THE PRACTICES AND CHALLENGES OF BALANCED SCORE CARD IMPLEMENTATION: A CASE OF METAL INDUSTRY DEVELOPMENT INSTITUTE OF ETHIOPIA

BY
TESFAYE GEMECHU

JANUARY, 2019
ADDIS ABABA, ETHIOPIA
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A THESIS SUBMITTED TO ST. MARY'S UNIVERSITY SCHOOL OF GRADUATE STUDIES IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF PROJECT MANAGEMENT (MBA)

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DECLARATION

I, the undersigned, declare that this thesis is my original work, prepared under the guidance of Mr. Shoa Jemal (Assistant Professor) All sources of materials used for the thesis have been duly acknowledged, I further confirm that the thesis has not been submitted either in part or in full to any other higher learning institution for the Purpose of earning any degree.

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St Mary's University, Addis Ababa Jan, 2019
ENDORSEMENT

This thesis has been submitted to St. Mary's university, school of Graduate Studies for examination with my approval as a university advisor.

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List of Acronyms/Abbreviation

BSC: Balanced Scorecard

CSRP: Civil Service Reform Program

MIDI: Metal Industry Development Institute.

PMS: Performance Management System

BPR: Business Process Re-engineering

MOCB: Ministry of Capacity Building

MoCS Ministry of Civil Service

KPI: Key performance Indicator

ERP: Enterprise Resource Planning

MOFED: Ministry of Finance and Economy Development.

SPSS: Statistical Package for Social Sciences
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ABSTRACT

The purpose of this study was to assess the implementation of Balanced Scorecard (BSC) and recommend appropriate management development tools that fit with the newly redesigned processes so as to make the change effective and sustainable. The research was conducted at the Metal Industry Development Institute (MIDI) which started the implementation of newly designed processes. This study adopted a descriptive design employed to meet the research objectives by analyzing questionnaire, interviews, literature review and internets. The methodology used helps to acquire sufficient data and the contribution of the research was to reveal strengths and obstacles of BSC implementation indicate the required attitudinal change and suggest the role and commitment of leaders. Analysis of the collected data revealed that there was awareness on BSC but making it practical requires more than having a general awareness in their working environment. During the transformation process MIDI encountered challenges and also obtained improvements in the area of leadership, Structure, process and working environment aspects. With regard to assessing the BSC implementation, the capacity of leaders (process owners) and performers in few areas of the parameters was found to be satisfactory. In majority of the areas, observable gaps were clearly seen which required additional organizational development efforts. Further, from the transformational perspective, ultimate change result is expected in the mind set-up of leaders and employees that must show an excellent strategy, communication and performance changes in MIDI which is not yet observed so far. That is the point where everybody can say that the transformation process is effective and sustainable. In order to implement BSC system, MIDI should undertake measures like assessing existing BSC system, creating awareness on the needs to change/adjust strategies and structure, communication process and performance measurement systems, identifying and correcting newly developed BSC, conducting continuous assessment on the status of their implementation and developing integration mechanism of BSC with other organizational management systems.

KEY WORDS: BSC, process owners, transformation process, performance measurement system, communication process, continuous assessment, organizational management system.
CHAPTER ONE: INTRODUCTION

This chapter deals with the background of the study, definition of key terms, statement of the problem, objectives of the study, significance of the study, scope of the study, limitations of the study, and organization of the study. The details are presented as follows.

1.1 Background of the Study

The bilateral Assistance Agreement reached between the Ethiopia Government and the United Nations Development Program in 1981, lay a foundation for the establishment of the current Institute or any of the other former supporting Institute which were called by different names and lead the sub sector. Since, the establishment of the Engineering Design and Tools Enterprise in 1983, there was no any organized government institute which led the country’s Metals and Engineering Sub-sector. Thus, the Enterprise was established with the objective to contribute its own share to the overall economy of the country though Designing and Manufacturing Equipment, Tools and others materials.

Lately, as proclamation No.47/1989(E.C) caused the amalgamation of other institutes which carried out similar activities as Design and Tools Enterprise, the Basic Metals and Engineering Institute was established, with pursuant to Proclamation No.47/1989. The main objective of the Agency was product development and rendering industrial supports for sub-sectors industries. Thereafter, as the Proclamation No.47/1989(E.C) caused amalgamation of the other institute which carried out similar activities as Design and Tools Enterprise, the Basic Metals and Engineering Institute was established, in accordance with No.47/1989(E.C) the main objective of the Agency was product development and rendering industrial supports for sub-sectors industries.

The agency, after spending a certain period of time, discharging the responsibilities vested upon it, on July 2004 transformed to a new Center, with the new name, The Metals Products development Center, (MPDC), under pursuant to Proclamation No.411/2004. The main objectives of the Center, by then, was undertaking market oriented new product development activities, building up the capacity to design and manufacture technologies that are favorable to Micro and Small Industries and for rural
development as well. The Center, until fully handed over to the Current Institute ‘The Metal Industry Development Institute’ (MIDI), on May 2010, it was administrated under the former Ministry of Trade and Industry.

The Metal Industry Development Institute’ (MIDI) is established pursuant to Proclamation No.182/2010 of the council of Ministers. The objective of the Institute is to facilitate the development and transfer of Metals Engineering Industries technologies and to enable the industries become competitive and be gets rapid development.

Consequently, the Institute, to successfully realize the goals vested upon to the sub-sector in the second Growth and Transformation Plan years and execute the power and duties bestowed to it by low, it has installed and, is implemented Business Process Reengineering oriented strategic plan. This change process requires an all rounded change within and outside the institutions which demand new management style and techniques, new way of working and collaboration, planning and implementation mechanisms. New interventions in management and modern styles of delivery shall be adapted by the people and around the institutions.

In the year 2001, Federal democratic Republic of Ethiopia (FDRE) designed new policy documents, the Civil Service Reform Program (CSRP) to reform the Ethiopian Civil Service in order to improve the effectiveness and efficiency of the civil service. The policies are directly applicable to the federal Ministries, Commissions, Public Authorities/enterprises and Municipal Administration as well as other Agencies.

They are looking for any best mechanisms which will take them to a competitive edge. The Ethiopian public service organizations are not exceptional from this reality. As a result public service organizations are looking for appropriate tools and techniques which are appropriate to their specific situation. One of the change tools which are implemented by many civil service organizations is the Balanced Scorecard (BSC).

It was originated by Robert Kaplan (Harvard Business School) and David Norton as a performance measurement framework that added strategic non-financial performance measures to traditional financial metrics to give managers and executives a more 'balanced' view of organizational performance.
BSC is a management system (not only a measurement system) that enables organizations to clarify their vision and strategy and translate them into action. It provides feedback about the internal business processes and external outcomes in order to continuously improve strategic performance and results. This paper focuses on assessing the practices and challenges of Balanced Scorecard implementation which inhibit the system and recommends possible solutions.

1.2 Definitions of Terms

Public institution /sector: Nonprofit making government organization which aims at serving citizens /http://www.collinsdictionary.com


Strategic management: is an art and science of formulating, implementing, and evaluating cross-functional decision that enables an organization to achieve its 22objectives (David, 2011).

Performance measurement: is a process of reviewing progress towards achieving predefined goals and objectives (kairuet.al, 2013)

Performance management: is the process for ensuring employees focuses on their work in the ways contribute to achieving the organization’s mission (Zang Ying Ying, 2012)

1.3 Statement of the Problem

The Balanced Scorecard (BSC) framework, introduced by Kaplan & Norton (1992), was an attempt to integrate all dimensions, having high importance for the management of performance; Balanced Scorecard is one of the best available approaches providing the overview of the strategy of a company or a business unit. Thus, the researcher expects the Balanced Scorecard to be a relevant tool for providing a measurement and assist to improve performance efficiency.

The reform process of the Ethiopian public and civil service organizations was started after the report produced by the task force which assessed the practice of civil service organizations in the country. The Balanced Scorecard translates an organization’s mission and strategy into a comprehensive set of performance measures that
provides the framework for a strategic measurement and management system (Kaplan and Norton, 1996).

Although many different organizations are using the BSC as a management technique to implement corporate strategy, a number of them have encountered different problems when trying to introduce the concept in their business. Majority have either implemented the BSC but without any significant improvement in performance, or they have given up in the implementation process itself. What makes the implementation of the BSC so difficult? A literature review and different cases used to identify reasons for Balanced Scorecard implementation challenges on support and service delivery. Taking this as a foundation, it should be assessed if there is any relation between the many reasons discovered by researchers and the reasons identified as causing the Balanced Scorecard implementation challenged on Lack of commitment at the top management level, measurement of employee performance/appraisal and/or the assigned task to the employees/customers, Confusion on BSC results, Lack of skill in setting strategic theme at organization level and cascading objectives to core and support process, and individual level of core and support directorate in organization.

Based on above information, it is evident that though studies have been done on core and support directorate, limited studies have been done on Balanced Scorecard implementation challenges on Institute on core and support directorate, mainly on Institute activities. Thus, the aim of this study is the practices and challenges of Balanced Scorecard implementation in Institute.

1.4 Research Questions
This study was formulated under listed questions based on statement of problem.

1. To what extent the BSC implementation get the proper commitment from the leadership?
2. What measures have to be taken to make the BSC a success?
3. To what extent the attitude of performers towards BSC implementation?
4. What are the major gap and challenges of BSC implementation?
1.5 Objectives of the Study
The research has the following general and specific objectives

1.5.1 General Objective
The general objective of the study is to assess the practices and challenges of Balanced Scorecard implementation as a strategic management tool in MIDI.

1.5.2 Specific Objectives
The research tried to achieve the following specific objectives:

- To indicate the importance of leadership commitment during the preparation and implementation stages
- To analyze the perception and attitudes of performers and leaders towards BSC
- To identify gaps found during the implementation process that needs to be minimized.
- To suggest appropriate mechanisms of implementing and developing BSC to achieve success.
- To identify major challenges of balanced scorecard implementation in Metal Development Industry Institute of Ethiopia.

1.6 Significance of the Study
As Balanced Scorecard implementation is a new strategy to MIDI (Ethiopian organization as well), it important to assess the implementation. This has enabled the organization to strengthen and overcame challenges, and contribute as input for decision makers (Executives and Process owner) selection of Balanced Scorecard appropriate as tool or arrange of alternative Strategic tools suitable for the Metal Industry Development Institute in Ethiopia.

The researchers strongly believe that the result of the research gives the following benefits, among others.

- It helps the researcher to acquire knowledge and practical experience about Balanced Scorecard and also for the partial fulfillment of the requirements for Master’s Degree in Business Administration.
• Private and government metal sector beneficiary from this study help to know the trend of strategy from the research.
• It provides valuable information to the Institute about how it has been working towards creating awareness and shaping the attitudes of its employees;
• To undertake further research on the subject matter.

1.7 Scope of the study
One of the most effective business tools helps us to predict our score in advance by setting and achieving on a consistent basis is Balanced Scorecard. The Institute which implemented BSC, the study focus on the MIDI. The criteria for the selection of this institute is accessibility of information, proximity and familiarity of the institute to the researcher. MIDI has three sectors and support process (11 core and 9 supported directorate) totally 20 directorate allover within the institute. It was difficult to consider this entire directorate members because of work culture of MIDI; Therefore, this study is only limited in 20 (twenty) core and support directorate. In this respect, director, team leaders, senior expert and expert, are considered as prime source of primary data collection and analysis; this is due to the reason that they were crucial actors in the implementation of BSC at investigation area.

1.8 Limitation of the study
The researcher had faced different limitations in the process of collecting relevant information such as lack of cooperation of the respondents and their commitment to complete filling the questionnaires as well as delaying in responding the questionnaires.

1.9 Organization of the paper
The research paper has five chapters. The first chapter includes introduction; background of the study, definition of key terms, statement of the problem, objectives of the study, significant of the study, scope of the study, limitations of the study, and organization of the study. The second chapter deals with literature review. The third chapter dwells up on research design and methodology. The fourth chapter contains data analysis and interpretations of the study and the last chapter has summary of findings, conclusion and recommendation
CHAPTER TWO: REVIEW OF RELATED LITERATURE

This chapter was present some concept and framework of BSC in the implementation process. It contains BSC concept, Perspectives, Development, Building and implementing BSC, Performance Management System, Successful Step by Step Implementation of the Balanced Scorecard and Problems Implementing a Balanced Scorecard. The details are as follows.

2.1 Theoretical Literature

2.1.1 Balanced Scorecard Basics

The balanced scorecard (BSC) is a strategic planning and management system that organizations use to: Communicate what they are trying to accomplish, Align the day-to-day work that everyone is doing with strategy, Prioritize projects, products, and services and Measure and monitor progress towards strategic targets (Kaplan & Norton, 1996).

The system connects the dots between big picture strategy elements such as mission (our purpose), vision (what we aspire for), core values (what we believe in), strategic focus areas (themes, results and/or goals) and the more operational elements such as objectives (continuous improvement activities), measures (or key performance indicators, or KPIs, which track strategic performance), targets (our desired level of performance), and initiatives (projects that help you reach your targets) (Kaplan & Norton, 1996).

2.1.2 Balanced Scorecard Perspectives

Financial perspective

The financial perspective is important for all shareholders and other financial backers of an organization. It answers the question: “How attractive must we appear to our shareholders and financial backers?” This is mainly a quantitative benchmark based on figures.
In addition, it provides a reliable insight into the operational management and the sustainability of the chosen strategy. The delivered added value from the other three perspectives will be translated into a financial success. This is therefore a quantification of the added value that is delivered in the organization. After all in the balanced scorecard, when there is a higher added value, the profits will also be higher. (Kaplan & Norton, 1996)

**Customer perspective**

Each organization serves a specific need in the market. This is done with a target group in mind, namely its customers. Customers determine for example the quality, price, service and the acceptable margins on these products and/or services. Organizations always try to meet customer expectations that may change at any time. The existence of alternatives (those of the competitor) has a large influence on customer expectation. This perspective answers the question: “How attractive should we appear to our customers?” (Kaplan & Norton, 2000).

**Internal Business Processes**

From the perspective of internal processes the question should be asked what internal processes have actually added value within the organizations and what activities need to be carried out within these processes. Added value is mainly expressed as the performance geared towards the customer resulting from an optimal alignment between processes, activities and decisions. This perspective answers the question: “What must we excel at to satisfy our customers and shareholders/financial backers?” (Kaplan & Norton, 1996).
Learning and growth

An organization’s learning ability and innovation indicate whether an organization is capable of continuous improvement and/or growth in a dynamic environment. This dynamic environment is subject to change on a daily basis due to new legislation and regulations, economic changes or even increasing competition. This perspective answers the question: “How can we sustain our ability to achieve our chosen strategy?” (Kaplan & Norton, 2000).

The balance within

As the name suggests, the equilibrium or balance is an important principle in the balanced scorecard model. There must be a balance between the short-term and the long-term objectives, financial and non-financial criteria, leading and lagging indicators and external and internal perspectives. It is about cohesion in which an improvement in one perspective must not be an obstacle in another perspective. (Kaplan & Norton, 1996). This cohesion is reflected in the model through the mutually connected arrows between the four perspectives (Kaplan & Norton, 2000).

2.1.3 Balanced Scorecard Development

The Institute’s award-winning framework, Nine Steps to Success TM, is a disciplined, practical approach to developing a strategic planning and management system based on the balanced scorecard. Training is an integral part of the framework, as is coaching, change management, and problem solving. Emphasis is placed on “teaching clients to fish, not handing them a fish”, so the scorecard system can be sustained. (Kaplan & Norton, 2000).

A key benefit of using a disciplined framework is that it gives organizations a way to ‘connect the dots’ between the various components of strategic planning and management, meaning that there will be a visible connection between the projects and programs that people are working on, the measurements being used to track success, the strategic objectives the organization is trying to accomplish and the mission, vision and strategy of the organization. (Kaplan & Norton, 2000).
2.1.4 Who Uses the Balanced Scorecard (BSC)?

BSCs are used extensively in business and industry, government, and nonprofit organizations worldwide. Gartner Group suggests that over 50% of large US firms have adopted the BSC. More than half of major companies in the US, Europe, and Asia are using the BSC, with use growing in those areas as well as in the Middle East and Africa. A recent global study by Bain & Co listed balanced scorecard fifth on its top ten most widely used management tools around the world, a list that includes closely-related strategic planning at number one. BSC has also been selected by the editors of Harvard Business Review as one of the most influential business ideas of the past 75 years. (Kaplan R.S. and Norton D.P. 2000).

2.1.5 Balanced Scorecard implementation

The implementation of the Balanced Scorecard consists of a number of steps. The first step in this is that senior management sets up a mission, vision and strategy. This strategy is linked to a number of objectives which are referred to as strategic objectives. Then middle management is informed about the mission, vision and the strategic objectives. In an open discussion, managers can express their opinions, indicate the critical success factors per perspective and they can point out or set up indicators themselves so that these can be monitored in the future. For the financial and customer perspectives within the Balanced Scorecard it is possible to carry out a survey or conduct interviews among the (potential) shareholders or customers to assess what their expectations are. This could provide an insight into the direction of the objectives the necessary objective. (Kaplan R.S. and Norton D.P. 2000).
In consultation with middle management and senior management several objectives are formulated in which the different critical success factors are indicated per objective, the indicators are used to measure this, specific values such as targets and initiatives are meant to achieve these objectives. It is possible to go one step further by linking personal objectives to the objectives of middle management. As a result, all personal initiatives will contribute to the chosen strategy of the organization. The implementation of the Balanced Scorecard can be carried out in different manners. (Dragan Pujas 2010)

Broadly, this could include the following steps:
1. Set up a vision, mission and strategic objectives.
2. Perform a stakeholder analysis to gauge the expectations of customers and shareholders.
3. Make an inventory of the critical success factors
4. Translate strategic objectives into (personal) goals
5. Set up key performance indicators to measure the objectives
6. Determine the values for the objectives that are to be achieve
7. Translate the objectives into operational activities.

**BSC Strategic Objectives**

Strategic Objectives are the continuous improvement activities that must do to implement strategy. The break down the more abstract concepts like mission and vision into actionable steps, Actions that the organization takes should be helping to achieve the strategic objectives. Examples might include: Increase Revenue, Improve the Customer or Stakeholder Experience, or Improve the Cost-Effectiveness of the Programs. (Paul R.Niven, 2006)

**BSC Strategy Mapping**

One of the most powerful elements in the BSC methodology is the use of strategy mapping to visualize and communicate how value is created by the organization. A strategy map is a simple graphic that shows a logical, cause-and-effect connection between strategic objectives (shown as ovals on the map). Generally speaking, improving performance in the objectives found in the Organizational Capacity perspective (the bottom row) enables the organization to improve its Internal Process perspective (the next
row up), which, in turn, enables the organization to create desirable results in the Customer and Financial perspectives (the top two rows) (Paul R.Niven, 2006)

**BSC Measures (Key Performance Indicators)**

For each objective on the strategy map, at least one measure or Key Performance Indicator (KPI) will be identified and tracked over time. KPI’s indicate progress toward a desirable outcome. 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 (Paul R.Niven, 2006).

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

**BSC Cascading**

Cascading a balanced scorecard means to translate the corporate-wide scorecard (referred to as Tier 1) down to first business units, support units or departments (Tier 2) and then teams or individuals (Tier 3). The end result should be focus across all levels of the organization that is consistent. The organization alignment should be clearly visible through strategy, using the strategy map, performance measures and targets, and initiatives. Scorecards should be used to improve accountability through objective and performance measure ownership, and desired employee behaviors should be incentivized with recognition and rewards. (Paul R.Niven, 2006)

Cascading strategy focuses the entire organization on strategy and creating line-of-sight between the work people do and high level desired results. As the management system is cascaded down through the organization, objectives become more operational and tactical, as do the performance measures. Accountability follows the objectives and measures, as ownership is defined at each level. An emphasis on results and the strategies
needed to produce results is communicated throughout the organization. This alignment step is critical to becoming a strategy-focused organization. (Paul R. Niven, 2006)

2.2 Empirical Review

Principles of Balanced Scorecard are easily understood in terms of concept whereas to put them into action is too much vague and complex because of non-identifiable among: Operational and strategic performance management:-Implementation of the strategies; Cascading from top stage of the sector to employee position; Relation among strategic, financial and physical plan; and that becomes too much difficult to distinguish their bounders in order to accomplish. Thus, to implement effectively, all must be able to separate and interconnect these factors but everyone cannot link as per the system requests (Lonescu, 2012).

Even though balanced scorecard innovated since 1992, it was widespread everywhere in the world’s private and public organizations. But in public sector organization it has encountered with numerous obstacles. These impediments also aggravate by researchers’ point of view in stressing merely to private sectors rather than mutually emphasizing them (Kureshi, 2011)

Criticisms are comment to the current intellectual writings on the performance management instruments. However, one of study conducted by Bedford, Borown, Malmi and Sivabalan (2008) argued that recent researchers attention are only stressed on utilization of the performance management tool, especially BSC rather than considering the advantages how it practically makes variation in performance outcome. Thus, it aims at bridging the shortage of empirical review. (Kureshi, 2011)

Since the BSC innovation a lot of scholars have been said about its development, nothing is done about the next stage. So to fill this gap, Bento and White (2010) conducts an exploratory study in the company of empirical model with ambition of clarifying the major features of strategic performance management tools as well as their impact on organizational performance. In so doing, they classify the stages into three parts. First stage is ‘how to’, second stage is ‘what else’ and the third stage is ‘so what’. Then at the end of the day, they come up with a considerable impact on the organizational personnel management system and firms output too.
Know a days in developing countries, both management and information systems are transforming from traditional to modernization system. But there are still scare professional literatures on performance management implementation. Whereas, Balanced Scorecard trends slowly changes this scenario (Waal, 2007).

Public enterprises in Ethiopia impressed by the benefits of Balanced Score card, to this effect they always participate on performance review meetings and try to improve their communication system through internet and government also tries to enhance improvement of the performance critically (Tessema, 2005 as cited in Waal, 2007).

2.2.1 The Gap in the Literature Concerning BSC
With the intention of efficiency and effectiveness, both private and public sectors are adopted balanced scorecard system. To this effect, several impressive results and critical obstacles are recognized in implementing BSC. Because of the recent adoption of BSC in public sectors of Ethiopia, many researches are undertaken. Some of them are conducted by Adebabay (2011), Tilaye (2010) and Tamiru (2013). Thus still there are empirical gaps on the scheme.

2.3 Conceptual Framework
Balanced Score Card (hereinafter abbreviated as BSC) is the new performance measurement system. It is an extension of the traditional performance measurement system popularly known as "Rate of Return on Capital Employed" (ROCE) or Return on Investment (ROI) or its modified versions like Social Cost-benefit Analysis or Social Return. (Paul R.Niven, 2006)

Traditionally the corporate plans were mere financial plans and, therefore, corporate performance indicators were also basically financial ratios. Companies used to operate in a supplier's market where buyers were at the mercy of suppliers. They had no choice. Shortages and black-marketing, long waiting lists were the order of the day. Financial planning and control through financial tools of performance measurement were adequate to manage an organization. Inputs and outputs both were having supplier market conditions. (Paul R.Niven, 2006)

However, the environment of business has undergone a basic change during the last two decades. Supplier market has been replaced by buyers' market where consumer's
sovereignty prevails. The buyer has abundance of supply and wider choice. Competition has become global due to globalization and liberalization. Various elements of business environment have gone very dynamic and volatile, may it be economic, social, political, legal and technological. The traditional physical and financial planning and control have turned to be adequate to manage an organization under the changed competitive environment. Management has become 'Strategic Management' and Planning has become Strategic Planning. New tools of strategic management like Total Quality Management (TQM), Business Process Re-engineering (BPR) has appeared on the scene. Profit and Profitability have given way to Value-added and Economic Value-added (EVA) and Market Value-added (MVA) analysis. (Richard H. Et.al2000)

**Long-established Measurements Tool for Business:**

Historically, the measurement system for business has seen financial aspect. Indeed, accounting has been known as language of business. Bookkeeping records of financial transactions can be traced back thousands of years, when they were used by Egyptians, Phoenicians, and Sumerians to facilitate commercial transactions. After long back, the during the age of exploration, the activities of global trading companies were measured and monitored by accountants double-entry books of accounts. During the nineteenth century, spawned giant textile, railroad, steel, machine tools and retailing companies. Innovations in measuring the financial performance of these organizations played a vital role in their successful growth (1) and financial innovations, such as the return-on-investment (ROI) metric and operating and cash budgets, were critical to the great success of early-Twentieth century enterprises like DuPont and General Motors. (Richard H. Et.al2000)

The post-world War II trend to diversified enterprises created an intra corporation demands for reporting and evolution of business unit performance based on accounting information given in annual accounts. In last few decades, the financial aspect of business unit performance has seen highly developed. Many analysts have criticized the extensive, even exclusive use of financial measurements in business. An over emphasis on achieving and maintaining short-term financial results can cause companies to over invest in short-term fixes and to under invest in long-term value creation, particularly in the intangible and intellectual assets that generate future growth. The management team performed a strategy review to determine the best future course to maximize Shareholder
value, but the short-run operating performance was still important, the company had to launch growth strategy. The company could maximize short-term financial results by exploiting customers through high prices or lower service. In short-run, these actions enhance reported profitability, but the lack of customer loyalty and satisfaction will leave the company highly vulnerable to competitive inroads. Richard H. Et.al (2000)

Financial measures are inadequate for guiding and evaluating organizations trajectories through competitive environments. They are lagging indicators that fail to capture much of the value that has been created or destroyed by manager's actions in the most recent accounting period. The financial measures tell something, but not all of the story about past actions and they fail to provide adequate guidance for the actions to be taken today and the day after to create future financial value. Richard H. Et.al (2000)

Necessitate of Balanced Scorecard:

The collision between the irresistible force to build long-range competitive capabilities and the immovable object of the historical -cost financial accounting model has created a new synthesis: the "Balanced Scorecard." The balanced scorecard retains financial measures. But financial measures tell the story of past events, an adequate story for industrial age companies of which investments in long-term capabilities and customers relationships were not critical for success. These financial measures are inadequate, however, for guiding and evaluating the journey that information age companies must make to create future value through investment in customers, suppliers, employees, processes, technology and innovation. The Balanced Scorecard complements financial measures of past performance with measures of the drivers of future performance. The objectives and measures of the Scorecards are derived from an organization's vision and strategy. The Balanced Scorecard provides managers with the instrumentation they need to navigate to future competitive success. Today, organizations are competing in complex environment so that an accurate understanding of their goods and the methods for attaining those goods is vital. The Balanced Scorecard enables companies to track financial results while simultaneously monitoring progress in building the capabilities and acquiring the intangible assets they need for future growth. (Niven, P2006)

Now, industrial age competition & shifting at information age company. During industrial age, from 1850 to 1975, Companies succeed by how well they could capture the benefits from economics of seals and scope (3) Technology mattered, but, ultimately,
success accrued to companies that could embed the new technology into physical assets that offered efficient, mass production of standard products. (Paul R. Niven, 2006)

The information age environment for both manufacturing and service organizations requires new capabilities for competitive success. The ability of a company to mobilize and exploit its intangible or invisible assets has become more decisive than investing and managing physical, tangible assets (4) Intangible assets enables an organization to:

1) To develop customer relationships that retains loyalty of existing customers and enables new customer segments and market areas to be served effectively and efficiently.
2) Introduce innovative products and services derived by targeted customer segments.
3) Produce customized high-quality products and services at low cost and with short lead-time.
4) Mobilize employer skills and motivations for continuous improvements in process capabilities quality and response times; and
5) Deploy information technology, databases and systems.

The Balanced Scorecard as a Management System

Companies using the Balanced Scorecard as the cornerstone of a new strategic management system have two tasks (1) build up the scorecard and (2) use the scorecard. Many companies have performance measurement systems that incorporate financial and non-financial measures. The objectives and measures view organizational performance from four perspectives financial, customer internal business processes, and learning and growth. These four perspectives provide the framework for the balanced scorecard. In these perspectives, each perspective identity generic measures that show up in most organization's scorecards such as the following. (Richard H. Et.al 2000)

**Perspective  Generic measures**

1) Financial  Return on Investment and economic value added
2) Customer  Satisfaction, retention, market and account share
3) Internal  quality, response time, cost and new product information
4) Learning and Growth Employer satisfaction and information system availability
The four perspectives of the scorecard permit a balance between short and long-term objectives, between outcomes desired and the performance drivers of those outcomes, and between hard objectives measures and softer, more subjective measures. All the measures are directed towards achieving an integrated strategy. The Balanced Scorecard should be used as a communication, informing, and learning system not a controlling system. Richard H. Et.al (2000)

**Balanced Scorecard Development:** A Review of Literature and Directions for Future Research Balanced Scorecard Development has been subject to various developments that have attracted the interest of academics and practitioners. Since 1992, the BSC literature has significantly expanded in terms of both theoretical developments and applications. The aim of this chapter is to review the BSC literature and to explore potential areas for future research. This chapter is organized into four sections. The next section shortly outlines the development of the BSC concept over time. Literature on applications of BSC in practice and examination of BSC assumptions will be reviewed in sections 3 and 4, respectively. The final section concludes the chapter and suggests some areas for future research. (Paul R.Niven, 2014)

**Linking Objectives and Measures:** Objectives and measures need to be linked through cause and effect relationships. Causal paths from all the measures on a scorecard should ultimately link to financial objectives. This not only indicates how each measure impacts the financial goals, but it also illustrates to all members of the organization what impact their actions have on the outcome of the overall strategy. (Richard H. Et.al 2000)

**Applying Balanced Scorecard Theory:** We’ve aligned our application with the Balanced Scorecard theory established (Robert S. Kaplan and David P. Norton), so that you can fully benefit from the knowledge upon which it is based. The Scorecard application provides you with the tools that you need to translate your strategy into a scorecard, communicate it throughout your organization, measure progress towards achieving defined goals, inform key individuals automatically about scorecard status, and determine why problems occur. The following diagram depicts the hierarchy of Scorecard elements from Vision at the highest level, then strategic thrusts, then critical success factors, then KPIs at the lowest level, and how they associate with your organization’s strategic goals:


2.4 Benefits of Balanced Scorecard
Kaplan and Norton (1992) have summarized the three major advantages of BSC. Firstly, it provides a comprehensive picture of company’s performance with a quick glance since the multiple measures are related to core competencies and strategy of the company in a single report. Besides, local optimization aims to protect the company is attainable. Improvement in internal processes is promoted by balancing the objective; for instance, set up time is improved by reducing set up process instead of enlarging the batch size. BSC can determine whether an improvement is based on actual process or reduce of another process. Lastly, it keeps only the measures that are related to strategy; thus, avoiding information overload within the company(Richard H. Et.al 2000)

2.5 Successful Step by Step Implementation of the Balanced Scorecard
Building and implementing the Balanced Scorecard (the 9-step framework). There are literally thousands of Balanced Scorecard toolkits and building methodologies, but the 9-step framework designed by Howard Rohm of the Balanced Scorecard Institute, a Strategy Management Group, (US, Washington), was found to be the most relevant, practical and implementable one. (Niven, P. R., 2002)

Phase 1: Corporate Scorecard

Step One: Organizational Assessment

Step one of the scorecards building process is about a number of things: to finalize the Balanced Scorecard Plan which will detail, among others, all the teams that will be involved in the designing of the scorecard and the training they will require. Secondly, Step One involves conducting the organization assessment of the strategic elements: the mission and vision, SWOT and organization values. Paul R.Niven, (2006) Thirdly, Step One is also about preparing a change management plan for the organization, which will entail conducting a change readiness review to determine how ready the organization is in embarking on such a journey and what needs to be put in place to make it ready, as well as defining communications strategy which will identify the target audience, key messages, media channels, timing, and messengers of the communication. The change management activities will take place throughout each step. (Richard H. Et.al 2000).
**Step Two: Strategy**

Step Two (Strategy) is about determining the strategic themes, including strategic results, strategic themes, and perspectives, which are developed to focus attention on the customer needs and their value proposition. The most important element of this step is to ensure that you have unpacked what your customers are looking for from your organization in terms of function, relationship and image to determine whether you are providing value to your customers. Paul R.Niven, (2006)

**Step Three: Objectives**

Step Three (Objectives) is about determining your organization’s objectives – that is your organization’s continuous improvement activities, which should link to your strategic themes, perspectives and strategic results. Paul R.Niven, (2006)

**Step Four: Strategy Maps**

The objectives designed in Step Three are linked in cause-effect relationships to produce a strategy map for each strategic theme. The theme strategy maps are then merged into an overall corporate strategy map that shows how the organization creates value for its customers and stakeholders. Paul R.Niven, (2006)

**Step Five: Performance Measures**

In Step Five, the performance measures are developed for strategic objectives. Performance measures should be defined clearly, differentiating the outcome and output measures, as well as the leading measures (future expected performance) and lagging measures (past performance history). In this step, you will also design your performance targets. This might be perceived as the most difficult and confusing step, so it is important that a bit of time is apportioned so that the performance measures will be meaningful. (Paul R.Niven, 2006).

**Step Six: Strategic Initiatives**

In Step Six, the strategic initiatives are developed that support the strategic objectives. This is where the projects that have to be undertaken to ensure the success of the organization (the extent to which the organization fulfills its mandate or vision) are drafted and assigned. To build accountability throughout the organization, performance
measures and strategic initiatives are assigned to owners and documented in data definition tables. (Paul R. Niven, 2006)

**Step Seven: Software and Automation**

Step Seven (Software and Automation) involves automating the Balanced Scorecard system, and consists of analyzing software options and user requirements to make the most cost-effective software choice for today and to meet enterprise performance information requirements in the future. Automation is purposely put as Step 7 on the 9-step framework, to make sure that the proper emphasis is placed on strategic thinking and strategy development before "software seduction" sets in. Purchasing software too early limits creative strategic thinking, and purchasing software late makes it difficult to sustain momentum of the new system, as performance information reporting utilization is clearly an early benefit to be captured from the process of building the scorecard system. (Paul R. Niven, 2006)

**Phase 2: Business Unit or Departmental and Individual Scorecards**

**Step Eight: Cascading**

Following the development of the corporate scorecard, Step Eight (Cascading) involves cascading the corporate scorecard throughout the organization to business and support units. Then team and individual scorecards are developed to link day-to-day work with departmental goals and corporate vision. Cascading is the key to organization alignment around strategy. Optionally, objectives for customer-facing processes can be integrated into the alignment process to produce linked outcomes and responsibilities throughout the organization. Performance measures are developed for all objectives at all organization levels. (Paul R. Naven 2014)

As the scorecard management system is cascaded down through the organization, objectives become more operational and tactical, as do the performance measures. Accountability follows the objectives and measures, as ownership is defined at each level. An emphasis on results and the strategies needed to produce results is communicated throughout the organization.

**Step 9: Evaluation**

Step 9 (Evaluation) involves evaluating the success of chosen business strategies. The key question asked is: Were the expected results achieved?
• The evaluation step includes the following:
  • Ensuring that organizational learning and knowledge building are incorporated into planning
  • Making adjustments to existing service programmers
  • Adding new programmers if they are more cost effective
  • Eliminating programmers that are not delivering cost effective services or meeting customer needs

Linking planning to budgeting

Problems Implementing a Balanced Scorecard

There is really nothing wrong with the concept of Balanced Scorecard. The main problem is that it does not provide practical guidance for deployment, and some executives view it as a "quick fix" that can easily be installed in their organizations. Implementing a balanced metrics system is an evolutionary process, not a one-time task that can be quickly checked off as “completed”. If executives do not recognize this from the beginning and fail to commit to the long term, then the organization will realize disappointing results. However, some approaches (e.g. Rummler-Brache) allow for a rapid start to the metrics system evolution. (Paul R.Naven 2014)

Poorly Defined Metrics:-Metrics need to be relevant and clear. They should be depicted with visual indicators that are easily understood. In addition, metrics need to be collected at the ideal frequency for making decisions, and defined in such a way that the measurement can be consistently applied across the firm, even if their targets of performance differ (and they should). A system that has sloppy or inconsistently defined metrics will be vulnerable to criticism by people who want to avoid accountability for results. (Richard H. Et.al 2000)

Lack of Efficient Data Collection and Reporting:-A primary reason that companies overemphasize financial metrics at the expense of other important operating variables is the simple fact that systems already exist for collecting and reporting financial measures. Companies that deliberately plan to define the vital few metrics and commit the resources to automate data collection and subsequent reporting tend to achieve good results. Unfortunately, in most organizations, if collecting metrics data consumes too much time and energy, they will not be captured. That is why it is important to prioritize key
performance indicators so you can be confident that your investment in metrics is spent on the information that will be most relevant to improving organizational performance.

**Lack of a Formal Review Structure:** Scorecards work best when they are reviewed frequently enough to make a difference. If a metric value changes on a daily basis and the variables within the control of management can be affected on a daily basis, then the metric should be reviewed on a daily basis. Additionally, metrics review meetings should follow a standard agenda, with clearly defined roles for all attendees and an expectation that follow through on any agreed upon actions will be monitored at each meeting.

Finally, review of metrics is ideally cross-functional, including peer groups who have a shared responsibility for process results. It is important to begin these meetings as early as possible in the deployment of a new metrics system. Do not wait until all of the metrics are defined, automated and deployed. Start with the metrics you already have defined and with manual data collection, if necessary. This is an important behavior change, which is essential for the success of your metrics program. (Paul R. Naven 2014)

**No Process Improvement Methodology:** The value of Balance Scorecard systems relies on the premise that once performance problems are identified, there is an efficient and effective method for diagnosing and addressing root causes. Solutions can then be developed and performance gaps can be closed. If the organization does not have standard methodologies and toolkits for addressing process problems, the amount of effort required to derive a problem solving approach for each new performance gap could eventually damage the performance improvement program as it will be seen as taking too many resources away from daily operations. When this happens, there can be no adaptation and performance will continue to deteriorate. Using time-tested process improvement methodologies, perhaps in combination with problem solving methodologies (e.g. Six Sigma) can greatly alleviate this problem. (Paul R. Naven 2014)

**Too Much Internal Focus:** One major criticism of the Balanced Scorecard is that it encourages an internal focus. This is not as much an indictment of the principle as it is the way companies put the principle into practice. To help overcome this problem, you should ALWAYS start with an external focus – the view of your organization’s Super System. The goal is to achieve a balance of enterprise level metrics as you assess the organization’s market, shareholders, competitors, employees and stakeholders.
Executives will use data about their Super System to assess Strengths, Weaknesses, Opportunities and Threats (SWOT). This will then guide them to gaps in their enterprise level metrics. Then, all other levels of metrics are tested for alignment with the enterprise level metrics, thereby ensuring that even internal metrics link to external performance drivers. Paul R. Niven, (2006)

**Building a Balanced Scorecard** - Rock water: Responding to a Changing Industry: Rock water, a wholly owned subsidiary of Brown & Root/Halliburton, a global engineering and construction company, is a worldwide leader in underwater engineering and construction. Norman Chambers, hired as CEO in late 1989, knew that the industry’s competitive world had changed dramatically. “In the 1970s, we were a bunch of guys in wet suits diving off barges into the North Sea with burning torches,” Chambers said. But competition in the subsea contracting business had become keener in the 1980s, and many smaller companies left the industry. In addition, the focus of competition had shifted. Several leading oil companies wanted to develop long-term partnerships with their suppliers rather than choose suppliers based on low-price competition. (Paul R. Niven, 2006)

With his senior management team, Chambers developed a vision: “As our customers’ preferred provider, we shall be the industry leader in providing the highest standards of safety and quality to our clients.” He also developed a strategy to implement the vision. The five elements of that strategy were: services that surpass customers’ expectations and needs; high levels of customer satisfaction; continuous improvement of safety, equipment reliability, responsiveness, and cost effectiveness; high-quality employees; and realization of shareholder expectations. Those elements were in turn developed into strategic objectives (see the chart “Rock water’s Strategic Objectives”). If, however, the strategic objectives were to create value for the company, they had to be translated into tangible goals and actions. (Paul R. Niven, 2006)
CHAPTER THREE: RESEARCH DESIGN AND METHODOLOGY

This chapter described the approach that was taken to achieve the study objectives. It includes Research Design and Approach, Population, Sample Size and Sampling Techniques, Data Gathering Instruments, Procedures of Data Collection, Pilot Testing, Method of Data Analysis, Reliability, Validity and Ethical consideration the details are as follows.

3.1 Research Design and Approaches

The selection of a research design contains the consideration of assumption to study the research, the nature of research, data collection methods, and data analysis and interpretation. Based on the above fact, this study adopted a descriptive type in order to meet the research objectives and address the research questions by analyzing the immediate situation. Data collected through questionnaire analyzed quantitatively and interviews analyzed with qualitative techniques.

Population, Sample Size and Sampling Techniques

3.2 Research Population

The population relevant to this research study is the Metal Industry Development Institute. In order to have a more general perspective about the practices and Challenge implementation of BSC, the targeted respondent groups were core and support process Directors, team leaders, senior experts and experts. A total of 196 employees were taken as sampling frame out of which 131 members were selected based on their exposure and involvement in the process of BSC implementation. From the sample Technical support, Technology and Development, Design and Product Development and Support Directorate shown in the table 3.1

Table: 3.1 Permanent employees in three Sectors and support directorates.

<table>
<thead>
<tr>
<th>S/No</th>
<th>Sector and support directorate:</th>
<th>permanent Number of employees</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Male</td>
</tr>
<tr>
<td>1</td>
<td>Technical support sector</td>
<td>19</td>
</tr>
<tr>
<td>2</td>
<td>Technology development sector</td>
<td>23</td>
</tr>
<tr>
<td>3</td>
<td>Design and product development sector</td>
<td>20</td>
</tr>
<tr>
<td>4</td>
<td>support directorate:</td>
<td>41</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>103</strong></td>
</tr>
</tbody>
</table>

Source: Summarized from the institute, HRM. Office, 2018
Sample Size

The sample size for this study was derived from Fisher’s formula (Rosner, 2010) as shown below

\[ n = \frac{z^2 qp}{e^2} \]

Where;

\( z \) = standard normal deviate for \( \alpha \) at 95% confidence, \( Z_{1-\alpha/2} = 1.96 \)

\( p \) = estimated proportion of employees performing well with BSC (0.5)

\( q = 1 - p \) (0.5)

\( d = \) level of precision (margin of error) at 5% (0.05)

\( n_0 = \) sample size = 384.16 \( \approx 385 \)

Assuming maximum variability in the proportion of employees at MIDI performing well in terms of BSC, \( p = 0.5 \), that is, maximum variability. Since the total number of eligible employees at institute was known, that is, 196, the finite population correction (Levy, 1998), was applied to the sample size estimated above as follows:

\[ n = \frac{n_0}{1 + \frac{n_0 - 1}{N}} = \frac{385}{1 + \frac{385 - 1}{196}} \]

Where;

\( N = \) finite population = 196

\( n_0 = \) is the sample size estimate = 385

\( n = \) correct sample size = 130.10 \( \approx 131 \)

The minimum sample size for the study therefore was 130 respondents. The study sample was proportionately distributed as shown in Table 2, resulting in a minimum sample of 131 individuals.

3.3 Sampling Techniques

As it is mentioned above, to obtain the required information relevant for the study, purposive sampling techniques taking the different levels of hierarchy (directors, team leader, senior experts, experts, and Employees) in the institutes are used. This technique
was preferred because it is used to select those respondents who acquire the experience in the implementation process in order to get information.

A sample of respondents was drawn from the employees of Metal Industry Development Institution. The study was purposive sampling technique based on characteristic, position, and experience and work culture of MIDI to select the sample, where 66.84% of the target population was taken to arrive at a sample size of 131 respondents. According to Kothari (2004), purposive sampling starts with a purpose in mind and the sample is thus selected to include people of interest and exclude those who do not suit the purpose. The technique allows a researcher to use cases that have the required information with respect to the objectives of the study (Kothari, 2004). The study was consider, directors, team leaders, senior expert, and expert of the following Core sector: Technical support sector, Technology and development sector, Design and development sector and support directorate.

I. **Technical support sector**
   - Engineering Services Directorate
   - Input Supply and Marketing Linkage Directorate
   - Small, Growing and Medium Industry Support and Linkage Directorate
   - Environment, Industrial safety and Energy Directorate

II. **Technology and development sector**
   - Engineering Products Technology Development Directorate.
   - Basic Metal Technology Development Directorate
   - Training and Education Directorate
   - Electrical, Electronics and Optics Technology Development Directorate

III. **Design and development sector**
   - Products Design and Research Directorate
   - Products Development and Research Directorate
   - Laboratory Testing and Quality Control

IV. **Support directorate**
Director general Office, Planning and Information Directorate, Finance and Procurement, Human Resource Management Directorate, Corporate Communication Directorate,
Logistics and General Services, Information Technology Directorate Internal Audit department and reform and good governance

Table: 3.2. Sample size Distribution Table

<table>
<thead>
<tr>
<th>S/No</th>
<th>Sector and support directorate:</th>
<th>Permanent employees</th>
<th>Sample taken</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>M</td>
<td>F</td>
</tr>
<tr>
<td>1</td>
<td>Technical support sector</td>
<td>19</td>
<td>7</td>
</tr>
<tr>
<td>2</td>
<td>Technology and development sector</td>
<td>23</td>
<td>8</td>
</tr>
<tr>
<td>3</td>
<td>Design and development sector</td>
<td>20</td>
<td>9</td>
</tr>
<tr>
<td>4</td>
<td>support directorate:</td>
<td>41</td>
<td>69</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>103</td>
<td>93</td>
</tr>
</tbody>
</table>

Source: Summarized from the institute, HRM. Office, 2018

3.4 Sources of Data

In order to achieve the objective of the study, the researcher has designed to use two appropriate data sources. These are the primary and secondary sources.

1. Primary sources: This study concentrated much on the primary sources of data by means of interview (qualitative) and questioner (quantitative) methods of data collection by employing different tools such as questionnaires and interviews.

The questions were structured in Likert scale format. In this technique, the degree of agreement or disagreement is given a numerical value ranging from one to five. Thus, a total numerical value can be calculated from all the responses.

Secondary sources: different documents were referred to complement the primary data. This may include published and unpublished documents as well as manuals used for the implementation of BSC system, Service Delivery Policy (2001), previous researches on the FDRE’s BSC literature review, strategic plans and reports related to BSC, books, journals, and the internet sources.

3.5 Data Gathering Instruments

To collect the relevant information, the researcher uses two basic instruments namely questionnaires and document analysis.
Questionnaire

The main data collection tool used for this research was questionnaire. Part 1 contains practices that help the Demographic characteristics of the respondents. Part 2 uses for assessing workers experience about BSC, it contains BSC experience of supervisors. In addition, the working (physical) conditions to execute BSC, contains issues about professional development system in performing BSC and finally assesses about production improvement in the department after BSC.

The nature of the questionnaire is at large, a closed ended questions where the rationales of closed questionnaires are thought to be essential.

Document analysis

The secondary sources of information are obtained from published and unpublished materials, books, worldwide websites and articles which are related to the program and plan of the Metal Industry Development Institution and also about the current status of quality and productivity of core and support directorates. These sources are used to supplement information/data on background of the study and literature review as well and also obtain information that could not be obtained through questionnaire and interview.

3.5.1 Pilot Testing

According to Sekeran (2003) a pilot test is necessary for testing the reliability of data collection instruments. Pilot study is thus conducted to test weaknesses in design and instrumentation to provide proxy data for selection of a sample. Reliability refers to the consistency of a measure. A test is considered reliable if the same result is got repeatedly (Cooper and Schindler, 2003). The pilot study was done by selecting twenty respondents from the population and issuing them with the questionnaire. The data obtained was evaluated to ensure that questions were properly answered. However the findings from the pilot test were not included in the final results.
Table 3.3 Alpha value on major variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>No of Items</th>
<th>Alpha</th>
<th>Acceptance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategic Planning of the institute</td>
<td>5</td>
<td>0.920</td>
<td>Excellent</td>
</tr>
<tr>
<td>Structure of the institute</td>
<td>3</td>
<td>0.710</td>
<td>Acceptance</td>
</tr>
<tr>
<td>Leadership Support</td>
<td>6</td>
<td>0.843</td>
<td>Acceptance</td>
</tr>
<tr>
<td>Communications strategy.</td>
<td>3</td>
<td>0.751</td>
<td>Acceptance</td>
</tr>
<tr>
<td>Employees competences toward BSC implementation</td>
<td>3</td>
<td>0.927</td>
<td>Excellent</td>
</tr>
<tr>
<td>Customer and stakeholder focus</td>
<td>3</td>
<td>0.767</td>
<td>Acceptance</td>
</tr>
<tr>
<td>Internal institute perspective</td>
<td>4</td>
<td>0.857</td>
<td>Good</td>
</tr>
<tr>
<td>Benefit obtained due to BSC implementation</td>
<td>4</td>
<td>0.783</td>
<td>Acceptance</td>
</tr>
<tr>
<td>Performance Measurement</td>
<td>5</td>
<td>0.860</td>
<td>Good</td>
</tr>
<tr>
<td>Learning and growth perspectives</td>
<td>5</td>
<td>0.732</td>
<td>Acceptance</td>
</tr>
<tr>
<td>Challenges of BSC implementation</td>
<td>10</td>
<td>0.960</td>
<td>Excellent</td>
</tr>
</tbody>
</table>

Source: pilot data, 2018

Table 3.4: Cranach’s Alpha Value of all variables

<table>
<thead>
<tr>
<th>Cronbach’s Alpha</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>.843</td>
<td>53</td>
</tr>
</tbody>
</table>

Source: pilot data, 2018

3.5.2 Validity

Good measure should be both consistent and accuracy. A stated by (Miller and Whicker, 1999), content validity is the measurement that is being taken a subset of a larger group of measurements that represent the focus of the study. Similarly, face validity is based entirely upon logic, common sense, and subjective judgment. The researcher has attempted to assess both type of validity through the mechanism of distributed the questionnaire for two experts that familiarized the subject matter. Then, verified the validity in terms of the items capture the entire scope and arrived at agreed the measurement that represent focus of the study.
3.5.3 Reliability Test

Reliability analysis refers trustworthiness, consistency and dependability of a measuring instrument to improve the reliability of the data. Cronbach Alpha the most commonly applied estimate of a multiple item scales reliability. Test reliability of data was checked by calculating Cranach alpha value for all corresponding variables. As shown in below table 3.6, the reliability of the measures was assessed using the inter-item consistency measures of Cranach alpha. George and Mallery (2003) provide the following rules of thumb (2003) the values of cronbach alpha between “α> 0.9 Excellent, α> 0.8 – Good, α> 0.7 Acceptable are considered is good α> .6 Questionable “α>0.5 Poor and α< 0.5 – Unacceptable” (p.231). Thus, as per the analysis made through using SPASS software and presented in the below table, the reliability statistics test for all variables (sub domain) alpha range from 0.7 to 0.9 and total alpha values for all variables 0.89. These indicate that the measurements are reliable and very dependable.

3.6 Method of Data Analysis

According to Marshall and Ross man (1999), data analysis is the process of bringing order, structure and interpretation to the mass of collected data. It involves the coding, editing and cleaning of data in preparation for processing. The completed questionnaires were received, checked for completeness and edited for correctness. Descriptive statistics was used to analyze mean, frequency, percentage the data in this study with SPSS as the main tool for data analysis and presentation.

3.7 Ethical Considerations

To avoid any harm on research participants, the researcher has been careful to abide by the general research ethics. This is because the respondent may be harmed with what they express to the researcher. And also before distributing the questionnaire, each respondent was informed about the nature of the research and they gave their consensus not to use their names. Much care was also taken not to touch their personal privacy in sensitive areas.
CHAPTER FOUR: DATA ANALYSIS AND INTERPRETATION

This section focuses on analysis, interpretation and discussion. The collected data was compiled and subjected to statistical tool analysis. The primary data collected through questionnaires were scrutinized by SPSS version 16 and qualitative data manually coded, categorized and discussed. The SPSS version 16 is critically essential in order to have a precise output of the analysis. Then quantitative data were analyzed using descriptive statistics (frequencies, percentage) in the process of BSC implementation at Metal Industry Development Institute.

4.1 Response rate

In this study, a total of 131 questionnaires were distributed to 20 core and support directorate. From the 131 questionnaire 123 were filled returned correctly and the remaining 8 uncollected. This shows that the response rate was 93.89 percent.

Having the intention of collecting 123 responses questionnaires were distributed to respondents. From this it was possible to find the exact amount of sample size predetermined in chapter three.

I. Interviewed director, team leader and experts

Table 4.1Number of Interviewed director, team leader, senior Experts and experts

<table>
<thead>
<tr>
<th>Core &amp;Support Process Directorate</th>
<th>Position</th>
<th>Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Director</td>
<td>4</td>
<td>33.3</td>
</tr>
<tr>
<td></td>
<td>Team leader</td>
<td>4</td>
<td>33.3</td>
</tr>
<tr>
<td></td>
<td>senior Experts</td>
<td>2</td>
<td>16.7</td>
</tr>
<tr>
<td></td>
<td>Experts</td>
<td>2</td>
<td>16.7</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>12</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Own Survey, 2018

As indicated in the table interviews were conducted four cores and Support Process directorate, including the Director, team leader, and senior experts who are involved in the implementation process and experts from core and support process.

The profile of the institute interviewed director, team leader and experts and their process category is presented in the Table 4.1 below. The table indicates that out of the interviewed 12 respondents 4(33.3%) are core & Support process directors, 4(33.3%) are
team leader from core & support directorate, 2(16.7%) senior experts from core & support directorate and the rest that is 2(16.7%) are from Experts.

II. Return rate of respondents
Out of 131 questionnaires distributed to respondents 123 questionnaires were returned. The rate of return is 93.89% from the total questionnaires distributed. Questionnaires distributed, returned and unreturned are summarized in Table 4.2 below.

Table 4.2 Return rate of respondent’s director, team leader and experts

<table>
<thead>
<tr>
<th>Respondents Core &amp; Support Process</th>
<th>Questionnaires Distributed</th>
<th>Questionnaires returned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Director</td>
<td>20</td>
<td>18</td>
</tr>
<tr>
<td>Team leader</td>
<td>25</td>
<td>23</td>
</tr>
<tr>
<td>Senior Experts</td>
<td>32</td>
<td>30</td>
</tr>
<tr>
<td>Experts</td>
<td>54</td>
<td>52</td>
</tr>
<tr>
<td>Total</td>
<td>131</td>
<td>123</td>
</tr>
</tbody>
</table>

Source: Own Survey, 2018

The data obtained from respondents, whose personal profile is indicated hereunder, through questionnaire are presented.

4.2 Demographic characteristics of the respondents rates
Basic information of the questionnaire respondents’ gender, Age, education, and service years and current position has been summarized under the table: 4.2 that show Demographic information of respondents.

Table: 4.3, Demographic information of the respondents

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Category</th>
<th>Frequency</th>
<th>Percents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Female</td>
<td>60</td>
<td>48.8</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>63</td>
<td>51.2</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>123</td>
<td>100</td>
</tr>
<tr>
<td>Age</td>
<td>20-29</td>
<td>48</td>
<td>39.1</td>
</tr>
<tr>
<td>Age</td>
<td>30-39</td>
<td>30</td>
<td>24.4</td>
</tr>
<tr>
<td>--------------</td>
<td>-------</td>
<td>----</td>
<td>------</td>
</tr>
<tr>
<td></td>
<td>40-49</td>
<td>27</td>
<td>21.9</td>
</tr>
<tr>
<td></td>
<td>50-59</td>
<td>18</td>
<td>14.6</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>123</td>
<td>100</td>
</tr>
<tr>
<td>Educational</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Master’s Degree</td>
<td>7</td>
<td>5.7</td>
<td></td>
</tr>
<tr>
<td>First Degree</td>
<td>108</td>
<td>83.7</td>
<td></td>
</tr>
<tr>
<td>Diploma or Certificates</td>
<td>13</td>
<td>20.3</td>
<td></td>
</tr>
<tr>
<td>Grade 12 and below</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>123</td>
<td>100</td>
</tr>
<tr>
<td>Service(year)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-4</td>
<td>48</td>
<td>39.1</td>
<td></td>
</tr>
<tr>
<td>5-9</td>
<td>30</td>
<td>24.4</td>
<td></td>
</tr>
<tr>
<td>10-19</td>
<td>27</td>
<td>21.9</td>
<td></td>
</tr>
<tr>
<td>20-30</td>
<td>18</td>
<td>14.6</td>
<td></td>
</tr>
<tr>
<td>above 30 years</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>123</td>
<td>100</td>
</tr>
<tr>
<td>Current position</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Director</td>
<td>18</td>
<td>14.6</td>
<td></td>
</tr>
<tr>
<td>Team leader</td>
<td>23</td>
<td>18.7</td>
<td></td>
</tr>
<tr>
<td>Senior expert</td>
<td>30</td>
<td>24.4</td>
<td></td>
</tr>
<tr>
<td>Expert</td>
<td>52</td>
<td>42.3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>123</td>
<td>100</td>
</tr>
</tbody>
</table>

**Source: Own survey 2018**

Table: 4.3, item 1 indicates Gender of respondents. Regarding respondents gender 63 (51.2%) were males while 60 (48.8%) were females. This shows that Metal Industry Development Institute has slightly more males than females. It seems there is gender equality in Institute.

Table: 4.3, item 2 indicate Age of respondents. Regarding respondents age 48 (39.1%) were between 20-29, 30 (24.4%) were between 30-39, 27 (21.9%) were between 40-49 and 18 (14.4%), were between 50-59 years. This implies that most of the employees of the Institute are young. Also the data gathered is affair representation of the population as almost all classes were represented and the data provided reflected the views of the entire population.

Table: 4.3, item 3 indicate Educational of respondents. The majority of the respondents, 103 (83.7%) were qualified with first degree and 7 (5.7%) of the Educational status indicated holders of Master’s degree. The rest of the respondents, 13 (20.3%) was diploma. This shows respondent’s Educational status that had Diploma and above Master’s degree status was few. This indicates that most of the respondents in the study area were professionals.
Table: 4.3, item 4 indicate Service years in the Institution of respondents. Regarding respondents work experience 75 (60.9%) of the respondents had served in Metal Industry Development Institute for a period of above 5 years. that is 48 (39.1%) for a period of 0-4 years, 30 (24.4%) for a period of 5-9 years, 27 (21.9%) for a period of 10-19 years, 18 (14.6%) for a period of 20-30 years and no response on above period of above 30 years. This implies that almost all respondents had taken reasonably enough experience to see how the performance evaluation process in the institute is under taken.

Table: 4.3, item 5 indicate current position (Job grade) in the institution of respondents. Regarding respondents current position 18 (14.6%) of the respondents had Director, position, 23 (18.7%) Team leader position, 30(24.4) senior expert and 52(42.3%) Expert delegated in Metal Industry Development Institute. This implies that almost all respondents had taken reasonably enough experience and current position to see how the performance evaluation process in the institute is under taken.

In the process of analyses, discussions and interpretations the researcher has divided the whole responses into ten sub-topics. These are:

- Strategic Planning of the institute
- Structure of the institute
- Leadership Support
- Communications strategy.
- Customer and stakeholder focus
- Challenges of BSC implementation
- internal institute perspective
- Benefit obtained due to BSC implementation
- Performance Measurement
- Learning and growth perspectives

### 4.2.1 Strategy plan of the institute

Successful BSC implementation, the whole organization must involve in strategic plan and implementation process. In this regard employees’ participation in the development of strategic plan helps to understand the institute focus areas and the challenges that affect the implementation process clearly identified. The assessment made at metal industry development institute (MIDI) has revealed below.
Table 4.4 Views of Employees in the Formulating Strategic plan

<table>
<thead>
<tr>
<th>Item</th>
<th>Statements</th>
<th>Status</th>
<th>Frequency</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>total</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Aware of the vision, mission and values of the institute.</td>
<td></td>
<td>Frequency</td>
<td>60</td>
<td>39</td>
<td>16</td>
<td>8</td>
<td>-</td>
<td>123</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Percent</td>
<td></td>
<td>48.8</td>
<td>31.7</td>
<td>13</td>
<td>6.5</td>
<td>-</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mean</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4.23</td>
<td></td>
</tr>
<tr>
<td>II</td>
<td>Familiarity with the policies, rules and procedures of the institute</td>
<td></td>
<td>Frequency</td>
<td>39</td>
<td>59</td>
<td>14</td>
<td>11</td>
<td>-</td>
<td>123</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Percent</td>
<td></td>
<td>31.7</td>
<td>47.9</td>
<td>11.4</td>
<td>9</td>
<td>-</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mean</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4.03</td>
<td></td>
</tr>
<tr>
<td>III</td>
<td>Participated in the formulation of strategic plan of the institute</td>
<td></td>
<td>Frequency</td>
<td>11</td>
<td>39</td>
<td>41</td>
<td>32</td>
<td>-</td>
<td>123</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Percent</td>
<td></td>
<td>8.9</td>
<td>31.8</td>
<td>33.3</td>
<td>26</td>
<td>-</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mean</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3.24</td>
<td></td>
</tr>
<tr>
<td>IV</td>
<td>The strategic plan and annual plans are clear and measurable</td>
<td></td>
<td>Frequency</td>
<td>40</td>
<td>43</td>
<td>24</td>
<td>16</td>
<td>-</td>
<td>123</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Percent</td>
<td></td>
<td>32.5</td>
<td>35</td>
<td>19.5</td>
<td>13</td>
<td>-</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mean</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3.86</td>
<td></td>
</tr>
<tr>
<td>V</td>
<td>The activities contribute to the strategic Objectives of the MIDI</td>
<td></td>
<td>Frequency</td>
<td>25</td>
<td>57</td>
<td>41</td>
<td></td>
<td>123</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Percent</td>
<td></td>
<td>20.3</td>
<td>46.3</td>
<td>33.3</td>
<td></td>
<td>100</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mean</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3.87</td>
<td></td>
</tr>
</tbody>
</table>

Source: Own Survey, 2018

As depicted in the above Table Item I, 48.8% (f=60) and 39 % (f=39) of respondents strongly agreed and agreed respectively on aware of the vision, mission and values of the institute.13% (f=16) remains neutral and 6.5 % (f=8) disagreed. The mean score 4.23 indicate respondent’s positively agreed about this issues. In item II, 31.7 % (f=39) and 47.9% (f=59) of the respondents strongly agreed and agreed respectively on familiar with the policies, rules and procedures of the institute, 11.5% (f=14) remains neutral and 9 % (f=11) disagreed. The mean score 4.32 indicate employees positively agreed about this issues.

In item III of the respondents 59.3% (f=73) have reservation on participated in the formulation of strategic plan of the institute that is about 26(f=32) % and 41% (f=33) have disagreed and neutral, remain 8.9 % (f=11) and 31.8 % (f=39) strongly agreed and agreed respectively on this issue. The mean score 3.24 indicate respondent’s moderately agreed on this issues. In Item IV, about 32.5 % (f=40) and 35 % (f=43) of respondents strongly agreed and agreed respectively on the strategic plan and annual plans are clear.
and measurable. 19.5 % (f=24) and 13 % (f=16) of respondents neutral and disagreed respectively about this statement. The mean score 4.00 indicate respondent’s positively agreed on this issues. In Item V, about 20.3 %( f=25) and 46.3 %( f=57) of respondents strongly agreed and agreed respectively on the employees activities contribute to the strategic objectives of the MIDI. 33.3 % neutral .The mean score 3.87 indicate respondent’s positively agreed on this issues.

4.2.2 Structure of the institute

The structures of workflow are well defined, decision making levels are recognized, roles and responsibility are clearly articulated, and reporting hierarchies are drawn through organizational structure. Hence it is unlikely to exclude it from taking it as one major variable to be considered while implementation the BSC. Below is what the respondents have to say.

<table>
<thead>
<tr>
<th>Item</th>
<th>Statements</th>
<th>Status</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>total</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>The reporting hierarchy are no confusion within institute</td>
<td>Frequency(f)</td>
<td>42</td>
<td>37</td>
<td>25</td>
<td>13</td>
<td>6</td>
<td>123</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Percent</td>
<td>34.1</td>
<td>30.1</td>
<td>20.3</td>
<td>10.6</td>
<td>4.9</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mean</td>
<td>4.65</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>II</td>
<td>Decision–making is extremely concentrated and centralized</td>
<td>Frequency(f)</td>
<td>32</td>
<td>41</td>
<td>26</td>
<td>15</td>
<td>9</td>
<td>123</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Percent</td>
<td>26.1</td>
<td>33.3</td>
<td>21.1</td>
<td>12.2</td>
<td>7.3</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mean</td>
<td>3.98</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>III</td>
<td>The duties and responsibilities are clearly defined and understood</td>
<td>Frequency(f)</td>
<td>59</td>
<td>24</td>
<td>23</td>
<td>17</td>
<td>123</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Percent</td>
<td>48</td>
<td>19.5</td>
<td>18.7</td>
<td>13.8</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mean</td>
<td>4.30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Own Survey, 2018

As depicted in the above Table Item I, about 34.1 %( f=42) and 30.1% (f=37) of the respondents strongly agree and agree respectively on the reporting hierarchy are no confusion within institute. That is about 20.3% (f=25) remains neutral and 10.6 %( f=13) and 4.9 %( f=6) had strongly disagreed and disagreed respectively about this issue. The mean Score 4.65 indicates positively agreed on this issue. In Item II, about 26.1 %( f=32) and 33.3 %( f=41) of respondent’s strongly agreed and agreed respectively on Decision–making is extremely concentrated and centralized.21.1% (f=26) and 12.2% (f=15) neutral and discarded respectively about this issue. The mean score 3.98 indicate respondent’s positively agreed on this issues. Item III, 48 % (f= 59) and19.5 %( f= 24) of respondents
strongly agreed and agreed respectively on the duties and responsibilities are clearly defined and understood. 18.7 %( f=23) and13.8 % (f=17) the respondents neutral and disagree respectively on duties responsibilities are clearly defined and understood. The mean score 4.30 indicate respondent’s positively agreed on this issues.

Therefore, the above table reveals that the majority of the respondents had involvement in the reporting hierarchy are no confusion within institute. Similarly, some of the respondents moderately agreed Decision–making is extremely concentrated and centralized as well as positively agreed the duties and responsibilities are clearly defined and understood.

4.2.3 Role of Leadership for BSC Implementation

Implementing corporate strategy requires a team effort headed by the organization's leadership team. Each person involved in change management has their responsibilities, and it is important for the entire organization to understand the role of leadership in strategic implementation to make delegating responsibility more effective.

The responses of the employees regarding their opinion (evaluation) of the awareness creation and support level of the management group show Table 4.3.3.

Table 4.6 Opinion of Employees responses towards Role of Leadership

<table>
<thead>
<tr>
<th>Item</th>
<th>Statements</th>
<th>Status</th>
<th>Frequency</th>
<th>Percent</th>
<th>Mean</th>
<th>total</th>
</tr>
</thead>
<tbody>
<tr>
<td>I.</td>
<td>Relationship between you and immediate director are smooth and participatory.</td>
<td>Frequency</td>
<td>20</td>
<td>16.2</td>
<td>4.33</td>
<td>123</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Percent</td>
<td>55</td>
<td>44.7</td>
<td></td>
<td>100</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mean</td>
<td>30</td>
<td>24.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Strongly Disagree</td>
<td>12</td>
<td>9.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Disagree</td>
<td>6</td>
<td>4.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>total</td>
<td>123</td>
<td>100</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>II.</td>
<td>Directors have provided clear guide/path on the job and share information about the Institute.</td>
<td>Frequency</td>
<td>18</td>
<td>14.6</td>
<td>3.91</td>
<td>123</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Percent</td>
<td>58</td>
<td>47.2</td>
<td></td>
<td>100</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mean</td>
<td>24</td>
<td>19.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Strongly Disagree</td>
<td>15</td>
<td>12.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Disagree</td>
<td>8</td>
<td>6.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>total</td>
<td>123</td>
<td>100</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>III.</td>
<td>Directors create a good work condition and environment that helps to do job for workforce</td>
<td>Frequency</td>
<td>11</td>
<td>8.9</td>
<td>3.53</td>
<td>123</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Percent</td>
<td>58</td>
<td>47.2</td>
<td></td>
<td>100</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mean</td>
<td>39</td>
<td>31.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Strongly Disagree</td>
<td>15</td>
<td>12.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Disagree</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>total</td>
<td>123</td>
<td>100</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>IV.</td>
<td>Directors encourage Learning that will help workforce to do job better</td>
<td>Frequency</td>
<td>48</td>
<td>39.0</td>
<td>3.91</td>
<td>123</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Percent</td>
<td>35</td>
<td>28.5</td>
<td></td>
<td>100</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mean</td>
<td>21</td>
<td>17.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Strongly Disagree</td>
<td>19</td>
<td>15.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Disagree</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>total</td>
<td>123</td>
<td>100</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>V.</td>
<td>The management has</td>
<td>Frequency</td>
<td>18</td>
<td>16.2</td>
<td></td>
<td>123</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Percent</td>
<td>22</td>
<td>17.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mean</td>
<td>18</td>
<td>15.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Strongly Disagree</td>
<td>57</td>
<td>47.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Disagree</td>
<td>8</td>
<td>6.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>total</td>
<td>123</td>
<td>100</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>
As indicated in the Table 4.6 Item I, that is about 16.2 % (f=20) and 44.7% (f=55) had strongly agreed and agreed respectively that the relationship between employee and immediate director are smooth and participatory, 24.4% (f=30) remains neutral, 9.8% (f=12) and 4.9% (f=6) had strongly disagreed and disagreed respectively on this issue. The mean score 4.33 of the item also indicated that the respondents positively agreed on this issues. In item II, 14.6 % (f=18) and 47.2% (f=58) had strongly agreed and agreed respectively indicated that Directors have provided clear guide/path on the job and share information about the Institute, 6.5% (f=8) and 12.2% (f=15) had strongly disagreed and disagreed respectively on this issue. The Mean score 3.91 of this item also positively agree on this issues.

Item III of the MIDI, about 8.9% (f=11) and 47.2% (f=58) had strongly agreed and agreed respectively indicated that Directors create a good work condition and environment that helps to do job for workforce. That is about 31.7% (f=39) remains neutral and 12.2% (f=15) had disagreed on this issue. The Mean score 3.53 of this item also moderately agree on this issues. Item IV of the MIDI, about 39% (f=48) and 28.5% (f=35) had strongly agreed and agreed respectively indicated that Directors encourage learning that will help workforce to do job better. That is about 17.1% (f=21) remains neutral and 15.4% (f=19) had disagreed on this issue. The Mean score 3.91 of this item also positively agree on this issues.

Item V, that is about 14.6% (f=18) and 18% (f=22) had strongly agreed and agreed respectively that the management has cascaded and communicated institute strategic plan to employees, 14.6% (f=18) remain neutral, 46.3% (f=57) and 6.5% (f=8) had disagreed and strongly disagreed respectively on this issue. The mean score 3.33 of the item also indicated that the respondents’ negatively agreed on this issues.
Item VI of the MIDI, about 32.5 % (f=40) and 29.3 % (f=36) had strongly agreed and agreed respectively indicated that the director regularly follows your performances and gives feedback to employees. That is about 20.3% (f=25) remains neutral and 17.9 % (f=22) had disagreed on this issue. The Mean score 3.76 of this item also positively agree on this issues.

The interviews made tell that MIDI has used almost identical structural arrangement for BSC implementation like other civil service organizations. At the top level management chaired by the Director General, took overall oversight responsibility for the implementation of the BSC. The management monitors and evaluates the performances of the processes on periodic basis.

While examining the results, most of the respondents clearly understand the Relationship between employees and immediate Director are smooth and participatory, Directors have provided clear guide/path on the job and share information and Directors create a good work condition and environment that helps to do job for workforce about the Institute. This implies the efforts were made by management in providing; guiding and support in order to help the employees to involve in the implementation process and has a positive contribution to the implementation of the strategy. As stated by (Oriento, 2010), Balanced Scorecard helps in promotion of a systematic development of vision and strategy and enable the identification of all activities that act as a trigger to reach established goals.

The result from the above data indicated that the majority of respondent’s the management has cascaded and communicated institute strategic plan to workforces and The director regularly follows the performances and gives feedback to workforce. This may adversely affect on the commitment of employees in the implementation process. According to (Molleman, n.d), the senior leadership team must work together to build and support the implementation of the Balanced Scorecard, including objectives, measures and targets.

4.2.4 Communications and Communications strategy

There was considerable discussion about the power of the Scorecard in translating the strategy and telling its story to all employees – what might be called communicating. So
why the Balanced Scorecard should be considered a communication tool A. Simply because it is the most basic and powerful attribute of the entire system. A well-constructed Scorecard describes strategy and makes the vague and imprecise world of visions and strategies come alive through the clear and objective performance measures have chosen. The assessment result of respondents on the status of communication strategy and plan is described as follows. Table 4.3.4 below shows the responses of the employees regarding their opinion.

**Table 4.7 Opinion of Employees on Communication and Communication Strategy**

<table>
<thead>
<tr>
<th>Item</th>
<th>Statements</th>
<th>Status</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>total</th>
</tr>
</thead>
<tbody>
<tr>
<td>I.</td>
<td>The institute has communications strategy and plan</td>
<td>Frequency</td>
<td>10</td>
<td>22</td>
<td>16</td>
<td>25</td>
<td>60</td>
<td>123</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Percent</td>
<td>8.1</td>
<td>9.8</td>
<td>13</td>
<td>20.3</td>
<td>48.8</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mean</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.57</td>
</tr>
<tr>
<td>II.</td>
<td>Leaders communicate with staff regularly about BSC</td>
<td>Frequency</td>
<td>7</td>
<td>72</td>
<td>21</td>
<td>15</td>
<td>8</td>
<td>123</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Percent</td>
<td>5.7</td>
<td>58.5</td>
<td>17.1</td>
<td>11.1</td>
<td>5.9</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mean</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3.45</td>
</tr>
<tr>
<td>III.</td>
<td>Communication among, Directors, Process owners, department’s management &amp; other staff are primarily interactive (two-way)</td>
<td>Frequency</td>
<td>6</td>
<td>47</td>
<td>30</td>
<td>40</td>
<td>-</td>
<td>123</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Percent</td>
<td>20.3</td>
<td>47.2</td>
<td>20.3</td>
<td>12.2</td>
<td>-</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mean</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3.15</td>
</tr>
</tbody>
</table>

**Source: Own Survey, 2018**

As it can be seen from item I, majority of the respondents 82.1% (f=101) have reservation on the institute has communications strategy and plan. That is about 48.8% (f=60) and 20.3% (f=25) have strongly disagreed and disagreed respectively and 13% (f=16) remains neutral. The other 8.1% (f=10) and 9.8% (f=13) of the respondents were strongly agreed and agreed respectively about the institute has communications strategy and plan. The mean score 2.57 indicated that majority respondents disagreed on this issues.

In item II, 5.7% (f=7) and 53.3% (f=72) of respondents were strongly agreed and agreed respectively about Leaders communicate with staff regularly about BSC. But 15.6% (f=21) remain neutral and 11.1% (f=15) and 5.9% (f=9) of respondents had strongly
disagreed and disagreed respectively on this issue. The mean score 3.45 indicated respondents moderately agree of on this issues.

In Item III, 4.4%(f=6) and 34.8% (f=47) of respondents strongly agreed and agreed about the Communication among, Directors, Process owners, department’s management & other staff are primarily interactive (two-way). But 22.2%(f=30) remain neutral and 29.6% (f=40) of respondent disagreed on this issue. The mean score 3.15 indicated negatively agreed on this issues.

The result indicates that the institute has no communications strategy and plan. This may be adversely affect awareness employees and communication within institute. In addition some of respondents doubt whether institute has among, Directors, team leaders, senior experts, core and support department’s management & other staff are primarily interactive (two-way) of communication. Many institutes seek BSC to mobilize their strategy when they find difficulty expressing their strategy.

4.2.5 Benefit obtained due to BSC implementation

BSC helps the institute in planning its day to day activities which hold culminate to the achievement of the overall institute objectives and living of their mission and vision. Therefore institute obtained many benefits from the implementation of this strategy. It improves communication, Service, performance and aligned day to day activities with strategy and effectiveness. BSC also build the capacity of organization.

The benefits obtained from BSC implementation by the MIDI, as per the response from the respondents, are as indicated in Table 4.3.5 below have brought changes in the working system of the MIDI, in the thinking and capability of core and support process, experts and employees.

Table 4.8 Opinion of Employees in the Benefit Obtained due to Balanced Scorecard

<table>
<thead>
<tr>
<th>Item</th>
<th>Statements</th>
<th>Status</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>total</th>
</tr>
</thead>
<tbody>
<tr>
<td>I.</td>
<td>Institute focus area identified due to BSC</td>
<td>Frequency</td>
<td>30</td>
<td>60</td>
<td>18</td>
<td>15</td>
<td>123</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Percent</td>
<td>24.4</td>
<td>48.8</td>
<td>14.6</td>
<td>12.2</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mean</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4.15</td>
<td></td>
</tr>
</tbody>
</table>
As depicted in the Table 4.8  Item I, 24.4 % (f=30) and 48.8 % (f=60) of respondents strongly agreed and agreed respectively on the benefit of BSC in Institute focus area identified due to BSC. 14.6 % (f=18) of the respondents were neutral and 12.2% (f=15) disagree on benefit of BSC in the identified focus areas. The mean score 4.15 indicate majority respondents positively agreed on this issues. In Item II, 29.3 % (f=36) and 53.7 % (f=66) of the respondents strongly agreed and agreed respectively on Employees have been share vision, mission and values of Institute. 11.4 % (f=14) of the respondents were neutral and 5.7% (f=7) of the respondents were disagreed about this issue. The mean score 4.07 indicate majority respondents positively agreed on this issues. In Items III, 5.7% (f=7) and59.3 % (f=73) of the respondents strongly agreed and agreed respectively of an Institute performance has been improved. 22.8 % (f=28) remain neutral and 12.2 % (f=15) of respondents disagreed about this issue. The mean scores 3.59 indicate moderately agreed on Institute performance has been improved.

In Item IV, 8.9 % (f=11) and50.4 % (f=62) of the respondents strongly agreed and agreed respectively the Institute Service delivery has been improved. 35 % (f=43) remain neutral and5.7 % (f=7) disagreed about Service delivery has been improved. The mean score 3.63 indicated moderately agreed on Institute Service delivery has been improved.

In Item V, about 45.5% (f=56) and 26.8 % (f=33) of the respondents are strongly agreed and agreed respectively about day to day activities of each employee has been aligned with strategy. But 18% (f=22) remain neutral and 9.7% (f=12) of respondents
disagreed about the alignment of day to day activities with strategy. But the mean score 3.70 indicate positively agreed on approved the day to day activities linkage with strategy.

The results from findings shows, the institute clearly knows the focus areas, Employees have share vision, mission and values. This benefit help the institute what we are trying to achieve. Therefore; day to day activities aligned with strategies. Besides performance and service delivery is improved. These benefits obtained from BSC implementation have brought changes in the working system of institute and build the capability of institute for competitive service delivery. In addition, interview was conduct with core and support director of reform and change office indicated BSC help for Communication tool, increase resource mobilization and enhances the individual performance through cascading target from group to individual level.

Accordingly (Kaplan, 1996), if executed properly, Balanced Scorecard that will help to clarify and gain consensus about vision and strategy, communicate the strategy, build a management team, and link reward to achieving strategic objectives. In this regards, benefits obtained from BSC implementation have brought changes in the working system of institute and build the capability of institute for competitive service delivery. In addition, BSC help as communication tool, to increase resource mobilization and enhances the individual performance at Metal Industry Development Institute.

4.2.6 Customer and Stakeholder focus
Performance of the Institute, directors, team leaders and individuals is evaluated in comparison of plan against the accomplishment results and on the rate of satisfaction of stakeholders and customers, since they have the power to make a decision on the outcome of the institute. The assessment result of respondents on the understanding customers’ needs and values and stakeholders’ value is revealed as follows.
As depicted in the Table 4.9, Item I, about 38.2 % (f=47) and 41.5 % (f=51) have strongly agreed and agreed respectively that BSC is focus on customers and stakeholders need & values. About 14.6 % (f=18) were neutral and 5.7 % (f=7) were disagreed on this issue. The Mean score 4.03 indicated positively agreed on this issues. In item II, 61.8 % (f=76) and 32.5 % have strongly agreed and agreed respectively indicated that Leaders create a good work condition for employees. About 5.7 % (f=7) were neutral about this issue. The mean score 4.06 indicated positively agreed on the issues. In item III, 29.3 % (f=30) and 32.5 % (f=40) of respondents strongly agreed and agreed respectively about BSC focus is on customer acquisition, retention and customer service. About 197.9 % (f=22) remain neutral and 20.3 % (f=25) disagreed about this issue. The mean score 3.71 indicated positively agreed on this issues. In item IV, that 25.2 % (f=31) and 17.1 % (f=21) of respondents strongly agreed and agreed respectively on BSC creating values and differentiation for the customers and stakeholders. About 35 % (f=43) remain neutral and 22.7 % (f=28) disagreed about this issue. The mean score 3.65 indicate respondents moderately agreed on the issues. The above table indicates that the majority of respondents knew customers’ needs and values as well as stakeholder’s values and less
than half of respondents understood on the BSC creating values and differentiation for customers and stake holders. Similarly, majority of respondents understand BSC focus on customer service, acquisition and retention. This indicates respondents aware what customers and stakeholders need and values. But, they do not understand benefit of BSC with customers and stakeholders values. This gap of knowledge in understood from perspective of BSC, adversely affects the implementation process.

4.2.7 Internal business perspectives
In the Internal Process perspective of the Scorecard, our task is to identify the key processes the firm must excel at in order to continue adding value for customers and, ultimately, shareholders; and develop the best possible measures with which to track our progress. To satisfy customer and shareholder expectations, you may have to identify entirely new internal processes rather than focusing your efforts on the incremental improvement of existing activities. Product development, production, and manufacturing, delivery may be represented in this perspective. Many organizations rely heavily on supplier relationships and other third-party arrangements to effectively serve customers.

<table>
<thead>
<tr>
<th>Item</th>
<th>Statements</th>
<th>Status</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>I.</td>
<td>The institute provides quality services to its customers.</td>
<td>Frequency</td>
<td>11</td>
<td>77</td>
<td>21</td>
<td>14</td>
<td>123</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Percent</td>
<td>8.9</td>
<td>62.6</td>
<td>17.1</td>
<td>11.4</td>
<td>100</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mean</td>
<td>3.69</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>II.</td>
<td>Tender processes in the institute meet industry standards.</td>
<td>Frequency</td>
<td>18</td>
<td>47</td>
<td>44</td>
<td>14</td>
<td>123</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Percent</td>
<td>14.6</td>
<td>38.2</td>
<td>35.8</td>
<td>11.4</td>
<td>100</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mean</td>
<td>3.56</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>III.</td>
<td>Certifications from this institute are trusted worldwide</td>
<td>Frequency</td>
<td>14</td>
<td>15</td>
<td>36</td>
<td>58</td>
<td>123</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Percent</td>
<td>11.4</td>
<td>12.2</td>
<td>29.3</td>
<td>47.2</td>
<td>100</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mean</td>
<td>2.93</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IV.</td>
<td>The institute strives to improve service delivery.</td>
<td>Frequency</td>
<td>29</td>
<td>65</td>
<td>14</td>
<td>15</td>
<td>123</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Percent</td>
<td>23.6</td>
<td>52.8</td>
<td>11.4</td>
<td>100</td>
<td>100</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mean</td>
<td>3.88</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Own Survey, 2018

As it can be seen from item I, more than half of the respondents 71.5 % (f=65) have agreed on understanding of the institute provides quality services to its customers that are about 8.9 % (f=11) and 62.5 % (f=77) have strongly agreed and agreed respectively and
17.1% (f=21) remain neutral, 11.4% (f=14) agreed about this issue. The mean score 3.69 indicated moderately agreed on the institute provides quality services to its customers. Item II the majority of the respondents 52.8% (f=65) have agreed on tender processes in the institute meet industry standards. That is about 14.6% (f=18) and 38.2% (f=47) have strongly agreed and agreed respectively. About 35.8% (f=44) remain neutral and 11.4% (f=14) disagreed about this issue. The mean score 3.56 indicated moderately agreed on Tender processes in the institute meet industry standards.

In item III of the respondents 88.7% (f=109) have reservation on their Certifications from this institute are trusted worldwide that is about 29.3% (f=36) % and 47.2% (f=58) have strongly disagreed and disagreed respectively and 12.2% (f=15) remain neutral. The mean score 2.93 indicated negatively agreed on Certifications from this institute are trusted worldwide. In item IV, 23.6% (f=29) and 52.5% (f=65) of respondents strongly agreed and agreed respectively about BSC the institute strives to improve service delivery. About 11.4% (f=14) remain neutral and 12.2% (f=15) disagreed about this issue. The mean score 3.88 indicated positively agreed on this issues.

According to Richard H. et.al (2000) the internal business results commonly lead to financial success and satisfied customers. To meet organizational objectives and customers’ expectations, organizations must identify the key business processes at which they must excel. Key processes are monitored to ensure that outcomes will be satisfactory. Internal business processes are the mechanisms through which performance expectations are achieved. Therefore, by relating the above literature with finding, we can conclude that Metal industry Development Institute properly identified key business areas and improve their capacity to be Certifications successful as well as satisfy provides quality services to its customers.

### 4.2.8 Learning and growth perspectives

The measures in the Learning and Growth perspective of the Balanced Scorecard are really the enablers of the other three perspectives; they are the foundation on which this entire house of a Balanced Scorecard is built. Once you identify measures and related initiatives in your Customer and Internal Process perspectives, you can be certain of discovering and able to close some gaps between your current organizational
infrastructure of employee skills and information systems, and the level necessary to achieve your results and to ensure sustainable performance for the future. (Paul R. Niven)

Table 4.11 Employee response on Learning and Growth Perspectives

<table>
<thead>
<tr>
<th>Item</th>
<th>Statements</th>
<th>Status</th>
<th>Frequency</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>total</th>
</tr>
</thead>
<tbody>
<tr>
<td>I.</td>
<td>BSC gives much concern to the advancement of your career development</td>
<td></td>
<td>4</td>
<td>38</td>
<td>48</td>
<td>33</td>
<td></td>
<td></td>
<td>123</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Percent</td>
<td>3.0</td>
<td>28.1</td>
<td>35.6</td>
<td>24.4</td>
<td></td>
<td></td>
<td>100</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mean</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3.11</td>
</tr>
<tr>
<td>II.</td>
<td>The training given on balanced score card implementation is inadequate</td>
<td></td>
<td>15</td>
<td>68</td>
<td>20</td>
<td>10</td>
<td>10</td>
<td></td>
<td>123</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Percent</td>
<td>11.1</td>
<td>50.4</td>
<td>14.8</td>
<td>7.4</td>
<td>7.4</td>
<td></td>
<td>100</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mean</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3.55</td>
</tr>
<tr>
<td>III.</td>
<td>The training program given for me is appropriate to enhance my performance</td>
<td></td>
<td>23</td>
<td>26</td>
<td>48</td>
<td>26</td>
<td></td>
<td></td>
<td>123</td>
</tr>
<tr>
<td></td>
<td>in work</td>
<td>Percent</td>
<td>17.0</td>
<td>19.3</td>
<td>35.6</td>
<td>19.3</td>
<td></td>
<td></td>
<td>100</td>
</tr>
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<td></td>
<td></td>
<td>2.37</td>
</tr>
<tr>
<td>IV.</td>
<td>I have taken all necessary support to improve myself through training</td>
<td></td>
<td>22</td>
<td>19</td>
<td>44</td>
<td>38</td>
<td></td>
<td></td>
<td>123</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Percent</td>
<td>16.3</td>
<td>14.1</td>
<td>32.6</td>
<td>28.1</td>
<td></td>
<td></td>
<td>100</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mean</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.20</td>
</tr>
<tr>
<td>V.</td>
<td>The working environment is suitable to develop my job, knowledge and ability</td>
<td></td>
<td>56</td>
<td>49</td>
<td>18</td>
<td></td>
<td></td>
<td></td>
<td>123</td>
</tr>
<tr>
<td></td>
<td>so that I can advance my career</td>
<td>Percent</td>
<td>41.5</td>
<td>36.3</td>
<td>13.3</td>
<td></td>
<td></td>
<td></td>
<td>100</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mean</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3.31</td>
</tr>
</tbody>
</table>

Source: Own Survey, 2018

As depicted in the Table 4.11 Item I, 3.0 % (f=4) and 28.1 % (f=38) of respondents strongly agreed and agreed respectively on BSC gives much concern to the advancement of your career development. 35.6 % (f=48) of the respondents were neutral and 24.4 % (f=33) disagree on this issue. The mean score 3.11 indicate moderately agreed on this issues. Likewise, from the table result reviled that the mean value of the all the parameters of learning and growth perspectives lies on the disagreement level.

Item II, 15 % (f=11.1) and 50.8 % (f=68) of respondents strongly agreed and agreed respectively on the training given on balanced score card implementation is inadequate. 14.4 % (f=20) of the respondents were neutral, 7.4 % (f=10) and 7.4 % (f=10) strongly disagree and disagree respectively on this issue. The mean score 3.55 indicate moderately agreed on this issues. This indicted that the respondent reply negatively about the achievements of learning and growth perspectives. Similarly, the percentages of the
respondent reviled after the implementation of the BSC in the institute the employees were not given appropriate training on balanced scorecard implementation. As a result the institute learning and growth perspectives were not improved as expected.

Item III, 26 % (f=19.3) and 35.6 % (f=48) of respondents strongly disagreed and disagreed respectively on the training program given is appropriate to enhance my performance in work. 19.3 % (f=26) of the respondents were neutral, 17.0 % (f=23) disagree the training program given for workforce is appropriate to enhance performance in work. The mean score 2.37 indicate disagreed on this issues.

Item IV, 16.3 % (f=22) and 14.1 % (f=19) of respondents agreed and neutral respectively on taken all necessary support to improve myself through training. 32.6 % (f=44) and 28.1 % (f=38) of the respondents were strongly disagree and disagree respectively on this issue. The mean score 2.20 indicated negatively agreed on this issue. This indicted that the respondent reply negatively about the achievements of learning and growth perspectives. Similarly, the percentages of the respondent reviled after the implementation of the BSC in the institute the employees were not given appropriate training on balanced scorecard implementation. Item V, 41.5 % (f=56) of respondents agreed on the working environment is suitable to develop my job, knowledge and ability. So that the employee can develop the job advance their career. 36.3 % (f=49) of the respondents were neutral, 13.3 % (f=18) disagree the working environment is suitable to develop my job, knowledge and ability. The mean score 3.31 indicate moderately agreed on this issues. As a result the institute working environment is suitable to develop my job, knowledge and ability perspectives were not improved as expected implementations of BSC.

The above table describes respondents’ opinion on concerning learning and growth perspectives. This indicted that the respondent reply negatively about the achievements of learning and growth perspectives. Similarly, the percentages of the respondent reviled after the implementation of the BSC in the institute the employees were not given appropriate the training program for employees.

In addition to that the respondents are not comfortable with the working environment to develop the job, knowledge and ability to advance their career. If a company wants to
implement the Balanced Scorecard properly and reap all the benefits this concept may bring, people should first learn about it. Niven (2006) noted that organizations, after deciding to implement the Balanced Scorecard, conceive that it can be done without much learning. According to him, due to its seeming simplicity, people in charge very often conclude that thorough education and training are not required. Such a conclusion will permanently harm the BSC initiative and lead to failure. The reason is quite simple. The Balanced Scorecard is very often introduced because of its attractive design and popularity: put your strategy into four (or sometimes five) perspectives and results will very soon follow. However, the Balanced Scorecard implementation in-depth education and training are needed.

### 4.2.9 Performance Measurement/appraisal

BSC helps to align key performance measures with strategy at all levels of the institute viz. at sector level, core and support directorate and individuals level, to evaluate plan against the accomplishment of its results. Conducting performance appraisal is one part of performance management system (PMS) and effective performance evaluation required of avoiding appraisal difficulties when conducting appraisals like the problem of setting measurement indicator. Performance measurement parameters clearly and precisely define what is to be accomplished by the employee. The Measurement techniques should be realistic if performance, standards and measures are clearly defined. Its rewards also should be timely and tied to actual performance. The assessment result of respondents on the performance appraisal or measurement revealed as follows Table 4.12 Opinion of employees about performance appraisal or measurement

**Table 4.12 Opinion of Employees about Performance Appraisal or Measurement**

<table>
<thead>
<tr>
<th>Item</th>
<th>Statements</th>
<th>Status</th>
<th>Frequency</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>total</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>The performance measurement system adequately corresponds to the change implementation plan under BSC</td>
<td>Frequency</td>
<td>43</td>
<td>40</td>
<td>25</td>
<td>15</td>
<td>123</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Percent</td>
<td>35.0</td>
<td>32.5</td>
<td>20.3</td>
<td>12.2</td>
<td>100</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mean</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3.90</td>
<td></td>
</tr>
</tbody>
</table>
As depicted in the Table 4. 9 Item I, 35 %( f=43) and 32.5% (f=40) of respondents strongly agreed and agreed respectively on the performance measurement system adequately corresponds to the change implementation plan under BSC. 20.3 %( f=25) of the respondents were neutral and 12.2% (f=15) disagree on this issue. The mean score 3.90 indicate positively agreed on this issues. Item II, 26.8 %( f=33) and 46.3% (f=57) of respondents strongly agreed and agreed respectively on BSC measures of performance are directly linked to the Strategic Objective of the Institute.20.3 %( f=25) of the respondents were neutral and 6.5% (f=8) disagree on this issue. The mean score 3.93 indicate positively agreed on this issues.

Item III, 5.7 %( f=7) and 43.9% (f=54) of respondents strongly agreed and agreed respectively In the process of Implementing BSC, there is fertile ground that employees take part in defining the way their job will be measured.43.9 % (f=25) of the respondents were neutral and 6.5% (f=8) strongly disagree. The mean score 3.42 indicate moderately agreed on this issues. Item IV, majority of the respondents 67.5 % (f=83) have reservation on the institute has follow standard guidelines for objective measurements.
That is about 5.7% (f=7) and 17.9% (f=22) have strongly disagreed and disagreed respectively and 43.9% (f=54) remains neutral. The other 5.7% (f=7) and 26.8% (f=33) of the respondents were strongly agreed and agreed respectively about the institute has follow standard guidelines for objective measurements. The mean score 2.62 indicated that majority respondents disagreed on this issues.

Item V, majority of the respondents 82.1% (f=101) have reservation on timely submission the performance contract and performance evaluation to concerned organ. That is about 13.8% (f=17) and 30.9% (f=38) have strongly disagreed and disagreed respectively and 37.9% (f=46) remains neutral. The other 17.9% (f=22) of the respondents were agreed about this issue. The mean score 2.75 indicated that majority respondents disagreed on this issues.

The above table reveals that, the poor linking of the Performance evaluation result with Reward system and recognition such as salaries, incentive, allowance, and bonus etc. Problem of setting right measurement indicator lead to subjectivism rather than objective measurement and majority of respondents’ result implied the problem of timely submission of performance contract and performance evaluation report to concerned organ and gap between performance contract and performance evaluation in terms of target set, job title and job grade impact on accuracy and reliability of performance appraisal taken as evaluation criteria. These results in the fact that majority of indicators have become obsolete and requires new indicators. Measuring with wrong indicators can distract an organization from its strategy support for the linkage of compensation to strategic measures can only occur effectively when it is part of the process of strategy translation in the institute.

4.13 Challenges of BSC implementation in MIDI

The change and benefits obtained from balanced score card implementation (BSC) were mentioned in the above sections. However, according to the respondents, there are a numbers of challenges that affect the implementation and use of BSC at MIDI. This section describes the major challenges of BSC implementation based on data collected from various respondents groups. The major challenges are presented in Table 4.3.10 below.
Table 4.13 challenges of BSC implementation in MIDI

<table>
<thead>
<tr>
<th>Item</th>
<th>Statements</th>
<th>Status</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Target cascading for employees do not clearly allocate based on job grades and job title</td>
<td>Frequency</td>
<td>12</td>
<td>61</td>
<td>25</td>
<td>19</td>
<td>6</td>
<td>123</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Percentage</td>
<td>8.9</td>
<td>45.2</td>
<td>18.5</td>
<td>14.1</td>
<td>4.4</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mean</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3.15</td>
</tr>
<tr>
<td>II</td>
<td>The non-financial and financial targets do not clearly assigned to their employees</td>
<td>Frequency</td>
<td>23</td>
<td>45</td>
<td>30</td>
<td>15</td>
<td>10</td>
<td>123</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Percentage</td>
<td>17.0</td>
<td>33.3</td>
<td>22.2</td>
<td>17.0</td>
<td>7.4</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mean</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3.14</td>
</tr>
<tr>
<td>III</td>
<td>Performance evaluation results do not clearly reflects the employee’s Performances.</td>
<td>Frequency</td>
<td>48</td>
<td>39</td>
<td>23</td>
<td>7</td>
<td>6</td>
<td>123</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Percentage</td>
<td>35.6</td>
<td>28.9</td>
<td>17.0</td>
<td>5.2</td>
<td>4.4</td>
<td>100</td>
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<td></td>
<td></td>
<td></td>
<td>3.94</td>
</tr>
<tr>
<td>IV</td>
<td>There is no Taking care for sufficient and Reliable data for Measurements before performance evaluation</td>
<td>Frequency</td>
<td>26</td>
<td>41</td>
<td>35</td>
<td>11</td>
<td>10</td>
<td>123</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Percentage</td>
<td>19.3</td>
<td>30.4</td>
<td>25.9</td>
<td>8.1</td>
<td>7.4</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mean</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3.46</td>
</tr>
<tr>
<td>V</td>
<td>Collect adequate data for measurement before performance evolution is tedious.</td>
<td>Frequency</td>
<td>60</td>
<td>24</td>
<td>16</td>
<td>16</td>
<td>7</td>
<td>123</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Percentage</td>
<td>44.4</td>
<td>17.8</td>
<td>11.9</td>
<td>11.9</td>
<td>5.2</td>
<td>100</td>
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<td>Mean</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3.97</td>
</tr>
<tr>
<td>VI</td>
<td>Standards measurement criteria do not clear used during performance evaluation</td>
<td>Frequency</td>
<td>60</td>
<td>24</td>
<td>16</td>
<td>16</td>
<td>7</td>
<td>123</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Percentage</td>
<td>44.4</td>
<td>17.8</td>
<td>11.9</td>
<td>11.9</td>
<td>5.2</td>
<td>100</td>
</tr>
<tr>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3.93</td>
</tr>
<tr>
<td>VII</td>
<td>Lack of skills and Lack know how in developing BSC</td>
<td>Frequency</td>
<td>60</td>
<td>21</td>
<td>15</td>
<td>18</td>
<td>9</td>
<td>123</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Percentage</td>
<td>44.4</td>
<td>15.6</td>
<td>11.1</td>
<td>13.3</td>
<td>6.7</td>
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<tr>
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<td></td>
<td></td>
<td></td>
<td>3.85</td>
</tr>
<tr>
<td>VIII</td>
<td>Lack of highly developed information systems</td>
<td>Frequency</td>
<td>49</td>
<td>41</td>
<td>13</td>
<td>14</td>
<td>6</td>
<td>123</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Percentage</td>
<td>36.3</td>
<td>30.4</td>
<td>9.6</td>
<td>10.4</td>
<td>4.4</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mean</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3.92</td>
</tr>
<tr>
<td>IX</td>
<td>Time consuming in developing and updating BSC</td>
<td>Frequency</td>
<td>49</td>
<td>41</td>
<td>13</td>
<td>14</td>
<td>6</td>
<td>123</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Percentage</td>
<td>36.3</td>
<td>30.4</td>
<td>9.6</td>
<td>10.4</td>
<td>4.4</td>
<td>100</td>
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<tr>
<td></td>
<td></td>
<td>Mean</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3.92</td>
</tr>
<tr>
<td>X</td>
<td>Too many measures to be used</td>
<td>Frequency</td>
<td>43</td>
<td>26</td>
<td>29</td>
<td>19</td>
<td>6</td>
<td>123</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Percentage</td>
<td>31.9</td>
<td>19.3</td>
<td>21.5</td>
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<tr>
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<td></td>
<td>Mean</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3.66</td>
</tr>
</tbody>
</table>

Source: Own Survey, 2018

As it can be seen from Table 4.13 Item I, about 8.9% (f =2) and 45.2% (f =61) of the respondents strongly agree and agree on Target cascading for employees do not clearly allocate based on job grades and job title. 18.5% (f 25) remains neutral and 14.1%( f 19)
and 4.4 %( f =6) had strongly disagreed and disagreed respectively about this issue. The mean Score 3.15 indicates moderately agreed on this issue. In Item II, about 17 % ( f =23) and 33.3 % ( f =45) of the respondents were strongly agree and agree on the non-financial and financial targets do not clearly assigned to their employees. And 22.2% (f=30) of the respondent remain neutral and 17 %( f =15) and 7.4 % ( f =10) had strongly disagreed and disagreed respectively about this issue. The mean score 3.14 indicate moderately agreed on this issues.

In Item III, 35.6 % ( f =48) and 28.9 %( f =39) of the respondents were strongly agree and agree respectively on Performance evaluation results do not clearly reflects the employee’s Performances. And 17 %( f= 23) of the respondent remains neutral and 5.2 %( f= 7) and 4.4 %( f=6) disagreed and strongly disagreed respectively about on this issues. The mean score 3.94 indicate positively agreed of respondent were agreed on this issues. Item IV, about 19.3% (f= 26) and 39.4 % ( f =41) of the respondents strongly agree and agree respectively on there is no Taking care for sufficient and reliable data for Measurements before performance evaluation. About 25.9 % (f= 35) remain neutral and 8.1 %( f =11) and 7.4% ( f =10) of respondents disagreed and strongly disagreed respectively on this issue. The mean score 3.46 indicate moderately agreed on this issues.

Item V, about 44.4% ( f =60) and 17.8 % ( f =24) of the respondents agreed there Collect adequate data for measurement before performance evaluation is tedious. About 10.4 % ( f =14) remain neutral and 7.4 %( f =10) and 6% ( f= 4.4) of respondents disagreed and strongly disagreed respectively on this issue. The mean score 3.97 indicate positively agreed on this issues. Item VI, about 44.4% (f =60) and 17.8 % ( f =24) of the respondents strongly agreed and agreed respectively there is Lack of skills and Lack know how in developing BSC. About 11.1 % ( f =15) remain neutral and 13.3 % ( f =18) and 6.7% ( f= 9) of respondents
disagreed and strongly disagreed respectively about this issue. The mean score 3.85 indicate positively agreed on this issues.

Item VIII, about 36.6% (f= 49) and 30.4 %( f= 41) of the respondents agreed there is Lack of highly developed information systems. About 9.6 % (f =13) remain neutral, 10.4 %( f =14) and 4.4% (f =6) of respondents disagreed and strongly disagreed respectively about this issue. The mean score 3.92 indicate positively agreed on this issues.

Item IX, about 49% (f =36.3) and 30.4 %( f= 41) of the respondents strongly agreed and agreed respectively there is time consuming in developing and updating BSC. About 9.6 % (f =13) remain neutral, 10.4 %( f =14) and 4.4% (f = 6) of respondents disagreed and strongly disagreed respectively about this issue. The mean score 3.92 indicate positively agreed on this issues.

Item X, about 31.9% (f =43) and 19.3 %( f= 26) of the respondents agreed there is too many measures to be used. About 21.5 % (f= 29) remain neutral and 14.1 %( f= 19) and 4.4% (f = 6) of respondents disagreed and strongly disagreed respectively on too many measures to be used. The mean score 3.66 indicate positively agreed on this issues.

As indicated above the extent to which the respondents agree with the proposition of factors as having negatively affected the institution in the process of BSC implementation and the circumstance of their effect. According to the responses, the factors that have highly affected the institutions could be restated as follows:

- Performance evaluation results do not clearly reflects the employee’s Performances
- Standards measurement criteria do not clear used during performance evaluation
- Lack of skills and Lack know how in developing BSC
- Collect adequate data for measurement before performance evolution is tedious
- Lack of highly developed information systems
- There is time consuming in developing and updating BSC.
- agreed there is too many measures to be used

The challenges mentioned other than those listed include inadequate and inconsistent commitment of the executives, treating the BSC as system project, lack of integration of
the Ministry of Civil Service plans with MIDI plans and inefficient resource allocation. This problem though they are stated by few Directors and experts, they need to be given due emphasis as they can be major barrier to the achievement of the BSC objectives. Having the above in mind, the respondents, stressed challenges such as: inadequate level of commitment from middle level managers, knowledge, skill and attitudinal gap on BSC at different levels, fears and wrong perceptions in cascading objectives, bulky paper work requirement, problems in setting the right measures for the strategic goals, subjectivity involved in the performance evaluation, inadequate level of BSC education and training and inadequate capacity and support of the reform units of the institute and the respective supervisors.

In short, the major problems expressed by the various groups are mainly associated with the process of implementation and operation of the BSC as strategic management and performance measurement system.

In the proceeding chapter summary of major findings, conclusions, and recommendations were presented.
CHAPTER FIVE: FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

This chapter presents summary of findings, conclusions, recommendations that the researcher found to be fundamental in relation to the assessment of Balanced Scorecard implementation practice and its challenges on Metal Industry Deployment Institute.

4.1 Summary of Major Findings

From the study it is revealed that Institute has a vision of making operational improvements in support of an organization’s strategic objectives and the steady growth of the country’s economy, re-structured its functions in different Divisions, Departments and Sections. Sourcing and Facilities division (SFD) is one of biggest support divisions’ that is in charge of supplying goods, services and works needed by industrialist. Sourcing Department is one of the three Departments’ which exists in SFD whose objectives are: “providing step by step instructions for responsible Institute personnel in Sourcing activities, aligning their decision and duty to the Sourcing policy and strategies; ensuring Sourcing activities are conducted as per the Sourcing principles stated in the policy; aligning Balanced Scorecard to build up results based measurement system and develop new attitude of employees who choose to be measured only through their results throughout Institute. Likewise, the main intent of this research was to assess Balanced Scorecard (BSC) implementation practice and its challenges in Metal Industry Development Institute.

✓ The majority of the respondents had involvement in the reporting hierarchy are no confusion within institute. Similarly, majority of the respondents positively agreed Decision–making is extremely concentrated and centralized as well as positively agreed the duties and responsibilities are clearly defined and understood.

✓ The majority of the respondents had indicated Relationship between employee and immediate director are smooth and participatory, Directors have provided clear guide/path on the job and share information, the management has cascaded and communicated institute strategic plan to workforces and the director regularly follows the performances and gives feedback to workforce. This may adversely affect on the commitment of employees in the implementation process. The senior leadership team must work together to build and support the
implementation of the Balanced Scorecard, including objectives, measures and targets.

✓ The result indicates that the institute has no communications strategy and plan. This may be adversely affect awareness employees and communication within institute. In addition some of respondents doubt whether institute has among, Directors, team leaders, senior experts, core and support department’s management & other staff are primarily interactive (two-way) of communication. The institutes seek BSC to mobilize their strategy when they find difficulty expressing their strategy.

✓ The majority of respondents result indicates that the institute clearly knows the focus areas, Employees have share vision, mission and values. This benefit help the institute what we are trying to achieve. Therefore; day to day activities aligned with strategies. Besides performance and service delivery is improved.

✓ The majority of respondents understand BSC is focus on customers and stakeholders need & values. But the half of respondent doubt about BSC creating values and differential from the dimension of customers and stakeholders .This indicates lack awareness within employees with regarding to BSC.

✓ The mean value of internal business perspectives and internal business perspectives parameters such as quality services delivery, Tender processes, Certifications and strives to improve service delivery was 3.69, 3.56, 2.93 and 3.88 respectively. This indicted that they were not sure there was improvements in the institute. However, the mean value of quality services delivery, Tender processes and strives to improve service delivery which was the internal business perspectives parameters was 3.69, 3.56 and 3.88 respectively. This implies the respondent believed that there was quality services delivery, Tender processes and strives to improve service delivery after BSC implementation in the institute

✓ From above interpretation, the researcher can conclude that Metal Industry Development Institute fails to give adequate training on balanced scorecard implementation as well as other training or educational programs to update
employee’s skill and improve themselves for better performance. In institute gives BSC implementation less concern for career development to enhance employee’s effort to their assigned task.

✓ On the other hand the working environment in institute is not suitable to develop employee’s knowledge and ability to advance my career. Therefore, the institute gives less attention for the improvements of learning and growth of its employees

✓ The result from the majority of respondent implied the problem of setting right measurement and target for employees, wrongly appraisal score give for financial, nonfinancial and final ratings, poor linking of the Performance appraisal result and recognition such as salaries, incentive, allowance, and bonus. This demoralizes employees in the implementation process.

✓ Target cascading for employees do not clearly allocate based on job grades and job title. The non-financial and financial targets do not clearly assigned to their employees

✓ Performance evaluation results do not clearly reflects the employee’s performances. There is no Taking care for sufficient and Reliable data for Measurements before performance evaluation

✓ Collect adequate data for measurement before performance evolution is tedious.

✓ Standards measurement criteria do not clear used during performance evaluation

✓ Lack of skills, know how in developing BSC Lack of highly developed information systems Time consuming in developing and updating BSC and Too many measures to be used

The challenges mentioned other than those listed include inadequate and inconsistent commitment of the core and support process, treating the BSC as system project, lack of integration between the Ministry of Civil Service plans with MIDI and inefficient resource allocation. We can infer that challenges need to be given due emphasis as they can be major barrier to the achievement of the BSC objectives.
4.2 Conclusions

Based on the results of this study, different factors were identified as responsible for the practice and challenges after balanced scorecard implementation in the institute. The current study demonstrated that after BSC implementation the impact is negative on the performance evaluation system in the institute as well as the key performance indicators are not measured the performance of the individual and the institute progress. Concerning the target given to the individual workers was not considered the internal capacity of the institute consequently the target is unattainable and unrealistic. Though, the strategy execution of the institute is not implemented in actionable ways.

From the study result we can conclude that employees’ level of understanding on vision, mission and values of the institute as well as their responsibilities, accountability & goals after BSC implementation is high. However, the existing communication system is poor as a result it does not facilitate interactive way of communication. Furthermore the existing IT support not effectively support balanced scorecard implementation in order to update the progress of strategy execution based on current and operationally relevant information.

It was clear from the findings that the BSC is seen as an instrument for the wide range of improvements in the performance and services delivery of the Institute. It resulted in improved strategic thinking at all levels from top level to operational personnel, developed quality of organizational strategic plans and integration of visions, missions, strategic objectives and activities. Further, it has improved culture of planning, plan based work performance and evaluation, and performance information handling and management system among other things.

BSCs in MIDI involve several challenges embedding its implementation and use as strategic management and performance measurement system. MIDI has been assigned as a change agent to assist Federal civil service organizations to train and implement change tools, such as BPR and BSC. It was a good opportunity to get lessons from organizations. However, the level of implementation of BSC in the institute for the last seven years is found to be poor as reported by planning director of MIDI. Some of the reasons are inconsistency and seasonality of the top level management commitment,
inadequate level of BSC training, absence of accountability for BSC failures and inadequate capacity of the Change and Performance Management Office has delayed taking up the BSC to the desired level of achievement.

Further, inadequate commitment of the team leader and employees, turnover of qualified personnel, inadequate BSC implementation manual, problems in cascading and alignment of the BSC to personal development plan, difficulties in setting performance measures, subjectivity and favoritism in performance evaluation system, and laborious paper based performance data handling and management system(lack of automation) has impeded the effectiveness of the BSC in achieving intended objectives in the Institute according to the perception of respondent.

In short, the implementation of the BSC facilitated changes in the strategic direction of the organizations; it has improved the focus for effecting strategic change and improved accomplishment of tasks that represents the foundation of good performance management. In other words, besides simply assessing performance, the Balanced Scorecard provided a structured framework for performance management. However, the level of performance in this regard has not grown to the desired level according to the perception of respondent.

4.3 Recommendations

Based on the findings and conclusions drawn with regard to the BSC practices and challenges at MIDI the following recommendations are made to obtain the full-fledged benefits of BSC as strategy management system, communication tool and performance measurement system.

✓ As MIDI is a change agent organization working in collaboration with the Ethiopian Civil Service University on BSC implementation and other change tools in the selected civil service organizations, it should work on building its internal capacity and developing use in MIDI and the civil service organizations.

✓ Changing the mindset and attitude of employees radically requires proper and careful considerations. The way employees perceive the merits and demerits of the intended change can shape their involvement in the implementation process. With this regard, viewing the BSC as a continuous process, reassessment, requiring
maintenance and updating; etc. are subject to such attitudinal influence. Therefore, to minimize some bad experiences, attention should be paid at each stage to change the attitude of all groups who involve in the implementation process.

- There need to develop BSC implementation manual to address the technical and operational system to strengthen the existing BSC implementation monitoring and evaluation with clear responsibility and accountability. It will also enable to use as guiding document for training and consulting other organizations.

- The study findings have indicated that the application of BSC at MIDI is on the right path but the pace of its performance is not to the expected level. Thus, there is a need to improve the pace of BSC implementation and use through mobilizing core and support process, team leader, senior experts and experts.

- The study findings have indicated that there is a challenge in collecting, processing and acquiring data in required amount and type. MIDI should provide automation of BSC information handling and management system and train employees for the successful handling of information.

- MIDI has established the new office recently tasked with supporting and leading change efforts. Meanwhile, there should be firm actions in equipping the office by competent human resource, and in giving clear authority with commensurate accountability towards BSC and other change tools implementation. The office may be engaged to coordinate and support the strategy development, strategy execution and performance management activities. MIDI should be a model organization in the BSC system management whereby others will benchmark its experience for successful implementation in their organizations.

- One of the challenges faced in the practice of the BSC is the prevalence of incidental/unplanned activities. This problem is resulted due to poor planning efforts and communication gap between the Ministry of Civil Service and MIDI, the Director General and process owners, and the performers. Thus, there needs to be an alignment in planning between the MoCS and MIDI, the Director General and process owners, and the performers to work on reducing existence of unplanned activities by planning proactively and exhaustively backed by practice of letting know
the performers plan of their respective process with their responsibilities and accountabilities.

- It is the opinion of the majority of the employees that there is subjectivity and favoritism in the performance evaluation and measurement. Thus there need to work on the following for smooth and effective performance evaluation and measurement.
  - making fair work distribution among performers considering their seniority and position
  - trying to make evaluation criterion as objective as possible—especially the behavioral measurement criteria are too subjective as most of the respondents confirmed
  - Develop awareness that purpose of the evaluation and measurement is mainly to help the employees improve their performance, among other things. Such effort may reduce favoritism (especially in peer evaluation) and
  - Establishing compliant procedure for handling disappointments on evaluation results

- Challenges were reflected on setting the right measures of performance, assignment of weights to the performance objectives and measures at different levels and on what needs to be cascaded, objectives versus activities. Such technical points should be addressed through expert discussion and debate within the institute, among core and support process.

- It becomes important to arrange scheduled forums where different public institutions may come together and exchange views, deal with challenges they face and celebrate their achievements. This can be organized by MIDI in collaboration with the Ministry of Civil Service and University of Civil Service.

- Most employees appreciate the positive changes in the implementation process. This can be justified by conducting further studies about the effectiveness and efficiency of the implemented process by involving the management group, core and support employees of the institute.
References

- WubeamlakMekonnen (2016) Assessment of Balanced Scorecard implementation Practice and its Challenges on Procurement Department in Ethio telecom
- DraganPujas(2010) Barriers to the Successful Implementation of the Balanced Scorecard - the Case of Plava Laguna J.S.C
• Kaplan, RS and Norton, DP (January–February, 1992), The Balanced Scorecard: Measures that Drive Performance, Boston, Massachusetts, Harvard Business Review.


• Nader Atout (2007) Helping leaders & organizations thrive with disruption as the CEO creative five groups, the Balanced Scorecard Institute.


• Ovidiu Ioan (2007) How to build a successful balanced scorecard, Babeș-Bolyai University.

• Paul R. Naven (2014) Balanced scorecard evolution, dynamic approach to strategy execution, Johnwiley and sons, inc, Canada.

• Paul R. Niven, (2006) Balanced scorecard step by step; maximizing performance and maintaining results; John wiley and sons, inc, Canada.


• The FDRE Ministry of Capacity Building (2010), Independent Assessment of the Implementation of the Civil Service Reform Program (CSRP) in Ethiopia, Addis Ababa, AH consulting.

• Tilaye Kassahunr (2010), Rethinking institutional excellence in Ethiopia: adapting and adopting the balanced scorecard (BSC) model. JBAS Vol.2 No.1.

Annex A: Survey questionnaire

ST’MARY’S UNIVERSITY

SCHOOL OF GRADUATE STUDIES

Questionnaires to be filled by Core and Support staffs of Metal Industry Development Institute

Researcher: Tesfaye Gemechu (tehaba.thb@gmail.com & (+251911385245)

Research topic: The practices and challenges of balanced scorecard implementation

In

Metal Industry Development Institute

Dear respondents;

I would like to express my sincere appreciation for your generous time and honest prompt responses.

Objective: This questionnaire is designed to collect information about the existing practices and challenges of Balanced Scorecard implementation in Metal Industry Development Institute. The information that you respond shall be used as a primary data in my case research which I am conducting as partial requirements of master’s degree at St Mary’s university.

Therefore, the information gathered will be used fully and with due attention for academic purpose only and I would like to assure you that the data collected will not be misused any ways.

General Instructions

- There is no need of writing your name.
- In all cases where answer options are available please tick (✓) in the appropriate box.
- For questions that demand your opinion, please try to honestly describe as per the questions on the space provided.
- If the space provided is not enough for your opinions, please use the back side of the paper by writing the question number
I.I.1 Part I: Demographic characteristics

**Instruction:** Answer the following questions by putting “✓” mark on the box writing on the space provided.

1. Gender:  
   - Female [ ]  
   - Male [ ]

2. Age in years:  
   - 20-29 [ ]  
   - 30-39 [ ]  
   - 40-49 [ ]  
   - 50-59 [ ]

3. Educational Background:  
   - Master’s Degree [ ]  
   - First Degree [ ]  
   - Diploma or Certificates [ ]  
   - Grade 12 and below [ ]

4. Years of service in the organization:  
   - 0-4 [ ]  
   - 5-9 [ ]  
   - 10-19 [ ]  
   - 20-30 [ ]  
   - above 30 years [ ]

5. Your current position (Job grade):  
   - Director [ ]  
   - Team leader [ ]  
   - Senior expert [ ]  
   - Expert [ ]  
   - Other [ ]

Part II: Opinion survey on practice and challenge on BSC implementation

**INSTRUCTION:** Please use the following scale on each of the identified issues associated with BSC implementation and put “x” mark under the rating you think would best explain your thoughts for statements listed in the table below. Rating Scales 5 - Strongly agree 4 - Agree 3 - Neutral 2 - Disagree 1 - Strongly Disagree

<table>
<thead>
<tr>
<th>I. Strategic Planning of the institute</th>
<th>RATING SCALE</th>
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<tbody>
<tr>
<td><strong>statement</strong></td>
<td>Strongly Agree</td>
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<tr>
<td>1 You are aware of the vision, mission and values of the institute.</td>
<td>[ ] 5</td>
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<tr>
<td>2 You are familiar with the policies, rules and procedures of the institute</td>
<td></td>
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<tr>
<td>3 You are participated in the formulation of strategic plan of the institute</td>
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<tr>
<td>4 The strategic plan and annual plans are clear and measurable</td>
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<tr>
<td>5 Your activities contribute to the strategic objectives of the MIDI</td>
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<tr>
<th>II. Structure of the institute</th>
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<tbody>
<tr>
<td>1 The reporting hierarchy are no confusion within institute</td>
</tr>
</tbody>
</table>
II. Decision making is extremely concentrated and centralized

III. Leadership Support

1. Relationship between you and immediate director are smooth and participatory.

2. Directors have provided clear guide/path on the job and share information about the Institute.

3. Directors create a good work condition and environment that helps to do job for workforce

4. Directors encourage learning that will help workforce to do job better

5. The management has cascaded and communicated institute strategic plan to you.

6. The director regularly follows your performances and gives feedback to you.

IV. Communications strategy.

1. The organization has communications strategy and plan

2. Leaders communicate with staff regularly about BSC?

3. Communication among, Directors, Process owners, department’s management & other staff are primarily interactive (two-way)

V. Customer and stakeholder focus

1. BSC is focus on customers and stakeholders need & values

2. Leaders create a good work condition for employees

3. BSC is focus on customer acquisition & retention and customer service

4. BSC creating values and differentiation for the customers and stakeholders

VI. INTERNAL INSTITUTE PERSPECTIVE

1. The **institute** provides quality services to its customers.

2. Tender processes in the **institute** meet industry standards.

3. Certifications from this **institute** are trusted worldwide

4. The **institute** strives to improve service delivery.

VII. Benefit obtained due to BSC implementation
1. Institute focus area identified due to BSC
2. Employees have been share vision, mission and values of Institute.
3. A Institute performance has been improved
4. Institute Service delivery has been improved

VIII. **Learning and growth perspectives**
1. BSC gives much concern to the advancement of your career development
2. The training given on balanced scorecard implementation is inadequate
3. The training program given for me is appropriate to enhance my performance in work
4. I have taken all necessary support to improve myself through training
5. The working environment is suitable to develop my job, knowledge and ability so that I can advance my career

IX. **Performance Measurement/appraisal**
1. The performance measurement system adequately corresponds to the change implementation plan under BSC
2. BSC measures of performance are directly linked to the Strategic Objective of the Institute.
3. In the process of Implementing BSC, there is fertile ground that employees take part in defining the way their job will be measured.
4. The performance evaluation report linked with employee’s benefits such as incentives, bonus and other
5. The management follow standard guidelines for objective measurements
6. Timely submission the performance contract and performance evaluation to concerned organ

X. **Challenges of BSC implementation**
1. Target cascading for employees do not clearly allocate based on job grades and job title
2. The non-financial and financial targets do not clearly assigned to their employees
3. Performance evaluation results do not clearly reflects the employee’s performances.
4. There is no Taking care for sufficient and Reliable data for Measurements before performance evaluation
<p>| | |</p>
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<tr>
<td>5</td>
<td>Collect adequate data for measurement before performance evolution is tedious.</td>
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<tr>
<td>6</td>
<td>Standards measurement criteria do not clearing used during performance evaluation.</td>
</tr>
<tr>
<td>7</td>
<td>Lack of skills and know how in developing BSC</td>
</tr>
<tr>
<td>8</td>
<td>Lack of highly developed information systems</td>
</tr>
<tr>
<td>9</td>
<td>Time consuming in developing and updating BSC</td>
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<tr>
<td>10</td>
<td>Too many measures to be used</td>
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Appendix B: Interview Questions

ST’MARY’S UNIVERSITY
SCHOOL OF GRADUATE STUDIES

The following interview questions are designed to collect information about the perception of employees towards the practice and challenges of balanced scorecard implementation in Metal Industry Development Institute. The information shall be used as primary data in my case research which I am conducting my MBA.

The research is to be evaluated in terms of its contribution to our understanding of the practices of Balanced Scorecard and its contribution to the improvement of these practices. Finally, your genuine, honest and prompt response is a valuable input for the quality and successful completion of the project.

LIST OF INTERVIEW QUESTIONS:

1. When does the Balanced Scorecard implementation started in MIDI?

2. Is enough training provided about Balanced Scorecard implementation and do employee has appropriate awareness about BSC?

3. What is the benefit gained for the Institute after Balanced Scorecard implementation?

4. What are the challenges faced related to Balanced Scorecard implementation?

5. What measures are taken to overcome the above problems?

6. Does key performance indicator properly measure the Institute’s progress and performance of individual effort towards the achievements of the company strategy?

7. Does the performance evaluation is linked to rewarding system?