions. Timing played a very important role in all these business opportunities.

Hence, the timing of a business should answer the vital question as to whether it is a pain killer or a vitamin. The timing of the painkiller needs to be thoroughly examined to understand the solution it is providing to the painpoint. Uber and Ola are companies that timed their establishment in India to provide viable transportation solutions in metro cities as an alternative relief from using the existing congested public transport infrastructure through an ecosystem that already had very high smartphone ownership using existing technologies. The solutions created value for the price the consumer paid for the service that was deeply associated with the pride of owning smartphones.

8. Business Model Failure

The business model analyses the entire business that the entrepreneur has conceived. What is the product, who is the customer, and what is the differentiating factor. The economics of the operation, namely the sources of revenue and the costs, needs to be identified. Putting all these things together checks if the hypothesis holds good as a solution to the pain point. If it holds, then there is a business opportunity on hand. To what extent can this business be scaled up and to what extent it can withstand competition are other factors that must be considered. A dispassionate analysis of all the factors in the business model can avoid early failure and sustain it while it establishes to meet unforeseen future challenges.

9. Execution Failure

In any kind of business endeavor, once the customer need has been identified, the technology to be employed has been figured out, the product has been decided, the timing is right, the right team is in place, with a profitable business model, then it would seem success is virtually assured, right? Not necessarily. Whether you are a startup or an established incumbent, you need one more thing to win the race advocates the author. And that is execution that makes the difference and decides who will win and who will lose, which is why it demands the focus of the entrepreneur in the dispassionate final analysis of the execution. Anticipating what can go wrong in the execution and how quickly it can be put right can go a long way in earning customer confidence, delight, and retention. The degree of employee empowerment plays a vital role in the execution phase of a business.

10. Conclusion

The book is a must-read for any entrepreneur to analyze his business venture from the perspective of where things can go wrong. It helps him or her to work out his business plan from the standpoint of a venture capitalist and prepare it dispassionately with honest answers to all the vital questions. Every business venture has its risks. However, anticipating the areas of failure can mitigate the impact of such risks. And that is an important step in conceptualizing a business plan. The author has been successful in cautioning and sensitizing entrepreneurs to this important factor. Anticipation of failure sharpens the vigilance instincts of startups. In short, this book is a prescription and wake-up call for entrepreneurial complacency.

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1. The paper should be based on original research work not yet published, not exceeding 8000 words. If the paper has been sent for publication elsewhere, that fact must be notified.

2. The paper must include the title, author's name, designation, mailing address, mobile number and e-mail address in the first page.

3. An abstract should not exceed more than 250 words. Along with the abstract, author(s) need to specify four to six key words in the second page.

4. Soft copy must be submitted in A4 size, MS-Word format only in Times New Roman with heading of 14 font size and remaining text size 12 with spacing 1.5 as a single line. There must be no tab for the first sentence of every paragraph.

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10. All references have to be arranged in alphabetic order and must be numbered.

11. The internet sources must be placed after other references and must be numbered separately.

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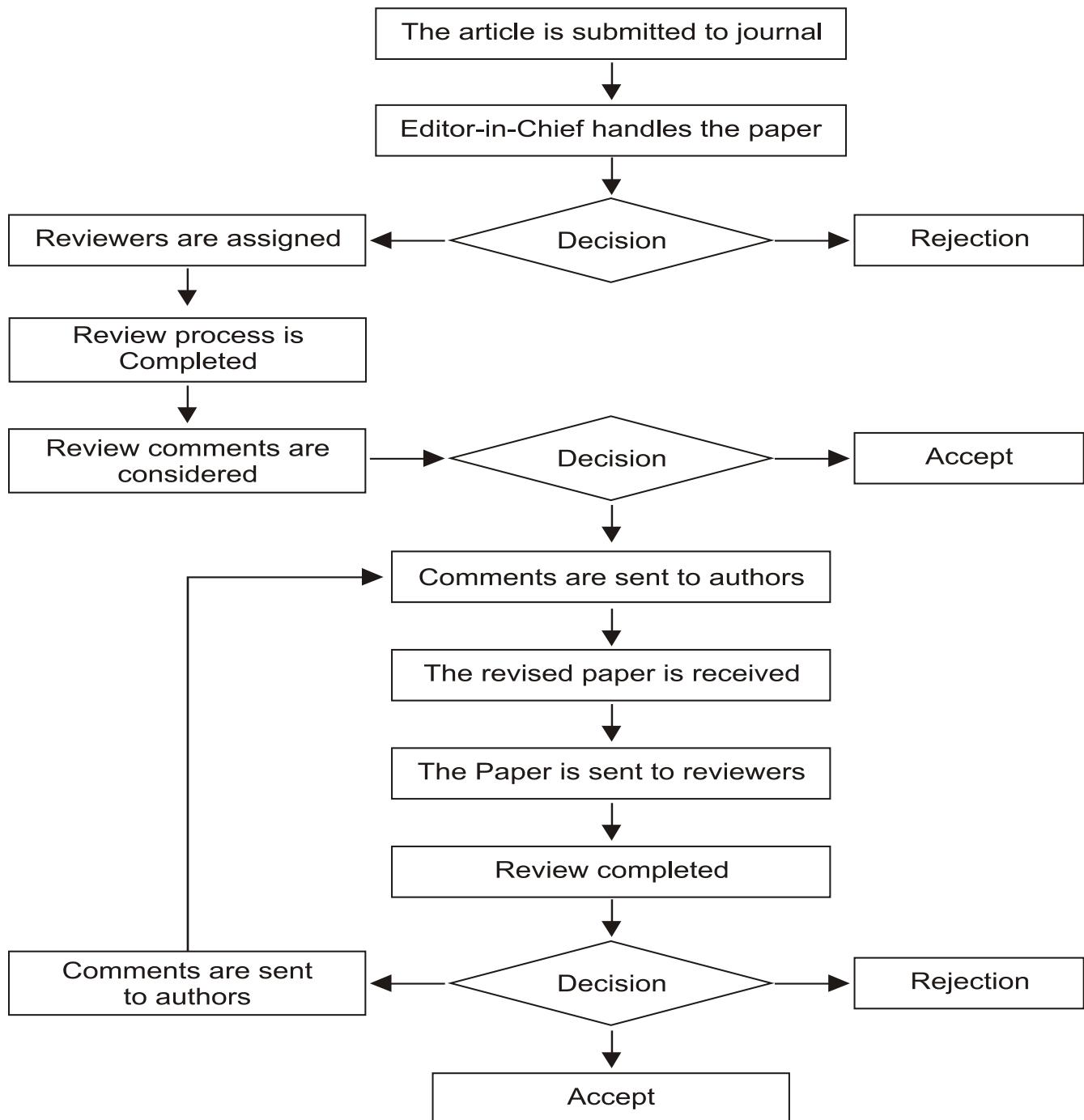
Theme for the Next Issue:

"Business Case Studies"

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The theme of the volume 14 Issue 1 of AMBER is **"Business Case Studies".** We seek submissions from academicians, industry experts, entrepreneurs and research scholars. Submissions, if found eligible, will be put through two stage blind review process by external reviewers. All submissions must be sent to amber@abbs.edu.in

Business Case Studies

Business Case Studies are important as they help us understand how real-life business scenarios are different from any other kind of learning. Businesses are dynamic, meaning they are susceptible to external forces. A business case study tells us how a particular business responded to a unique situation. Other businesses can learn from them and be prepared for what can happen, how-to, or how not to respond to a similar situation. Case study gives the readers a chance to apply theory to a real-life situation, analyze, and draw insights. The business case study can be a fictitious account of a business situation provided by the instructor to check the critical thinking and problem-solving skills of the readers to a greater extent. Some of the case studies featured highlight the decision-making process in a business or management setting. Other cases are descriptive or demonstrative in nature, showcasing something that has happened or is happening in a particular business or management environment. Whether decision based or demonstrative, teaching cases give students the chance to be in the shoes of a protagonist. With the help of context and detailed data, students can analyze what they would and would not do in a particular situation, why, and how. These case studies offer readers the opportunity to think along with a small-business owner who has confronted an interesting challenge.

Guidelines for Publication:

* The paper should be based on original research work not yet published, not exceeding 8000 words. If the paper has been sent for publication elsewhere, that fact must be notified.

- The paper must include the title, author's name, designation, mailing address, mobile number and e-mail address in the first page.

- Abstract should not exceed more than 250 words. Along with the abstract, author(s) need to specify four to six key words in the second page.

- Soft copy must be submitted in A4 size, MS-Word format only in Times New Roman with heading of 14 font size and remaining text size 12 with spacing 1.5 as a single line. There must be no tab for the first sentence of every paragraph.

- Abstract and full paper should be sent as a word document only (Either as Doc. Or Docx.).

- No publication fee would be charged.

- Manuscripts would be checked for plagiarism.

- The third page must contain the title followed by the body of the manuscript.

- Manuscripts are reviewed through 2 stage blind peer review system by experts in the subject area. To ensure anonymity, the author's name and other details should only appear on the first page and should not be repeated anywhere else.

- All references have to be arranged in alphabetic order and must be numbered.

- The internet sources must be placed after other references and must be numbered separately.

- The reference must be present in APA Format.

- The Author is required to sign copyright form.

Quick Note:

Soft copy of the paper must be emailed to **amber@abbs.edu.in**

IMPORTANT DATES

Last Date of Submission of Full Paper:

20th March 2023

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