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THE BALANCE SCORE CARD– PERFORMANCE MEASUREMENT TOOL- A STUDY WITH REFERENCE TO TII (TUBE INVESTMENTS OF INDIA) LIMITED IN CHENNAI CITY

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ABSTRACT

Organizations need to respond to a rapidly changing global environment. In order to achieve increased and sustainable results, Organizations need to execute strategies and engage employees. Performance of organization is measured by analyzing where the organization is in regards to its goals and its mission. It can either view their challenges as competition with others or as opportunities to push them closer to reaching their full potential. This study is focused to determine the performance of the organization in four perspectives to measure its health. Balance scorecard helps organizations to clarify their strategy and communicate the business's top strategic priorities and objectives. Each of these perspectives focuses on different side of the company and creating balanced view of the organization. The Balance scorecard sets out the principle of performance management by balancing four perspectives namely Financial, Customer, Internal process, Learning and growth. This paper aims to increase the better understanding of Balance score card framework which could be used as a potential inclusive tool that strives to improve overall organizational performance.

KEY WORDS: *Perspectives, Balance score card, Strategic management, Mission-oriented process, Key Performance Indicators (KPI), Responsibility accounting system.*

INTRODUCTION

In today's corporate world which is dominated by competitiveness and where excellence makes all the difference, the challenge for managers is to maintain a system that can provide useful, fair and accurate information, aiding always delicate decision-making process.

Balance score card is seen as the ideal tool for its ability to integrate Strategic, operational and organizational actions in a company to focus on total quality. The Balanced Scorecard is a systemic and strategic tool of measuring performance of an organization.

The Tube Investment of India limited uses a Balanced score card technique which balances financial and Non-financial measures to achieve organizational sustainability.

BSC TERMINOLOGY: KEY PERFORMANCE INDICATORS

Strategic KPIs monitor the implementation and effectiveness of an organization's strategies, determine the gap between actual and targeted performance and determine organization effectiveness and operational efficiency. GOOD KPIS:

- Provide an objective way to see if strategy is working
- Offer a comparison that gauges the degree of performance change over time
- Focus employees' attention on what matters most to success
- Allow measurement of accomplishments, not just of the work that is performed
- Provide a common language for communication
- Help reduce intangible uncertainty

REVIEW OF LITERATURE

Stephen Amling (2018): At present the buzz word among the global – companies is the abolishing of annual performance reviews. And, at present many organizations are re-designing their appraisal policy. The, new policy of appraisal should design in such a way that it creates a immense faith and trust between the manager and the employees, but not like putting” old wine in the new wineskins”.

Adobe (2017): Adobe a multi – national software company has totally abolished its annual- appraisals, and instead they introduced “CHECK – IN” in the year 2012. By using the stated appraisal technique where the employees and managers have regular, informal conversations to set clear expectations, give frequent feed – back and talk about their career growth.

Ms. Ramila Ram Sing, Dr. S. Vadivelu- (2016): Performance appraisal (PA) has been a significant tool in developing the capabilities of an individuals and organizations.

Valmohammadi and Ahmadi (2015): The author in his research paper on performance of employees in petrochemical company regarding evaluation of knowledge management (KM) practices on organizational performance. The effects of seven critical success factors (CSFs), namely leadership role, organizational culture, KM strategy, processes and activities, training and education, information technology, and motivation and rewarding system, on organizational performance in the framework of four perspectives of balance scored card (BSC) approach were surveyed.

Momeni, M., and Ghasemi, A.R. (2014): The author stated some indexes are necessary for performance evaluation of a management system. Balanced scorecard (BSC) is used in order to extraction of these indexes for evaluating the necessary performances in the process.

OBJECTIVES OF THE STUDY

1. To explore and describe the Balanced Score card System (BSC) and practices followed in Tube Investments Of India Limited
2. To examine the four perspectives of Balanced score card system towards TII’s activities in gaining competitive edge
3. To study the design of Balanced score card reflecting cause and effect relationship between outcome (lag measures) and critical drivers (lead measures)
4. To realize the significant benefits from the score card system
5. To study the impact of Balanced score card in Individual Performance and Organizational Development.

HYPOTHESIS

There is no significant relationship between the Experience of the employees and Effective Internal process management. The attributes are independent.

SCOPE OF THE STUDY

This study aims to explore an approach to manage and measure the implementation of Balanced score card practices at TII Limited. It aims to increase the understanding of performance framework which could be used as a potential inclusive tool that strives to improve overall TII's performance.

METHODOLOGY

To achieve the above stated objectives Field visit is undertaken to observe the process of performance framework at TII. Primary data is collected through well structured questionnaire which is distributed to the employees of TII. Secondary data is collected from books, journals, Articles, Annual reports, Financial statements, Performance sheets, Feedback forms, websites etc. A sample of 150 respondents was selected from three divisions of 50 employees from each division using stratified sampling technique.

TOOLS FOR ANALYSIS: In the present study, Chi-square has been used.

Chi-Square Analysis: Chi square test is non-parametric test to test Hypothesis.

TUBE INVESTMENTS OF INDIA LIMITED- A BRIEF PROFILE

Post restructuring, Tube Investments of India Limited is mobility focused manufacturing company from the Murugappa Group, one of the oldest and most diversified business houses of India. The business interests span across products like steel strips, tubes and tubular components, bicycles and fitness products, chains for automotive and industrial applications, metal formed parts for automotive, railways, industrial gears and automotive dies. The Company has a network of 17 manufacturing units located close to the major manufacturing hubs with Just In Time (JIT) supply capabilities.

Going forward, the competitive advantages of high-quality operational and technical expertise, strong relationship with customers and unique positioning to gain from the growth of both two wheelers and four wheelers will cement the company position in India. The company novel approach towards enhancing productivity and adding value added products in the portfolio will prove to be a morale booster for the stakeholders who always look forward to value creation.

DIVISIONS OF TII

ENGINEERING DIVISION: Tube Products of India, Avadi, Chennai

Manufacturing of high precision, safety critical CDW and ERW tubes, tubular components, large diameter tubes for hydraulic cylinders and off-road applications, and special grade Cold rolled Steel Strips (CRSS).

BICYCLES AND COMPONENTS: TI Cycles of India, Ambattur, Chennai

Manufacturing and marketing a wide range of bicycle brands, fitness equipment and accessories. The bicycle range include standard commute bicycles to premium bicycles for kids, the health conscious, the urban commute and performance cycling. The company's brands command a leadership position in India.

METAL FORMED PRODUCTS: TIDC India, Ambattur, Chennai

Manufacturing and supply of auto and industrial chains, fine blanking components. Motor casings and metal formed products for automotive, industrial and railway segments.

VALUES AND BELIEFS OF TII: THE FIVE LIGHTS

As a distinct manufacturing enterprise that is fresh out of restructuring, we would be able to channelize our resources into boosting technical and operational efficiencies. We aim to achieve our goal by leveraging our focus in the areas of product research and development, project planning, technology and innovation. Even as we embark on a new journey, we continue to be guided by the five lights of TII – integrity, passion, quality, respect and responsibility.

INTEGRITY	The light of integrity that gives the company courage to do the right thing.
RESPONSIBILITY	The light of responsibility that gives the company humility to think about the world.
PASSION	The light of passion that provides the company with the desire to win
RESPECT	The light of respect that inspires people around the company to perform.
QUALITY	The light of Quality which makes the company dream of excellence.

PURPOSE OF PERFORMANCE APPRAISAL

Administrative purposes:

Determining Compensation changes- salary and increment
 Determining promotion decisions
 Facilitating layoff or downsizing decisions
 Hiring decisions- selection procedure
 Supporting manpower planning or succession planning
 Encouraging performance improvement- Rewards and awards

Developmental purposes:

Providing Feedback to employees about their performance
 Motivating Superior performance
 Counseling poor performers
 Encouraging coaching and mentoring
 Determining Individual training and development needs
 Improving overall Organizational performance

POPULAR PERFORMANCE MANAGEMENT SYSTEM APPROACHES

- MBO - Management by Objectives
- Hoshin kanri - “Strategy deployment”
- BSC - Balance Score Card
- EFQM - European Foundation for Quality Management
- Du pont

PERFORMANCE APPRAISAL APPROACH AT TII - BALANCED SCORE CARD

The name “Balanced score card” comes from the idea of looking at strategic measures in addition to traditional financial measures to get a more “balanced view of performance”. This focus on both High –level strategy and low level measures that sets the balanced scorecard apart from other performance management methodologies.

The Balanced Scorecard (BSC) is a systemic and strategic tool of measuring performance of the TII Limited. It is a tool which enables manager’s to monitor and measure the different levels of performance activities done

by their staff members at various levels. It also helps them to control and make decisions basis on performance results. A survey of IMA members in management positions indicates that 88% of regular users of the balanced scorecard believe it has led to improved operating performance.

TII'S BALANCED SCORE CARD: "Survive, Succeed, Prosper"

FINANCIAL PERSPECTIVE: The Key objective that is related to the company's financial health and performance included in this perspective.

- **REVENUE SOURCES**

TABLE 1: REVENUE POSITION OF TII IN THREE SEGMENTS (In Crores)

YEAR	ENGINEERING DIVISION	BICYCLE AND COMPONENTS DIVISION	METAL FORMED DIVISION
2018-2019	2375.85	1311.14	1405.48
2017-2018	2076.93	1358.69	1344.87
2016-2017	1629.35	1485.33	953.73
2015-2016	1724.67	1314.25	929.38

The revenue position of the company is in increasing trend by year by year except Bicycle and components division with limited short fall. The revenue growth of the company is quite satisfactory in improving their financial health and performance.

- **PROFIT MARGIN:** Increasing operating Profit margin.

TABLE 2: OPERATING PROFIT OF TII IN THREE DIVISIONS (In Crores)

YEAR	ENGINEERING DIVISION	BICYCLE AND COMPONENTS DIVISION	METAL FORMED DIVISION
2018-2019	174.92	1.74	93.28
2017-2018	145.78	35.73	86.45
2016-2017	94.57	79.29	85.96
2015-2016	102.89	57.75	81.26

The operating profit margin of TII in Engineering and Metal formed divisions are highly good in growth. The Performance factor of bicycle division is need to be concentrated in controlling their deficiency in yet coming years.

- **COST SAVING AND EFFICIENCY:** Goal to reduce production cost by 10% by 2020. The Company recorded a growth of 5% in revenue and more significantly 69% in the net profit.

CUSTOMER PERSPECTIVE

The perspective focuses on performance objectives that are related to Customers and market.

- **MARKET SHARE:** Growing market in segments.

TABLE 3: GROWTH OF SALES OF TII IN THREE DIVISIONS (In Crores)

YEAR	ENGINEERING DIVISION	BICYCLE AND COMPONENTS DIVISION	METAL FORMED DIVISION
2018-2019	1993.16	1476.62	1339.26
2017-2018	1770.14	1347.52	1296.11
2016-2017	1463.45	1307.41	908.27
2015-2016	1405.16	1302.65	874.92

The sales growth of TII products are raising year by year proves their performance level in the markets. The products of TII satisfy the customer needs which leads to high demand for their products in the market.

- **Customer service and satisfaction**
- **Brand awareness:** increasing interactions on social media
- **Responsive supply**

INTERNAL PROCESS PERSPECTIVE

Internal Operational Goals and objectives include

- **Process improvements:** Streamlining internal approval process
- **Quality optimization:** Reducing manufacturing waste
- **Capacity Utilization:** Using technology to boost efficiency

Technological Advances

High Strength Hydroformable Tubes: Used for twist beams of cars, these tubes fall in the safety-related product category. The Company has increased the strength of the tubes through induction heating technology while still retaining its formability.

Straightening machines for tube processing: In-house design, development and manufacture of straightening machines for tube processing has helped improve process capabilities in manufacture of precision tubes like tubular front forks for motorcycles.

Machine vision systems: Machine vision system have been deployed for inspecting fine blanked parts and automotive chains. These systems are intended for ultimate use in car seating safety systems and motor cycles.

LEARNING AND GROWTH PERSPECTIVE

This perspective considers the most intangible drivers of performance:

Human Capital: Skill, Talent and Knowledge- Skill assessment, Performance management scores, Training Effectiveness

Information capital: Databases Information System, network and Technology Infrastructure- Safety system, Data protection system, infrastructure investments.

Organizational Capital: Culture, Leadership, Employee Alignment, Teamwork and Knowledge management.

PERFORMANCE ENRICHING APPROCHES OF TIDC

To attain Balance scorecard four perspectives mentioned above, the following programs are undertaken by TII to bring Excellency in performance.

1. **HPWS-** High Performance Work System through 5s in the workplace. 5S- Sort, Set in order, Shine, Standardize, Sustain.
2. **SOP policy-** Standard Operating Procedures.

3. **IDPs Plan**- Individual Development Plan.
4. **Develop Productivity System** by eliminating 3Ms
“Muda-Waste” “Muri- Over Burden” “Mura-Unevenness”
5. **DWM**- Daily Work Management
6. **FMEA**- Failure Mode Effect Analysis
7. **OPEX GOAL**
 - PQCDSDM MODEL- Production, Quality, Cost, Delivery, Safety, Morale
 - MET FUNCTION - Manufacturing Engineering Technology
 - CTC FUNCTION - Corporate Technology Centre
8. **SHE POLICY**- Safety Health Environment Policy.
9. **CSR**- Corporate Social Responsibility.
10. Leadership and Transition Management Program.
11. Employee Relation and Engagement Program
12. Capacity Building Program.
13. **TEI**- Total Employee Involvement.

PERFORMANCE CITATIONS OF TII

Awards and recognitions continue to fuel the company’s journey of excellence. TII’s continued focus on growth, value creation and innovation has won many awards. Some of the awards that they have won in the previous year for their operational excellence in the three divisions are:

- Star Performer Award for Exports from EEPCC
- Global Strategic Supplier Award from Showa (Japan)
- Outstanding Kaizen Award from QCFI
- Award from Wipro for consistent improvement in quality
- Best Emerging Brand Award for Mach City,
- CII Design Excellence Award for BSA Lady Bird
- The Bajaj Auto Limited Award for Fine Blanking Quality and TPM Excellence,
- The Quality Commitment (Zero Defect) Award from Autoliv,
- The Quality Award from Maruti Suzuki India Limited for Fine Blanking

TABLE 4: PERCEPTIONS OF EMPLOYEES ABOUT PERFORMANCE APPRAISAL SYSTEM IN STIMULATING THEIR ENHANCEMENT

S.N	OPINION OF THE RESPONDENTS	HIGH	MODERATE	LOW
1.	General and technical capability	80	50	20
2.	Inter personal skill development.	90	47	13
3.	Job Involvement	75	68	7
4.	Job Satisfaction	84	56	10
5.	Level of motivation	70	50	30
6.	Personal career management	72	52	26
7.	Self rated potentialities	68	57	25
8.	Association with Colleagues	76	62	12

INFERENCE: It is inferred from the above table that Performance assessment will help the employees to improve their enhancement in various areas in higher mode and found to be moderate and satisfactory. In certain point of employees it is found to be dissatisfactory which need to be concentrated and resolved in an effective manner.

TABLE 5: RESPONDENT'S VIEWS OF IMPORTANCE OF PERFORMANCE APPRAISAL IN ACHIEVING THE INSTITUTIONAL OBJECTIVES

S.N	OPINION OF THE RESPONDENTS	STRONGLY AGREE	AGREE	DISAGREE
1.	Increased Organizational commitment	75	47	28
2.	High Consciousness of work ethics	81	45	24
3.	Awareness of Business strategy	79	58	13
4.	Adaptability to work environment	83	52	15
5.	Effective Internal process management	90	50	10
6.	Improved Customer satisfaction level	85	49	16
7.	Increased Profits and growth position.	92	48	7

INFERENCE

More than half of the respondents strongly agreed about of achieving institutional objectives through performance measurement approach in TII.

Nearly 50% of the respondents agreed that achieving institutional objectives is quite improving due to effective performance measurement.

Less than 20% of the respondents disagree the effectiveness of the measurement and achievement. Steps should be taken and analyze the minor deficiencies and focus towards Maximum growth of the organization

IMPLICATIONS OF RESEARCH FINDINGS

All the four perspectives in the Balance Scorecard contributes the performance measurement and suggests improvement areas which are completely based on weight ages assign to each parameters. The business model is visualized in Strategy Maps which forces managers to think about cause-and effect relationships. At the present time, performance assessment is well thought-out as an imperative feature in human capital administration and an element of the control process in management.

The Balanced Scorecard approach forces organizations to design key performance indicators for their various strategic objectives. This ensures that companies are measuring what actually matters. Research supports this as companies with a Balanced Scorecard approach tend to report higher quality of their management information as well as increasing benefits from the way this information is used to guide management insights and strategic decision making.

TABLE 6: CHI-SQUARE TEST ON EXPERIENCE AND EFFECTIVE INTERNAL PROCESS MANAGEMENT

OPTION	EXPERIENCE OF TII EMPLOYEES				
	OPINION/ YEARS	2-4 YEARS	5-7 YEARS	ABOVE 7YEARS	TOTAL
EFFECTIVE INTERNAL PROCESS MANAGEMENT	STRONGLY AGREE	18	30	42	90
	AGREE	13	14	22	49
	DISAGREE	7	3	1	11
		38	47	65	150

$$E=R*C/N$$

Where, R = sum of row total

C = sum of column total

N = sample size

OBSERVED FREQUENCIES (O)	EXPECTED FREQUENCIES (E)	2 (O- E)	2 (O- E) / E
18	22.8	23.04	1.010
30	28.2	3.24	0.114
42	39.0	9	0.230
13	12.41	0.35	0.028
14	15.35	1.82	0.119
22	21.23	0.59	0.027
7	2.79	17.72	6.351
3	3.45	0.20	0.057
1	4.77	14.21	2.979
150	150		10.915

Calculated value of chi- square = 10.915 approximately 10.92

Table value of chi-square

Degree of freedom = (row-1)*(column -1) = (3-1)*(3-1) = 2*2= 4

The chi-square table value at 5% level at 4 degrees of freedom = 9.49

INTERPRETATION: Since the calculated value 10.92 is greater than table value 9.49 the hypothesis is rejected.

RESULT

From the above test we conclude that the attributes are dependent and there is a significant relationship between the Experience of the employees and Effective Internal process management.

CONCLUSION

Organizations understand that in order to thrive in a competitive environment, they must make their processes deliver products and services better, faster, and cheaper. Performance measurement is a key enabler for developing and executing organizational strategies and business goals. The Balanced Scorecard assists organizations in measuring organizational performance and successfully implementing strategy. BSC gives solution to the problems related to strategy implementation to organizational goal, bringing all on board, establishing cause and effect relationship, adaptive learning or double loop learning.

BSC is that it makes possible to evaluate managerial activities from a broad viewpoint, by looking at both tangible financial aspect sand intangible non financial aspects. BSC having its root in practical application provides a means of measuring organizational performance and keep the companies looking and moving forward in the new age.

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