

***THE PRACTICES AND CHALLENGES OF BALANCED  
SCORECARD DESIGN AND IMPLEMENTATION AT GAMBELLA  
UNIVERSITY***

*A thesis Submitted to the School Graduate Studies of Jimma  
University Partial Fulfillment of the Award of the Degree of Masters of  
business Administration (MBA)*

**BY:**

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**JIMMA UNIVERSITY  
COLLEGE OF BUSINESS & ECONOMICS  
MBA PROGRAM**

**JUNE 5, 2017**

**JIMMA ETHIOPIA**

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## Declaration

This Thesis entitled “*The practices and challenges of balanced scorecard design and implementation at Gambella University*” is my original work and has not been presented for the award of any diploma or degree in any university and that all sources of materials used for this research have been duly acknowledged.

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## ***Abstract***

*Balance scorecard is an instrument for strategy implementation which help an organization to achieve its vision by aligning the organization's strategic goals to every employee's activity. As one of government owned higher educational institution, Gambella University implemented BSC in 2015. The general objective of this research was to assess the practice and challenges of balanced scorecard building (design) and implementation in Gambella University. To attain these objective, the study employed case study method is used. To collect data questionnaires, interviews and document analysis have been used. The questionnaires are prepared for 30 academic staff and 30 admin staff. Out of the administered questionnaires only 58 managed to return. Interview and document analysis were also made to complement the information obtained. All closed ended questions of the questionnaires were analyzed quantitatively using frequency and percentage and where as data obtained from interviews and document analysis were transcribed to supplement the quantitative data.*

*The result of finding the university has problems in building (design) BSC such as lack of participation in strategic plan development process, the performance measures are not keeping balance between leading (performance drivers) and lagging (outcome measures), adequate budget is not allocated to some critical initiatives.*

*In addition critical challenges in BSC implementation the University unable to use automation in BSC system, improper cascading and poor evaluation towards the progress of strategic goal. It is recommended that the university has to sep up qualified BSC team which will be supported by professional external consultant; Automate the BSC system; undertakes and revise the cascaded objective and arrange regular program to review the implementation.*

**Key words:** Balance scorecard, management, implementation, building, performance measurement.

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# CHAPTER ONE

## 1. INTRODUCTION

### 1.1. Background of the study

Balance scorecard was first introduced by Kaplan and Norton posted in the Harvard Business Review Article in 1992. At that time, it was new approach to strategic management. Kaplan & Norton recognize some of the weakness and ambiguity of previous performance management approaches. They have demonstrated that BSC enables any organizations to translate their visions and strategies into comprehensive objectives and substantial set of performance measures. Thus BSC provides enterprise view of organization's overall performance by integrating financial measures with other key performance indicators around customer perspectives, internal business processes, and organizational growth, learning, and innovation. (Kaplan and Norton, 1996)

The Balanced Score Card (BSC) is undoubtedly the most popular management system in organizations today (Wiersman, 2009), its popularity comes from the principle that it brings all of the strategic objectives of a business into a single and balanced framework (Kaplan and Norton, 2003). The BSC concept was introduced following a lot of critic from using only financial measures to evaluate the performance of a company. (Kaplan and Norton, 1992), proposed that financial measure of a company's performance be supplemented with other measures that will capture the intangibles assets of the growth, were to complement financial ones to give a clear picture of the company's performance.

In general, the performance measurement at university level is dominated by normative academic performances since the performance indicators are developed by the government and is applicable to all higher education institutions. As a result, such homogeneity in performance measurement has led to difficulty in assessing the strategy developed by University since the results will be biased. Most of the achievement of the strategic goals cannot be measured because the performance measurement system has not focused on the strategy. The university performance is basically the accumulation of performance achieved by study programs and other units within the university (IndriantySudirman,2012). But in fact, the study programs have not obvious performance indicators and targets that are inline with the university strategic goals.

Nowadays, the private and public sector organizations throughout the world exercise BSC as change and strategic management system.

Dumond (1994) and Sandt et al (2001) suggest that using balanced performance measurement systems improve the decision-making performance of managers and employees. On the contrary, on the survey made by Neely, Kennerley and Martinez (2000) from data gathered over three-year period on a major wholesaler of electrical company in the UK, referred to as Electrical which planned to use BSC and the sister company who continued to use traditional methods of performance reporting at the branch level come up with almost similar result with three parameters (total sales, Gross Profit and net profit). A research done at the Free university of Amsterdam indicates that about 70 percent of all implementations of Balanced Scorecard fail (Pforsich, 2005).

Hence as of May 2010 the balanced scorecard card(BSC) performance management system that is tool for change and strategic management system has been implemented in many public sector organizations in Ethiopia (The Ministry of Capacity Building, 2005). However; the public organizations that employ BSC as change and strategic management system encountered difficulty with its design and its implementation.

Therefore, to study in our country context, Gambella University has chosen. Gambella University is selected over other public organization because it implemented BSC. Thus the researcher is motivated to undertake research on the practice and challenges of BSC design and implementation; in the case of Gambella University.

## **1.2 Statement of the problems**

According to Atkinson (2006), it is estimated that 70% of BSC have failed during implementation. Similarly, Dragan (2010) on his thesis conclude that 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 BSC and implement it. The majority have either implemented the BSC but without any significant improvement in performance, or they have given up in the implementation the process itself. As mentioned the major causes implementation of BSC to fail; limited understanding of the Balanced scorecard, lack of executive sponsorship, lack of Balanced Scorecard education and

training, inadequate IT support, Not involving the whole organization, lack of planning and communication and also un willing to change by managers. According to Fortune magazine (1999 in the, cited by Niven, 2006) 70 percent of organization failures came not as result of poor strategy, but poor execution. Furthermore, Nair (2004)state that, Ironically, the organization challenges and implications encountered in implementing Balanced Scorecard require that implementation focus on three axes conditions; The people issues and challenges in change management, the process issues that require a removal or an additional of new processes of enable the transformation ,and the technology that sustains and improvement.

Hence; the weight of change in different organizations, BSC, with all its limitations, is perceived to bring basic changes. As a result, goals of BSC are very fundamental such as; customer satisfaction, increase performance and communication, promote strategic leadership. These goals are very difficult to achieve unless the system is designed and implemented properly. Designing and Implementing BSC performance and change management system is very essential, but the end result is the positive impact of the program, on the overall organizational performance and institutional capacity building. The efforts exerted to see properly designed and implemented BSC are immense. But no one can give assurance whether the efforts are on the right track, having the expected results from designing and implementing BSC. Publicly, many institutions in federal and regional states in Ethiopia talk about BSC and announce that they are implementing the BSC for the last many years. But no one institution has come up with its report that it has fully deployed the BSC and saw the real change achieved by proper designing and implementing BSC. Up to now, there is no empirical research done on the study, design and implementation, outcome and impact of BSC in higher public education institutions in Ethiopia particularly in Gambella region.

Additionally, evaluations to which conducted in 2008 EC shows that there were tremendous problem in implementing part rather than in building Balanced Scorecard. Even the evaluation indicates most top official's implementation of Balanced scorecard left to the middle managers (Report of Gambella university, 2008 EC).

These facts bring to mind to look the difficulties involved in the design and implementation process of BSC in the Gambella University. Taking this as a foundation, the student researcher tried to evaluate the university BSC with American balanced scorecard institutes model of six

step of building and three steps of implementation of BSC. Such evaluation and comparison gave an insight to the practical problems in design and implementation of balanced score card and to forward workable recommendation.

## **Research questions**

Based on the above statements of the problem, this research tried to explore and answer the following basic questions.

1. To what extents have the steps and the stage of BSC design and implementation strictly followed and deployed?
2. What are the overall roles and commitment of the senior leadership of Gambella University in design and implementation of BSC?
3. What are the practical challenges encountered in design and implementation of BSC in Gambella University?
4. What measures could be taken to make BSC more effective?

## **1.3. Objective of the study**

### **1.3.1. General objective**

The general objective of this research was to assess the practice and identify the challenges of Balance score card building (design) and implementation in Gambella University.

### **1.3.2. Specific objectives**

Consistent with the above general objective, the following will be the specific objective of the research

- To assess the strength and weakness in each stages of BSC design and implementation
- To examine the overall roles and commitment of senior leadership of Gambella university in design and implementation of BSC
- To find out the major challenges encountered in designing and implementation of BSC in Gambella university
- To forward appropriate recommendation to make BSC more effective.

#### **1.4. The significance of the study**

BSC has become one of the important reform implementation tool in Ethiopia public sector. Therefore conducting this study has the following significance.

1. The result of this investigation will contribute to solve problems related to design and implementation of BSC in Ethiopia public sector.
2. Another important significance of the study is based on the finding the researcher put forward critical recommendation to sustain the system
3. Finally this paper can help to trigger other study in the area and can be used as an input for further research

#### **1.5 The scope of the study**

This study is delimited and focused in the practice and challenge of Balanced score card design and implementation at the Gambella university, Gambella regional state.

#### **1.6 Limitation of the study**

Since the paper deals with practice and challenge of BSC design and implementation, one of the limitations it has is dwelling on one institution due to time and resource problem.

#### **1.7 Organization of the paper**

The paper is organized in such way that chapter one include the introduction part of the paper, chapter two is literature review, chapter three methodology, chapter four data presentation and analysis and chapter five is going to be summery of finding, conclusion and recommendation

# CHAPTER TWO

## 2. LITERATURE REVIEW

### 2.1 Why balanced score card?

In industrial economy, companies measure their organizational performance by using tangible assets and rely on financial measures, however; the emergence of the information era in the last decades of the twentieth century made obsolete many of the fundamental assumptions of industrial age competition (Kaplan & Norton, 1996). So, in today's economy, i.e. in information age in order to be successful, intangible assets have become the major sources of competitive advantage (ibid; 2001).

As Kaplan & Norton stated that in the early 1980's, a survey of management consultants reported that fewer than 10 percent of effectively formulated strategies were successfully implemented. On a 1999 Fortune cover story of prominent CEO failures concluded that the emphasis placed on strategy and vision created a mistaken belief that the right strategy was all that was needed to succeed (Kaplan & Norton, 1996). Besides, according to Kaplan and Norton estimate 70% of - the real problem is not [bad strategy]... bad execution." Thus Kaplan and Norton identified four barriers of strategy which are vision, people, management and resource barrier. So, organizations need a new kind of management system which is designed to manage strategies. Because according to Evans (2005) stated that strategies may be very well drawn and presented, but the problem is that strategy is not very well communicated to people involved in the execution process.

So, to be successful, strategy should be well communicated and it should become everyone's every day's job. Since the ability of executing strategy was more important than the quality of the strategy itself because "Good Execution hastens the failure of a poor strategy" (Alkhafaji, 2003:192). The issues of difficulty in executing strategy, coupled with reliance on financial measures of performance to gauge success or failure of the organization and the rise of value creating intangible assets becomes unfit for the information age, this led Kaplan and Norton to propose a new synthesis: the Balanced Scorecard (BSC) as a tool to link performance measures by looking at the business's strategic vision from four different perspectives: Financial, Customer, Internal Processes, and Learning and Growth in 1992. (Kaplan & Norton, 1992)

## 2.2 Definition of BSC

BSC defined differently by different researchers. In evaluation of BSC concept, two fundamental moments were identified; First, BSC was presented as a performance evaluation system (Kaplan, 1994; Kaplan & Norton, 1992; 1993 ;) and the authors defined BSC as –

*“aset of measures that gives top managers a fast but comprehensive view of the business.”*

*According to Iqra et al. (2013) BSC is defined as “Balanced score card as a tool used by the management to keep a record of the activities and actions of the staff and to control and monitor the results or consequences of the actions.”*

More elaborating Holmes, Gutierrez and kiel (n.d) defined BSC as

*“A comprehensive method of measuring organizational performance that is superior to traditional singular and efficiency based measures of agency performance aimed at determining whether management is building the infrastructure necessary to sustain organizational and institutional resilience and accountability.”*

On the second stage, following the experience of implementing BSC in several enterprises, Kaplan and Norton (1996) concluded that managers were not using BSC only as performance evaluation, but also as a strategic management system. So in the second stage Kaplan and Norton (1996) argue that BSC is more than an operational or tactical measurement system, BSC is a management system (not only a measurement system) that enables organizations to clarify their vision and strategy and translate them into action.

BSC is not a simple set of measures, but their definition must follow two fundamental principles; all measures used must be based on the definition of objectives established by the company’s mission and strategy; and a cause and effect relation between the measures defined for the four perspectives must be ensured.

According to Niven (2006) the measurement focus of the score card is to accomplish critical management process;-

1. Clarify and translate vision and strategy,
2. Communicate and link strategic objectives and measures,
3. Plan, Set targets, and align strategic initiatives
4. Enhance strategic feedback and learning.

(Huselid, Becker, & Beatty, 2005; Tanyi, 2011) defined BSC as

*“a tool managers can employ to measure an organization’s operational success through direct cause-and-effect linkages back into daily operations.”* Niven (2006) defined BSC as

*“Balanced Scorecard is a carefully selected set of quantifiable measures derived from an organization’s strategy. The measures selected for the scorecard represent a tool for leaders to use in communicating to employees and external stakeholders the outcomes and performance drivers by which the organization will achieve its mission and strategic objectives in the eyes of financial, customer, internal process and internal growth and development perspective”.*

## **2.3 The four pillars of BSC**

The balanced scorecard translates an organization’s strategy into four perspectives (Financial, customer, internal business processes and learning and growth) with a Balance among the following elements:

- Internal and external measures
- Objective and subjective measures
- Performance results and drivers of future results and
- The balanced scorecard [also balances] traditional financial measures with non-financial measures (Ittner, Larcker& Meyer, 1997; Kaplan et al., 1992).

The four Perspectives of Balanced score card introduced by Kaplan and Norton are discussed below:-

### **1. Financial Perspective**

The financial perspective demonstrated the strategy of increasing profitability while maintaining both business equity and proprietor’s income (Shadbolt et.al, 2003). Private sector financial objectives generally represent clear long-range targets for profit-seeking organizations. Under this perspective the most common performance measures incorporated are the traditional financial measures: ROI, Cash Flow, Net Operating Income, Revenue Growth, etc. So success is measured through financial measures .These measures differ from one company to another, which mean there is no standard set of financial measures applicable across different contextual organizational frameworks and environments (Al-Sawalqa, Holloway and Alam , 2011). In the government arena, the “financial” perspective differs from that of the traditional private sector. Success for public organizations should be measured by how effectively and efficiently they



meet the needs of their constituencies (Hopf et.al, Ronchetti, 2006) Therefore, in the government, the financial perspective emphasizes cost efficiency, i.e. the ability to deliver maximum value to the customer.

## **2. Customer Perspective**

The customer perspective demonstrated the strategy of good relationships with customers, and superior customers (Hopf. et.al. Shadbolt et.al, 2003). Kaplan and Norton (1992) state that customers' concerns have a tendency to fall into four different categories: time, quality, performance and service, and cost.

According to Al sawalqa, Holloway and alam (2011) Lead time measures the time required for the company to achieve its customers' needs. Quality measures the defect level of incoming products as measured by the customer. The combination of performance and service measures how the company's products or services contribute to creating value for its customers. The objectives recorded within the Customer quadrant of the Balanced Scorecard may be both contemporary and future orientated. They may relate to both existing and potential customers and markets (Mackay, 2004:16). The customer perspective enables the managers of the business to communicate and align the market based strategy; since the perspectives are linked, enhance the financial returns of the financial perspective (Kaplan & Norton, 1996). Customers, represents another view of internal operations that has a cause-and-effect relationship with the financial perspective and addresses how the organization must appear to customers in order to fulfill the organization's mission.

For the profit-driven private sector, the Customer perspective supports the critical financial perspective. However, for nonprofits, it is appropriate that the Customer perspective assumes primary over the financial perspective due to the critical need for constituent satisfaction. In the governmental model, the principal driver of performance is differ from the strictly commercial environment; namely, customers and stakeholders take preeminence over financial results. (Hopf et al.). In general, public organizations have a different, perhaps greater, stewardship/fiduciary responsibility and focus than do private sector entities

To achieve sustained competitive success, however; companies need to be focusing onfar more than their current products and customers. Companies should strive to continually surprise their customers with products which meet needs that they never even knew they had (Hamel and

Prahalad,1996:118). In competing for future success, organizations need to be continually developing the value propositions to be made available to their customers for years to come.

Kaplan and Norton (1996:93) summarized the importance of the customer perspective as follows:

*“The core of any business strategy is the customer – value proposition, which describes the unique mix of product, price, service, relationship, and image that a company offers. It defines how the organization differentiates itself from competitors to attract, retain, and deepen relationships with targeted customers. The value proposition is crucial because it helps an organization connect its internal processes to improved outcomes with its customers.”*

So, in this perspective the organization should demonstrate how it differentiates itself from the competitors by retaining, attracting, and sustaining relationships with its targeted customers (AL-Najjar & Kalaf, 2012).

### **3. Internal Business process perspective**

Internal business Processes, represents the impact of product and service quality and helps identify which internal business processes must operate with excellence in order to satisfy customers. In other words, the objectives of the internal business process perspective highlights the processes which are most critical for the strategy of the organization to succeed and to meet customer expectations (Kaplan & Norton, 1992; Kaplan & Norton, 1996a).

In the Balanced Scorecard of a commercial business, the Internal Business Processes objectives and measures should not focus solely on enhancing processes per se but should also focus on those capabilities that deliver competitive advantage (Mackay,2010). Internal business process metrics are then developed, which communicate the level of product quality through the monitoring of in-process metrics, as well as measuring productivity associated with the number of units produced or services provided (Brown, 1996). Metrics defined for the internal business Process perspective are those that can be associated with satisfying customers and delivering value. After all, exceptional customer performance descends from excellent internal processes (Kaplan & Norton: 1992). Typically the measures of this perspective are based on producing goods and services in the most efficient and effective methods. Commonly used measures for this perspective are: cost of quality, cost of non-conformance, process innovation, time savings

etc (AL-Najjar&Kalaf, 2012). These processes also enable the business to satisfy the shareholder expectations of the company's financial return (Kaplan & Norton, 1996a).

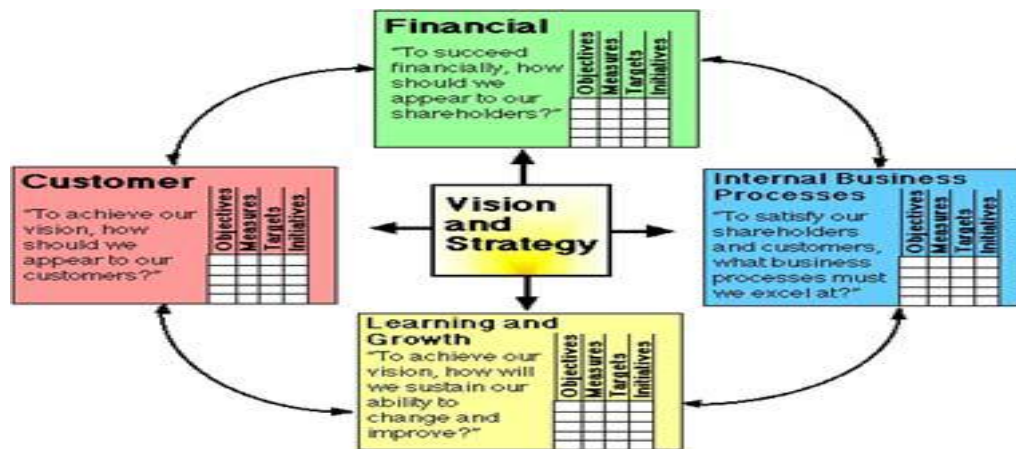
The internal business process perspective demonstrated the strategy of increasing and intensifying production while satisfying partners and operating in a socially responsible manner (Shadbolt et.al:2003). However, for nonprofits, realizing excellence in internal operations correlates to increased constituent or congregant satisfaction, not financials (Niven, 2003).

#### **4. Learning and growth Perspective**

The intense global competition of today's world requires the companies to be able to change fast and be innovative (Kaplan & Norton, 1992). The products and processes need continuous improvement to be able to keep up with the fast pace. The main sources of organizational learning and growth are people, systems and organizational procedures (Kaplan & Norton, 1996c; Mackay 2010). The learning and growth perspective demonstrated the strategy of utilizing technology, improving partner and employee knowledge through off- and on-[...] training and developing (Shadbolt et al, 2003). Learning and Growth, enables the other three perspectives and defines what type of staff and automation the organization must have in order to achieve the mission, support the internal processes, and satisfy the customers. So this perspective, along with the internal process perspective, hub on identifying factors of long-term and short-term success.

Kaplan and Norton acknowledge that the learning and growth measures are the most difficult to select; therefore they suggest the following measures as examples: employee empowerment, employee motivation, employee capabilities, and information systems capabilities (AL-Najjar&Kalaf, 2012).

Figure.2.1. Balanced scorecard four perspective



Source: Kaplan & Norton, 1996:

## 2.4 The balanced score card in the public organization

Although the balanced scorecard (BSC) was originally developed for the private sector, it has also become more widely used in public sectors. The public organizations are interested in performance measurement for improving performance and increasing accountability (Barry 2000; Berman and Wang 2000). There for; the major departure of public organization BSC from private one is the public organization's BSC focus in three high-level perspectives that are costs of rendering services for public, value/benefit of the service, and support of legitimizing authorities (Niven, 2002) Unlike the private sector, where financial measures are used for profitability in the public sector the focus is of initiating the programs and making best use of resources. None the less, the assignment of shaping the measures, targets and collecting the relevant information for non-financial measures is difficult task (Niven 2005; Davig et al. 2004). According to Kaplan (2001) the balanced scorecard has enabled public owned organizations to link their vision, mission and strategy statements to day-to-day operational actions. It is also shift their focus from programs and initiatives to the outcomes of the programs and initiatives. It is yet align initiatives, departments, and individuals to work so as to reinforce each other that dramatic performance improvements can be achieved. Thus achievement for public organizations should be measured by how effectively and efficiently they meet the needs of the public. Concrete objectives must be defined for customers and community. Financial considerations can play a

facilitating or constraining role, but will hardly ever be the primary objective (Kaplan and Norton, 1996)

## **2.5 The balanced score card and strategic management**

The balanced scorecard is an instrument for strategy implementation. It improves performance by converting an organization's mission and strategy into specific objectives and comprehensive performance measures (Kaplan and Norton, 1996)

Today, public and private owned organizations are working in complex environments. Hence; the BSC help these organization to clarify and translate their vision and strategy, communicating their strategy, aligning work unit and individual goals to strategy, linking strategic objectives to long term targets and budgets, and undertaking periodic performance evaluation (Kaplan and Norton, 2001)

Thus the balanced scorecard is not simply an operational measurement system; it is rather an integrated management system consisting of three components that are strategic management system, communication tool, and measurement system (Kaplan and Norton, 2001)

## **2.6 Basic principles of BSC**

### **Readiness Assessment**

The senior management body of the public organizations is the champion of the balanced scorecard. Besides; middle and lower level public organization leadership have to fully committed in the involvement, conceptual understanding, communication, and serving as process owners. Without this commitment, the result is failure. Prior to BSC can be implemented, the organization's mission, vision, and strategic plan must be well-defined. (Niven, 2003)

### **Engaging/Involving Leadership**

The commitment of leadership is the most critical factor for the success and failure of BSC. The heads of public organization, more than any other individual, has to be the sponsors of the balanced scorecard. BSC building and implementation is a gradual process. Therefore, the public organization leadership views BSC as a long-term process and be ready to commit to change over a longer period of 3 to 5 years time (Niven, 2002).

### **Education of Internal & External Stakeholders**

The BSC concept and theory has to communicate for all level of leadership. All level of leadership members need to understand BSC concept and prepared to educate internal staff & customers. The critical factor for success is communicating BSC to all to achieve specific performance measures and achieving organization-wide support and commitment (Niven, 2002).

The balanced scorecard's strategic objectives and measures have to communicate with print and electronic media. The communication serves to indicate to all staff and customers the objectives that must be accomplished. Once the employees understand high-level objectives and measures, they can establish local objectives that support the business unit's corporate strategy (Kaplan and Norton, 1996).

### **Data: Gathering, Processing, & Benchmarking**

The data collection is an important consideration for BSC, planning and implementation. The Information technology infrastructure should be considered when implementing the BSC. In addition to IT infrastructure issues, the human resource knowledge and time must be considered. Time spent on collecting and reporting data that has no direct linkage with the achievement of performance strategies can be minimized (Niven, 2003)

Benchmarking can be internal and external. Internal benchmarking is related with the selection of a set of measurements and indicators that attach to internal standards established without regard to performance by public organization that provide similar services. Internal benchmarking focuses on the rate of improvement rather than reaching an external standard or benchmark. External benchmarking relies on standards and measurements that relate to other public organizations (Niven, 2003)

### **Building Long-term Sustainability**

The balanced scorecard is system that used to clarify and communicate strategy, align work units and individual goals to the strategy, link strategic objectives to long-term targets and annual budgets, identify and align strategic initiatives, perform periodic and systematic strategic reviews, and obtaining feedback to improve strategy. Hence; it is time & effort taking to build and fully implementing (Kaplan and Norton, 1996).

Implementing a BSC is a gradual process. Head of the public organization in particular, should be tolerant. The process is time taking, requires overall changes within an organization at all levels (Niven, 2003)

## **2.7 .Step-by-step process of BSC in public organization**

**A:** - The organizational assessment is the first step which is dealing with checking whether the organization is ready for building and implementation of the BSC. The major tasks in this level are conducting SWOT analysis, identifying organization pains, and enablers from SWOT analysis (Asian Development Bank, 2007)

The first steps of assessments has passed through three steps, these are; launching BSC Program that is dealing with crafting team charter that defines roles & responsibilities, schedule and resourcing and training. The second step is conducting organization assessment. This is basically deals, identifying customers and stakeholders, organization internal & external pains and enabler. The last step is managing change that is basically deals with conducting readiness assessment, organization change management strategy and plan and communications strategy and plan (The Balanced Scorecard Institute, 2007)

**B:** - The second step design of BSC is developing strategic plan which considers organization's mission, vision. The mission answers why does the organization exist? The vision gives answer for where is the organization going and what should it looks like in 5–10 years? To achieve the vision and mission, strategic themes indicates the organization's most important areas for strategic focus? (Asian Development Bank, 2007)

In this step perspectives are selected from alternative, customer/stakeholder needs and value proposition are develop, strategic themes and critical success are identified (The Balanced Scorecard Institute, 2007)

**C:-**The third step of BSC is identifying high-level objectives for each BSC perspective. It is noted that strategy is a hypothesis of the best way for the organization to achieve its vision and mission. The strategy is long and short term that requires selection among alternative ways of doing things, focusing on a few things (The Balanced Scorecard Institute, 2007)

**D.** The fourth step is reviewing strategy map to ensure the reliability of the cause-and-effect relationships across objectives in multiple perspectives. The cause-and-effect relationship along

with performance drivers enables an organization's BSC to be linked to its strategy (Kaplan and Norton, 1996)

Strategy maps provide a visual representation of an enterprise's critical objectives and the crucial relationships among them that drive organizational performance (Asian Development Bank, 2007). There for the process of designing a strategy map should stimulate senior management to enter into a cause-and-effect analysis by using appropriate lagging (outcome) measures in conjunction with the leading measures that drive performance on the outcome measures (Kaplan and Norton, 1996)

Therefore; strategy maps for the public organization usually illustrate objectives in four perspectives that are financial, customer, process, and learning and growth. The financial perspective is balancing revenue growth with increases in productivity, efficiency, and costs (Niven, 2002). The Customer perspective is balancing the value propositions. The core outcome measures of customer perspectives are customer satisfaction, customer retention, new customer acquisition (Asian Development Bank, 2007; Niven, 2002).

The internal Process is identifying the core business processes that are critical for effective delivery of value proposition. In the internal-business-process perspective, the leadership identifies the core internal processes that are critical for the organization success or failure. The scorecard approach, however, will usually identify entirely new processes at which an organization must excel to meet customer and financial objectives (Asian Development Bank, 2007; Niven, 2002).

Finally learning and growth perspective is balancing the organizations' focus on competency development, improving access to information, and improving the corporate culture in the key areas that are important for successful strategy execution. Organizational learning and growth come from three principal sources: people, systems, and organizational procedures (Asian Development Bank, 2007; Niven, 2002).

Generally the four perspectives of the BSC have been common and found across a wide variety of private and public organizations. However; the four perspectives should not be a strait jacket. Depending on the organization context and a work unit's strategy, one or more additional perspectives may be needed (Kaplan and Norton, 1996).



#### E. The fifth step is performance measurement

The fifth step is identifying one or more measures that will drive improved performance on each objective. The performance measures are indicators of tracking performance of an organization's strategies and they are means of measuring both organization effectiveness and operational efficiency (The Balanced Scorecard Institute, 2007)

There for; the objectives and measures are organized and stated properly into a BSC. The well structured balanced scorecard consists of a mixture of 15 to 25 financial and nonfinancial measures. These measures should be grouped into four perspectives. For the three perspectives the distribution should be the same with five measures 22% each and the higher weighting is for the internal work process 8-10 measures and represents 34 % (Kaplan and Norton, 2011)

The most common measures of the objectives in the four perspectives are customer measures which includes, customer retention, acquisition, satisfaction, profitability; financial measures which includes return-on-investment, profitability, revenue growth, cost reduction productivity; learning and growth perspective which includes employee satisfaction, retention, information systems capabilities, motivation, empowerment; internal process which includes quality, response time, cost, (Kaplan and Norton, 1996)

In this step the objectives and measures have to keep balance between financial and non-financial indicators of success, lagging and leading indicators of performance, long term and short term, and finally keeping balance between enablers and outcome. Besides, target has to establish for the measures for three to five years that will transform the organizations (Kaplan and Norton, 1996)

#### F. The sixth step is strategic initiatives

In this step once targets for financial, customer, internal process, and learning and growth measures have been established in the step five, then after any organizations which try to introduce BSC have to assess whether their current initiatives will help achieve these ambitious targets, or whether new initiatives are required (Kaplan and Norton, 2001)

At present, many organizations have a numerous of initiatives under way. For example, total quality management, Kaizen, and BPR .While the formulation and mobilization of initiatives to achieve stretch performance targets is largely a creative process.

G: - The seventh step is automating the work process. The automation processes is basically deals employing information communication technology to support the BSC. The automation of work processes has many advantages. It can help to use software to automate the collection, reporting, and visualization of performance data, and better inform decision making (The Balanced Scorecard Institute, 2007).

H: - The eighth step is cascading the organization BSC to different work unit in the headquarters and branch offices. This is the stage that the corporate strategic plan is cascaded in to lower level objectives and measures. The headquarters management is expected to work hand in hand with branch managers to attain the corporate BSC objectives at the branch level (Asian Development Bank, 2007)

The function of BSC cascading is basically related with creating alignment around the organization's shared vision, to make strategy actionable to departments, and down to individuals. Consequently individual scorecards would aligned to departments and support units objectives that link with rewards, recognition, and incentives to results (The Balanced Scorecard Institute, 2007

Linking the compensation system to the scorecard measures is also another important function of this stage. Private and public organizations are linking their compensation system to the measures. For the scorecard to create the cultural change, the compensation scheme must be connected to achievement of scorecard objectives and outcome (Kaplan and Norton, 1996)

I: - The ninth step is basically related with evaluation. Evaluation is a strategic learning framework. This step should be considered to be the most important aspect of the entire scorecard management process. The main task of this stage is reviewing periodically the organization strategy map and BSC. The evaluation is basically deals with assessing the strategic results achieved following to the execution of BSC. Based on the assessment finding the tasks of reviewing and updating organization strategic elements undertake. Besides modifying strategy, objectives, strategy map, performance measures, initiatives are necessary. Based on the assessment finding organization structure change is also undertaken if necessary. A strategic

feedback system is an integral part of evaluation framework. It is designed to test, validate, and modify the corporate strategic plan (The Balanced Scorecard Institute, 2007)

## **2.8 Challenges and Failure of BSC**

Despite many stories of successful implementation of the Balanced Scorecard in large companies, Kaplan and Norton (2001: 360), based on their experience of Balanced Scorecard implementation in many organizations, identify two sources of failure of the Balanced Scorecard in large companies: the design and process failure. BSC often fails to achieve its goals when it focuses on trying to balance conflicting stakeholder interests or when it acts as a management scorecard (Gering et.al ,2000) in this case, BSC ceases to become a focused operationilizaion of a coherent strategy. Gering and venkatramen (2000) and Christopher Ittner& David Larcker categorized this kind of failure as design failure.

According to Schneiderman (1999) as cited by Itter and Larcker, Murby& Gould( 2005. 23) negotiated, rather than stakeholder focused performance targets is one of the reason that BSC fails. BSC can be ineffective or even potentially damaging if it becomes a “balanced brain storm” ( Gering et al., 2000a) or grap –bag of ideas to satisfy each constituency independent of common strategic objectives or, even worse, as set of “ scorecards”, pitting different and sometimes conflicting indicators against each other and on an equal footings. Thus the stakeholders BSC does not specify any single objective which the organization aims to achieve, instead it gives managers unlimited power to do what they want only subject to the restrictions from financial markets. In addition, studies by Lorange and Murphy (1984) and Goold and Quinn (1993) indicate that formal strategic control systems may reduce performance by focusing attention on incomplete or incorrect goals and performance measures and fostering behavioral and political barriers that adversely affect the utility of the strategic controls. Ittner and Larcker(2003) &Schneiderman (1999) also state that poor metrics is one of the reason for BSC failure, as Kaplan and Norton Richardson (2011) described this as failure of measures selected to depict the organization strategy which is categorized as deign failure by Kaplan and Norton

The BSC is also weakened if too many performance indicators are included, and some researchers have noted a tendency for the number of performance measures to increase over time with the resultant risk of weakening the critical link between performance measures and

organizational strategy (Gering and Rosmarin, 2000b) this is stated as design failure by (Kaplan & Norton, Ittner and Larcker) .According to Jesen (2002), a firm cannot maximize several objective as the same time. Many authors, Chen and Jones (2009); Debusk and Crabtree (2006); Richardson (2011) bring up the issue of communication within the organization as a risky factor. If the communication doesn't reach all the way down to the bottom of the organization, it is easy for the Balanced Scorecard to fail already in the implementation stages (Chen & Jones, 2009). Organization wide communication is important in order to gain employee acceptance when implementing the Balanced Scorecard (Debusk& Crabtree, 2006). Even the founders of the Balanced Scorecard, Kaplan and Norton, pushes the importance of organization wide effective communication (Chen & Jones, 2009). Ineffective communication is a great impediment for a successful adoption and use of the Balanced Scorecard (Chen & Jones, 2009). The company vision is one such thing that is very important to communicate properly throughout the organization. Another problem that organizations frequently make is jumping into a measurement program too fast and making the program too complicated. Deriving meaningful measurements, gathering reliable data, developing useful analytical techniques, and educating managers about how to use the data are all difficult steps. Doing all this at one time with a bucket full of 50 different measures is doomed to failure. (Zimmerman,2004)

According to Molleman (2007) the research made in an engineering company the cause of the failure of the BSC is due to the use of Bottom up approach because it is stated that lengthy of the process and delegation of the project to middle management and defining the project as performance. So success of BSC does not come from a vacuum rather top management of the [of the organization] should demonstrate its commitment to the adoption of the BSC. Because the one of the cause of BSC failure is lack of Top management commitment in implementation of BSC and Kaplan and Norton also classify this kind of failure as process failure Al-Najjar&Kalaf (2012), Richardson (2011), Kaplan and Norton (2001: 361).

Other researcher like Professors Christopher Ittner and David Larcker classifies source of failures in to two, one is design failure and the other transitional failure. Nelly et al (2002) classifies source of failure of BSC to three, content issue, contextual issue and processual issue. Christopher Ittner and David Larcker at Wharton classifies design failure in seven different items

1. Confusion regarding primary performance drivers often, financial measures carries more weight within an organization than non-financials, but to drive through a holistic, long-term and sustainable strategic re-alignment, the needs of non-owner stakeholders (service users, service delivery partners, etc) should also be considered.
2. Lack of a delivery-level target deployment system /Schneiderman (1999), Murby& Gould (2005: 23)
3. No state-of-the-art improvement system is used; /Schneiderman A.(1999), Murby& Gould(2005:23)
4. There is no, and cannot be a quantitative linkage between non-financial and expected financial results. /Schneiderman (1999), Murby& Gould (2005:23)
5. Being inward looking and examining the impact of external discontinuities

The most common causes of process failure include (Kaplan and Norton, 2001: 361):

- Too few individuals involved;
- keeping the scorecard at the top;
- Overly long development process;
- Treating the Balanced Scorecard as a one-time measurement project;
- Treating the Balanced Scorecard as a systems project
- Hiring inexperienced consultants;
- Introducing the Balanced Scorecard only for compensation.

To this also come the difficulty to determine the weights of various performance measures, outcomes and incentives. According to De Busk & Crabtree (2006) linking the Balanced Scorecard to incentives is a very hard thing to achieve and it carries some risk. The difficulty lies in what size and weight the different performance measures should have and what types of incentives to give for the employees to think long-term and about the best interest of the company instead of their own best interest (DeBusk & Crabtree, 2006).

Kaplan and Norton emphasize that the implementation of a Balanced Scorecard makes it easier for managers to set bonuses and other incentives subjectively (DeBusk & Crabtree, 2006). However, Lipe and Salterio (Chen & Jones, 2009) assert that the Balanced Scorecard may be biased and can sometimes fall short with its intended use of providing a more balanced approach to evaluate employees.

Lawson et al (2003) and Dumond (1994) found that using performance measurement systems and linking scorecards to compensation significantly increased employee satisfaction. It is true, however; sometimes this kind of motivation might lead to manipulation of measures in order to get compensation and bonuses. Sometimes lack of understanding will lead the performers to manipulate the system. Research by professors Christopher Ittner and David Larcker at Wharton (2003) & Kaplan and Norton (1996b), lack of understanding of the nonfinancial areas of performance that might advance strategy can allow self-serving managers to choose and manipulate measures.

Behind underlying failures there exists ineffective communication within an organization. This means that not everyone in the organization understands the concept and thus may even oppose it. Zimmerman (2004) many managers simply implement a balanced scorecard as if it were a recipe. If they do not understand what is, how it works and why they implement it then they might copied it.

Richardson (2011) also states ten points which lead BSC to fail. Out of the points stated by Kaplan and Norton as process failure, the remaining which is not mentioned by them is depicted here below;-.

1. Not clearly linking balanced scorecard indicators with strategic objectives-
2. Forgetting that the balanced scorecard is a tool for measuring the health of the business strategy
3. Not focusing on the “ vital few”
4. Not changing balanced scorecard indicators when required
5. Treating the balanced scorecard effort as a project and not assigning adequate resources to the ongoing use of the balanced scorecard;

The other cause of failure of BSC stated by professors Christopher Ittner and David Larcker is transitional issues.

Transitional issues:-

1. Major organizational changes (for example, a merger or acquisition);
2. Changes in key Personnel/management team; (Tesfaye&Ataklity, 2011:149) lead BSC to fail.

According to Nelly et al(2002) the main reasons for success and failure of BSC is categorized using organizational context as contextual, content and Processual issues are as follows-

**(1) Contextual issues:-**

- The need for a highly developed information system; ( Bierbusse and Siesfeld, 1997).
- Time and expense required; (Bierbusse and Siesfeld 1997; McCunn, 1998).
- Lack of leadership and resistance to change; (Hacker and Brotherton, 1998; Meekings, 1995).

**(2) Processual issues:-**

- Vision and strategy were not actionable (Kaplan and Norton, 1996) as there were difficulties in evaluating the relative importance of measures and the problems of identifying true ``drivers`` (Bierbusse and Siesfeld, 1997; Schneiderman, 1999). Strategy was not linked to resource allocation (Kaplan and Norton, 1996; Meekings, 1995).
- Goals were negotiated rather than based on stakeholder requirements (Schneiderman, 1999).
- striving for perfection undermined success (McCunn, 1998; Schneiderman, 1999).

**(3) Content issue and it include**

- Strategy was not linked to department, team and individual goals (Kaplan and Norton 1996; Bierbusse and Siesfeld, 1997; Schneiderman, 1999).
- Large number of measures diluted the overall impact (Bierbusse and Siesfeld, 1997).
- The need to quantify results in areas that are more qualitative in nature (Bierbusse and Siesfeld, 1997).

Another difficulty with the Balanced Scorecard is translating the strategy into action, which is a very common reason for failure during implementation (DeBusk& Crabtree,2006)

Other challenge is lack of interest in implementation of BSC. Olveet. al. (2003) brings up the lack of interest when it comes to developing and advancing the already existing Balanced Scorecard as a problem. This lack of interest may be due to the attitude of the employees; they may believe that the Balanced Scorecard is yet another temporary and pointless project which will result in less effort in implementing. They further say that the life-span of the Balanced Scorecard is limited like other passing fashion trends. They further give examples of businesses where the Balanced Scorecard has run out of steam or where the companies has chosen to deviate from the scorecard because it has been too much work (Olve& Samuelson, 2008).

As Kaplan and Norton stated, the balanced scorecard requires a sustained, long-term commitment at all levels in the organization for it to be effective. The main challenge of this system is that it can be difficult and time-consuming to implement.

Strategy researchers point out that the use of formal, pre-set goals and milestones in strategic control systems such as the balanced scorecard may also prevent the adaptability and flexibility that is the essence of good strategy (e.g., Quinn, 1980; Mintzberg, 1987). Pre-set goals are almost always met, but whether goals are achieved by improving performance or by improving the measures without improving performance can be difficult to determine (Meyer and Gupta, 1994). Apart from the above, BSC in Governmental organization in both developed and developing nations is to improve performance, promote accountability, and increase confidence in government. However; the implementation of the BSC in developing countries would be suffered by a lack of resources, politicization of public administration, and corruption. Holems, Gutierrez & Kiel (n.d)

Murby & Gould (2005:23) state in percentage the reason for failure of some organization BSC implementation which shows that:

- 78 per cent of companies that have implemented strategic performance measurement systems do not assess rigorously the links between strategies and performance measures;
- 71 per cent have not developed a formal causal model or value-driver map;
- 50 per cent do not use non-financial measures to drive financial performance; so the effectiveness of the BSC will suffer if the included non financial measures are not linked to or aligned with the firm's strategic objectives ( Kaplan & Norton, 1996; Zimarman 2004)
- 79 per cent have not attempted to validate the linkages between their nonfinancial measures and future financial results; and
- 77 per cent of organizations with a balanced scorecard place little or no reliance on business models and
- 45 per cent found the need to quantify results to be a major implementation problem.

## **2.9 Application of BSC (empirical study findings)**

A case study was conducted to assess the application of balanced score card in performance measurement at ESSAR Telkom Kenya Ltd which is the subsidiary of partially privatized public owned Telkom Kenya Ltd with data being collected by use of personal interviews with the heads of departments mainly the technical, information technology, customer experience, finance, human resource, sales and marketing.



The study revealed that the company primarily uses balanced score card for strategy implementation and as a performance measurement tool. The major strengths and challenges of BSC application in the company are stated below.

The challenges of using balanced scorecard to measure performance in the company includes the management is too busy in solving and implementing short term goals; inadequate top management support; lack of highly developed information system to support balanced score card; lack of linkage of balanced score card to employee reward; balanced score card is time consuming to develop; lack of skills and know how in developing and implementing balanced score card ;trapped with organizational politics (Stephen and Gabriel,2010)

The major strength of using balanced scorecard to measure performance in the company includes the performance measures were clearly defined in each performance area and linked to compensation to a great extent; information from employees is highly valued; measures are used for strategic planning; balanced score card complements the financial measures of past performance with operational measures that drive future growth; performance and that the benefits will outweigh the costs if balanced scorecard was implemented fully (Stephen and Gabriel,2010).

Generally for sustaining the BSC all nine steps stated above are critical& mandatory in building and implementation of BSC. Besides, for sustainability of the BSC the public and private organizations maintain committed and engaged leadership, create a results- oriented culture, enhance individual accountability for results through objective ownership, align the organization, systems and employee performance around strategy through a rewards and recognition program, emphasize continual improvement basically in processes, in learning and skills development, in understanding customer needs and satisfaction, and in ensuring employee satisfaction, evaluate the progress and use automation to support BSC (The Balanced Scorecard Institute, 2007)

## **2.10 BSC application in Ethiopia**

BSC is a strategic management and measurement tool. It measures performance by taking intangible assets in to consideration, but most of the banks measure their performance mostly taking their tangible asset in to consideration and their growth also measured likewise. Fikadu (2009) in his book in its thesis, recommended that CBE is better utilize BSC approach for its performance management in addition to traditional approach because BSC measures performance of the business taking in to account the long run aspects of the business like Customer satisfaction, internal business process and Learning and growth perspective of the business rather than only dwell on financial matters. Some authors even recommend BSC to curb the problem of employee dissatisfaction that emanated from low salary and benefit. Because BSC attaches performance with reward system in order to motivate employees.

As Tesfaye&Ataklity (2011:149-150) stated absence of reward system and low level of salary in public organization especially in civil service adversely affected employee motivation and caused high labor turn over. Likewise the employee dissatisfaction of the three organizations MoLSA, CBE and DBE's is emanated from low salary and benefit ,so in order to solve the problems the authors recommended the introduction of reward system in line with desired result or behavior. That is introduction of result oriented performance management system (using BSC as a tool) is assumed that it will solve this problem. Actively supported at the highest levels of governments in Ethiopia, policy makers have adopted the 'Balanced Scorecard', an accounting concept introduced into the management literature in the 1990s (Kaplan and Norton, 1996) to stimulate and inform performance planning and monitoring with the intention of creating a more 'strategically coordinated' public service (Adebabaye& Perkins: 2010.83) .

According to our 'insider' account, Adebabaye& Perkins: (2010.83) state that BSC was chosen mindful of the need to coordinate activity not only vertically between governmental policies and individual ministries but also horizontally across public service agencies, to deliver integrated performance management motivated by a more stakeholder centered approach.

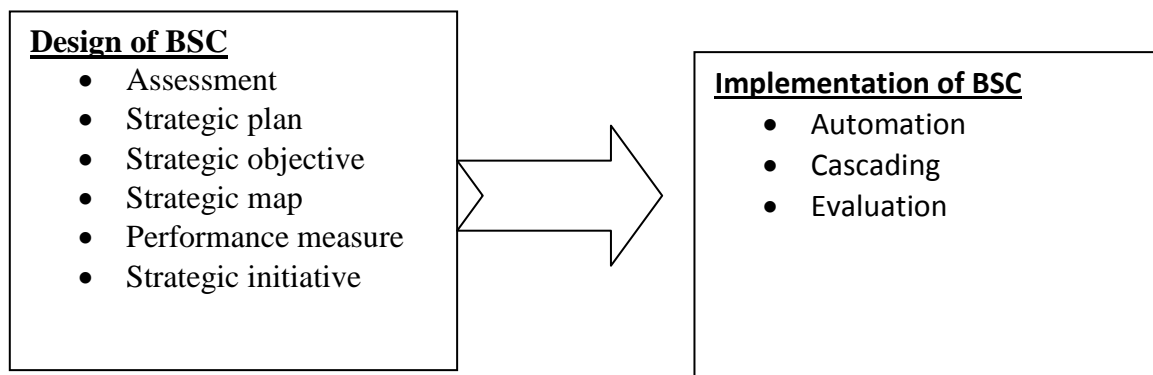
Based on the documented information produced by the World Bank issued on 2013, it states that around 145 federal and 270 regional offices in Ethiopia have implemented BSC; the institutions have integrated balanced scorecard measures in their strategic plans. A system of individual performance agreements linked to team and organizational performance targets derived from the

balanced scorecard methodology is also being implemented in the above mentioned organizations.

## 2.11 Conceptual frame work

The conceptual schema of the relationship between the dependent variable and independent variable is depicted here below.

Figure1. Conceptual schema of the relationship between the variable



# CHAPTER THREE

## 3. RESEARCH METHODOLOGY

### Introduction

This chapter introduces research design and methodology of the study. This chapter present the methodology that will be utilizes to determine challenges of BSC design and implementation of Gambella University. The main objective of this section is to recognize the sampling, data source and statistical measures that will enhance the analysis of the study. Hence this chapter gives details of the research design that represents the overview of the research methodology to looks at target population, sampling size, sampling technique, data collection instrument and its administration and technique use for data analysis

### 3.1. Research design

The study employed a case study design to examine the practice and challenges of balanced scorecard in design and implementation at Gambella University. Yin (2009) explained that the “case study method allows investigators to retain the holistic and meaningful characteristics of real-life events such as . . . organizational and managerial processes” (p. 4).

The choice to design a case study was necessitate by the need to develop a valid study to describe the phenomena which is the BSC in Gambella University. Stake (1995) explained, “A case study is intended to catch the complexity of a single case” (p. xi). A case study is about concentrating on one situation; it is not research based upon large samples.

Therefore, a case study is unlikely to provide a strong representation of others, meaning the researcher does not study cases to understand other cases; but the hope is by understanding one case the researcher can have a greater understanding when the researcher complete other case studies exploring a similar phenomenon. This case study is organized with the intention of answering research questions; therefore, it is an instrumental case study. The case study is instrumental for accomplishing the answer to the four research questions. An instrumental case study is utilized when the researcher feels they “may get insight into the question by studying a particular case” (Stake, 1995, p. 3).

### **3.2. Study area**

The study was conducted in Gambella university Gambella peoples' regional state. It is located 450 Km from Jimma but found Gambella town. In this regional state there is only one university and in which the study was undertaken. The study site was selected based on the familiarity of the researcher in which a newly established university. Moreover, the BSC tools also launched and implanted since 2015 in the university.

### **3.3. Population and sampling method**

The total population of Gambella University which consists 358 academics and admin staff. Out of this 127 of them were academic staff; while the remaining 231 were an admin staff. The target population for the main study was both academic and admin staff who served 2 years and above in the University because staff who served 2 years and above, who took different trainings on the BSC and staff with a mild, moderate or in depth knowledge of BSC.

### **3.4. Sampling size and sampling technique**

The researcher strategically identified the target population with the assistance of HR directorate and get a complete picture of the organization on the design and implementation of BSC and staff educational background, position and work experience. In descriptive research typically uses larger samples; it is sometimes suggested that one should select 10-20 percent of the accessible population for the sample (Singh, 2006).The total number of employees is 358. From this total population, 60 staffs were taken as the sample size. Then, the researcher distributed the questionnaires to the two facilities and ten directorates via quota in order to give an equal chance. Based on the quota, 30 questionnaires distributed to the two faculty (agricultural and business and economics faculty) and each faculty get 15 questionnaires. The remaining 30 questionnaires also distributed to the 10 directorates and each directorate get 3 questionnaire. To select the respondents the researcher employed purposive sampling technique in order to capture a full range of defined conditions about BSC. Purposeful sampling is a technique widely used in identifying and selecting individuals or groups of individuals that are especially knowledgeable about or experienced with a phenomenon of interest (Cresswell and Plano Clark 2011).In addition to knowledge and experience, Bernard (2002) and Spradley (1979) note the importance

of availability and willingness to participate, and the ability to communicate experiences and opinions in an articulate, expressive, and reflective manner

Moreover, academic vice dean, administrative vice dean, president office head, institutional change directorate, human resource, information technology, budget and planning directorate and the BSC design committee were also purposively selected for interview in order to triangulate the data found via questionnaires. Here, staff who served less than two years in the university excluded intentionally because they did not take the training on the BSC. 58 Out of the 60 questionnaires filled and returned while two questionnaires discarded.

### **3.5. Data collection tools**

In order to answer the research basic questions, the researcher employed various data collection methods. Initially to gather information from the participant closed ended questionnaires with five point liker scale were used. The reason for using the likert scale is that will enable certain arithmetical operations to perform the data that collected from respondents. Beside this, the researcher was conducted unstructured interview with senior managers. To collect data for the study, the researcher reviewed the Gambella university BSC document of (2015-2020)

#### **3.5.1. Questionnaires**

The questionnaire was used as a main instrument to collect data from the staff of Gambella University. It preferred from other tools hoping that may provide an opportunity for obtaining reliable and valid data from respondents. The questionnaire developed by the researcher from different theories and reviewed by two University lecturers who have reach experience in the area of management and economics and also by reviewing previously done papers who are related to this topics. The questionnaire consisted demographic of the respondent and closed ended type. It divided in to three parts with five scale questions (Liker scales that are strongly agree, agree, undecided, disagree, Strongly Disagree). The first part related to top leadership commitment in terms of engagement, conceptual clarity, communication and serving as change agent. The second part related with six steps of BSC design that are The organizational assessment, developing strategic plan, identifying high-level objectives for each BSC perspective, reviewing strategy map, identifying measures that will drive improved performance

on each objective, strategic initiatives. The final was about automating the work process, cascading the organization BSC to different work unit, and evaluation.

### **3.5.2. Interview**

Unstructured interview was prepared to senior managers of the university. Interview was selected in order to obtain data that did not accessed through questionnaire. The selected senior managers of the university, academic vice dean, administrative vice dean, president office head, institutional change directorate, human resource, information technology, budget and planning directorate and the BSC design committee.

### **3.5.3. Document analysis**

The research reviewed a document BSC strategic plan of the university 2015 to 2020 that consists organizational assessment, mission, vision and values, strategic themes and result, strategic objectives, strategic map, initiative, automation, cascading and monitoring and evaluation in nine phases.

## **3.6. Data Analysis**

Both quantitative and qualitative approach was used to analyze the data collected for the study.

Using such mixed approach helps to use data from different sources. Depending on the nature of such question and data that was collected different statistical were employed. Data collected with closed ended question were feed into SPSS statistical package version 20 and analyzed with five liker scale quantitatively in terms of percentage and frequency. To enrich the data that gained with interview were analyzed qualitatively. Finally, findings were interpreted, analyzed and discussed in relation to the research questions and review related literature.

## **3.7 Validity the Data**

The Validity of qualitative research is vital. The researcher must have some way of demonstrating that their findings were true otherwise, there are no good grounds for anyone to believe it. Conventionally, the bases for judging the quality of research have been validity this refers to the appropriateness of the data in terms of the research being investigated; reliability

this refers to whether a research instrument is natural in its effect and constraint across multiple occasions of its use (Den Scombe, 2007). So, for increasing creditability of the researching the following instruments were used:

1. **Triangulation:** the data was collected from different sources using different instruments such as interview, documentation and closed ended questionnaire for cross checking the result.
2. **Grounded data:** qualitative research tends to builds on a detailed security of the text or visual images involved. This provides a solid foundation for the conclusions based on the data and adds to the credibility of the research.
3. **Use of detailed description with a quota.** In interpretation of the data obtained, I narrated and describe what I understand
4. **The questionnaire part in data processing and analysis** was made using SPSS that help to increase the creditability and reliability of the study.

### 3.8 Analysis Of cronbach’s alpha reliability Test

These tests run to determine the reliability of the collected data. For reliability to be confirmed, cronbach’s alpha coefficient range from 0-1 and will need to be above 0.6 to conclude reliability, below this level, reliability cannot be concluded (Nunnaly, et al.,1967). Later on According to him (1978) “the minimum acceptable level of cronbach’s alpha value is 0.70” so, this data are above this value which is acceptable of the internal consistency of the questions ( table 3.1).

**Table 3.1. Cronbach’s alpha reliability test**

Dimension of BSC	Cronbach’s Alpha	Percentage (%)	Number of item
Management and leadership	0.886	88.6%	9
assessment	0.763	76.3%	5
Strategic plan	0.886	88.6%	9
Strategic objective	0.858	85.8%	6
Strategic map	0.906	90.6%	4
Performance measure	0.934	93.4	6
Performance initiative	0.768	76.8	3
Automation	0.813	81.3%	2
cascading	0.789	78.9%	4
evaluation	0.903	90.3%	4

Source : own survey , 2017



### **3.9 Ethical Considerations**

This study carried in line with the approval obtained from Jimma University and Gambella University also gave a written permission to conduct this research in response to a written inquiry. The interview is conducted by letting the participants to have information about the purpose of the study and the type of information needed from them. The interview was carried out after consent from the interviewees and at a place of their choice. In the case of primary data collection, different management positioned employees of the university were participated. Through this process the researcher let the participants to know the purpose of the research and those who participated were according to their willingness. The questionnaire provided to the respondents has general information about the purpose of the study. In addition to that it indicates that the respondents need not mention their name in the questionnaire and it insures confidentiality. The distribution and collection of questionnaire were made using sealed envelope. This led the respondent to provide their view without any fear and discomfort

## CHAPTER FOUR

### 4. Data presentation and analysis

This part of the paper presented and analyzed the data collected to seek appropriate answer for the basic questions raised in the statement of the problem. To collect the data, Gambella university BSC document was consulted, interview was conducted with concerned officials of the university, and questionnaires were distributed to collect data from employee and of management bodies.

#### 4.1 Characteristics of the Respondents

The university employee from all categories of sex, work position, educational level and years of experience were in filling out the questionnaire. This was made in order to increase the comprehensiveness and reliability of the data.

Table1 shows that 67.2% (39) participants were male while 32.8% (19) were female. Regarding the age, table 1 indicates that 22.4% (13) of the respondents were within the age of 18-30; 55.2% (32) of respondents were between the ages of 31-41; 22.4%(13) of respondents were within the age of 41-50. The data indicates that, 77.6 %(45) of respondents were between the ranges of 31-50 years. From this data one can conclude that the majority of the respondents were adult and a good opportunity for the university.

Regarding level of education, 39.7%(23) respondents were 1<sup>st</sup> degree holder, 56.9%(33) of respondents 2<sup>nd</sup> degree holder and 3.4%(2) of respondents were PhD holder. This shows 60.3%(35) of respondents graduate and above. From this one can understand that the majority of the university staff was master and above in their education level.

In relation to the work position, 31%(18) of the respondents were teacher, 24.1%(14) of the respondents were officer,29.3%(17) of the respondents were team leader and 15.5%(9) of the respondents were directors and others.

With regard work position and experience, table 1 indicates that, 15.5%(9) of the respondents served two years, 25.9%(15) respondents served 3 to 5 years, 32.8% (19) of respondents served

6 to 8 years and 25.9%(15) of respondents served above 9 years. This data shows the 84.6% (49)of the respondents served above 3 years. The majority of the university staff served more than three years.

**Table 4.1 Demographic description of the respondents**

<b>Variables</b>	<b>Category</b>	<b>Frequency</b>	<b>Percentage</b>
Sex	Male	39	67.2
	Female	19	32.8
	Total	58	100.
Age	18-30	13	22.4
	31-40	32	55.2
	41-50	13	22.4
	Total	58	100.
Levels of education	Degree	23	39.7
	Master	33	56.9
	PhD	2	3.4
	Total	58	100.
Work positions	Teacher	18	31.
	Officer	14	24.1
	Team leader	17	29.3
	Director and other	9	15.5
	Total	58	100.
Work experience	Two year	9	15.5
	3-5 year	15	25.9
	6-8 year	19	32.8
	>9 years	15	25.9
	Total	58	100.0

**Source;** data generated from questioner

### 4.1.1 Employees/management response related with BSC

In this particular section the data related with the study is presented and analyzed in a very detailed way. There for the data is collected from interviews, and questionnaires in relation to the title under study. The presentation and analysis is categorized in to three major dimensions: Leadership commitment, designing or building BSC, and finally its implementation. These three dimension serve as checklists as to whether or not BSC is properly designed and implemented in Gambella university

### 4.1.2 Management and leadership

In this sub section of the paper data were collected from the questionnaires, and interview that are related with the top management commitment in the building and implementation of BSC. The data are presented and discussed as follows:

Table 4. 2 Management and leadership

Variable		Strongly disagree	Disagree	Undecided	Agree	Strongly agree
The senior management well defined the organization vision, mission and corporate values	Frequency	2	6	5	32	13
	Percentile	3.4	10.3	8.6	55.2	22.4
The senior management is fully committed in the process of the university BSC building and implementing	Frequency	1	9	14	26	8
	Percentile	1.7	15.5	24.1	44.8	13.8
The senior management understand the concept of BSC and educate the internal staff and External stack holders	Frequency	3	8	12	26	9
	Percentile	5.2	13.8	20.7	44.8	15.5

The senior management has the quality of tolerance and understanding of BSC implementation takes time and require change within the organization as at all level	Frequency	2	11	15	18	12
	Percentile	3.4	19	25.9	31	20.7
The senior management empower your directorate or department to devise new ways of doing their day to day businesses	Frequency	4	11	12	27	4
	Percentile	6.9	19	20.7	46.6	6.9
Senior management style emphasis communication, participation, employee empowerment and innovation	Frequency	5	9	8	32	4
	Percentile	8.6	15.5	13..8	55.2	6.9
The senior management facilitate top-down and bottom-up communication	Frequency	5	9	8	22	14
	Percentile	8.6	15.5	13.8	37.9	24.1
The senior management form BSC team comprising of change agent and hire consultants to build the university BSC	Frequency	4	9	15	23	7
	Percentile	6.9	15.5	25.9	39.7	12.1
The university uses management meeting to work together in teams to identify problems, assess change in the operation and strategic environment	Frequency	1	7	8	26	16
	Percentile	1.7	12.1	13.8	44.8	27.6

Source; data generated from questioner

Table 4.2 item 1 indicates that 22.4% of the respondents strongly agree that the senior management well defined the organization vision, mission and corporate values. Regarding 55.2% of the respondents agree that senior management well defined the university vision, mission and corporate value. Whereas 3.4% of the respondents strongly disagree and 10.3% of the respondents disagree that senior management well defined the organization vision, mission and corporate value. From this data we can understand that majority (77.6%) of the respondents strongly agree and agree that senior management of the university well defined the organization vision, mission and corporate value.

As the above Table 4.2 item 2 shows that the respondents asked to rate the senior management members commitment with involving themselves in the BSC building and its implementation. As table indicate that majorities (58.6%) of respondents are agree and strongly agree that the senior management members are committed in involving themselves in the BSC building and implementing. This fact is also supported by the BSC team members, who were responsible for designing Gambella University BSC and conducting pilot testing, during the interview. According to the team members the top management of university designated its commitment throughout the courses of BSC designing and its implementation. According to the team members the top management was brought the concept and the project ideas of BSC to the organization. They are launching BSC program with planning and executing change management strategy, prepare and execute communications strategy, monitor and evaluate its implementation, resourcing and training. Thus there is no gap with regard to the top management commitment in involving themselves in the whole courses of journey from inception to the execution of BSC in the university

As the Table 4.2 item 3 reveals that 15.5% of the respondents strongly agree that the senior management understand the concept of BSC and educate the internal staff and external stakeholders, in addition 44.8% of the respondents agree that senior management understand the concept of BSC and educate the internal staff and external stakeholders. In contrast 5.2% of the respondents strongly disagree and 13.8% of the respondents disagree that senior management understand the concept of the BSC and educate the internal staff and external stakeholders. This data shows that the majority (60.3%) of the respondents said the senior management understand

the concept of the BSC and educate the internal staff and external stack holders. This shows that they were conceptually clear and educate the internal staff and external stack holder.

As it can be seen Table 4.2 item 4 shows that 20.7% of the respondents strongly agree that senior management has the quality of tolerance and understanding of the BSC implementation takes time and requires change; Also 31% of the respondents agree that senior management has the quality of tolerance and understand of BSC implementation takes time. Where as 25.9% of the respondents were undecided and 19% of respondents were disagree. This data shows that 51.7% of respondents reveal that senior management has the quality of tolerance and understanding of BSC implementation takes time. The result shows that senior management has tolerance and understanding of BSC implementation takes time and requires change with the organization

Table 4.2 item 5 shows that 6.9% of the respondents strongly agree that senior management empower directorate or department to devise new way of doing day to day business and 46.6% of the respondents were agree. Whereas 25.7 % of the respondents were disagree that the senior manager are empower the department or directorate to devise new way of doing their business. This data shows that 53.5% of the respondents were strongly agree and agree that senior management empower the directorate or department to devise new way of doing their day to day business

Table 4.2 item 6 indicates that 8.6% of the respondents strongly disagree and 15.5% of respondents were disagree that senior management style emphasis communication, participation and employee empowerment. In contrast 55.5% of the respondents were agree that senior management emphasis communication, participation and employee empowerment and 6.9% respondents also strongly agree. This data shows that majority (62.1%) of respondents agree that senior management style emphasis communication, participation and employee empowerment.

Table 4.2 item 7 reveals that 24.1% of the respondents strongly agree; 37.9% of the respondents were agree that senior management facilitate top- down and bottom up communication. where as 8.6% and 15.5% of the respondents were strongly disagree and disagree respectively. This data

indicates that majority (62%) of respondents were agree that senior management facilitate two way of communication.

Table 4.2 item 8 indicates that 12.1% of respondents were strongly agree that senior management form BSC team comprising change agent and hire consultant to build BSC; 39.7% of the respondents were agree that senior management form BSC team and hire consultant to build BSC. This data shows that majority (51.8%) of the respondents agree and strongly agree that the university management form BSC team and hire consultant that build BSC.

The interviewee asserted that the top management of Gambella University are the champion of change. They are manifesting their commitment for change by introducing lots of change initiatives .They established BSC team comprising five staff from different section headed by budget and planning directorate and the university hire external consultants(Ethiopian management institute) whom they consult the whole course of BSC designing and its implementation and provide training .

Table 4.2 item 9 shows that 44.8% of the respondents agree that university uses meeting to work together in teams to identify problems ; 27.6% of respondents were strongly agree that university uses management meeting to work together in teams. However 13.8% of the respondents were disagree that the university use meeting to work together. This data shows that majority (72.4%) of respondent said that university uses meeting to work together to identify problem.



## 4.2 Building Phase of BSC

This section is dealing with the first step of building BSC that is basically related with assessments.

Table 4. 3 building BSC (Assessment )

Variable		Strongly disagree	Disagree	Undecided	Agree	Strongly agree
University analyze the internal weakness, strength and the external threats and opportunities in formulating strategic plan	Frequency	0	5	7	29	17
	Percentile	0	8.6	12.1	50	29.3
GU develop clear vision, mission and core value to provide direction for the organization	Frequency	0	1	3	29	25
	Percentile	0	1.7	5.2	50	43.1
GU identify the customers and stake holder after understanding their needs and demands	Frequency	1	5	7	35	10
	Percentile	1.7	8.6	12.1	60.3	17.2
GU strategic plan is developed by all of us , not just leaders and /or the planning directorate	Frequency	4	12	16	17	9
	Percentile	6.9	20.7	27.6	29.3	15.5
GU provide training about change with communication media	Frequency	6	15	11	20	6
	Percentile	10.3	25.9	19	34.5	10.3

Source ; data generated from questioner

Table 4.3 item 1 and 2 indicates that (50%) of the respondents agree with item 1& 2; and 29.3% and 43% of the respondents strongly agree with item 1& 2 respectively, even if, 12.1% and 5.2 % of the respondents undecided to item 1& 2 respectively. In contrary, 8.6% and 1.7% of the respondent disagree with item 1&2. This data shows that, 79.3% of respondents agree with analyzing of university SWOT analysis and 93% of respondents agree that the university develop a clear vision, mission and core values. But fewer respondents (8.6%) disagree with conducting SWOT analysis before install the system and 1.7% respondent disagree with the development of a clear vision, mission and core values.

Moreover, data that found from Gambella university BSC document 2015-2020 through document analysis, the university conducted a SWOT analysis before lunching BSC program

and identified the strength, weakness, opportunity and the threat. Availability of class rooms, dormitories, dining hall, library and instructor. Availability of transport and living home for instructor, Good starting of team spirit working relationship, Good starting of national collaboration, and Strong desire to improve institutional efficiency and quality of education identified as a strength and

Favorable government policies and strategies, Strategic location of Gambella university with respect to natural resources, Growing facilities and infrastructure, Good relationships with regional government and bureaus, Wide range of research opportunities and funding, Existence of plenty of income generation stated as an opportunity.

While, Inadequate ICT, Weak documentation and lack of data base, Inadequate incentive and reward system, Lack of well qualified and efficient administrative support, High staff turnover in some fields, Shortage of qualified staff, Poor staff evaluation system, Inadequate recreation center for students, Non existence of research and publication stated as weakness and

High staff turnover, Declining interest in capital investment by development partners, Negative impact of globalization, Inflation, Environmental degradation and pollution, HIV/AIDS and other killer diseases as a threat.

Gambella university BSC document of 2015-2020 was reviewed whether or not the university develop clear vision, mission and core values. Hence; as it is depicted (Gambella BSC document of 2015-2020 pp 18-19) in the university determine its mission that define why the organization exists, reflecting its purpose and incorporate features of the organization in few sentences.

Similarly the university vision is coined with emotionally inspiring words of future success (to be one of the recognized academic and research center in Africa by 2030) that describes where the organization to be in the future. The university also determines its core values that are aligned with organization vision, mission, and corporate culture which describes what human resource stand for in the context of the organization's vision and mission.

Table 4.3 item 3 indicates 10.3% respondent said strongly disagree and disagree and 12.1% of the respondent fall in undecided. In contrary, 60.3% and 17.2% of the respondent fall in agree and strongly agree respectively. This data shows, majority (77.5%) of respondents were agree with

the university identification and understanding customers and stakeholders demand. From this data, one can understand that the university identified and understand customers and stakeholders demand.

Regarding table 4.3 item 4 indicates that 6.9% of the respondents said strongly disagree, 20.7% of the respondents disagree and 27.6% of the respondents undecided. On the other hand, 29.3 % and 15.5% of the respondents agree and strongly agree respectively. This data shows that (55.2%) majority of the respondents disagree and undecided which support the university strategic plan development processes were not participatory. Additionally, data that found through interview with budget and plan directorate mentioned that, the strategic plan developed by a committee which selected from different departments after they gathered an input from internal and external stakeholders. From this data, one can understand that the university strategic plan development was not participatory or the staff participation is in directed or limited.

Table 4.3 item 5 shows that, 10.3% and 25.9% of the respondents strongly disagree and disagree respectively. Whereas, the 34.5% and 10.3% of the respondents agree and strongly agree respectively. This data tells us below half or 44.8% of the respondents agree with the provision of training on change with communication media and 36.2% of the respondents disagree. Moreover, 19% of the respondents were undecided with the provision of training on change with communication media. From this data one can understand that, the university lack in providing training on change with communication media. This fact has indicated that the majority did not agree with undertaking training on change with communication in print and electronic media.

## 4.2 Strategic planning

This section is dealing with the second step of building BSC that is basically related with strategic planning.

Table4. 4 Strategic planning

Variable		Strongly disagree	Disagree	Undecided	Agree	Strongly agree
GU formulated strategic plan based on in depth analysis of the internal and external Environments	Frequency	1	4	14	28	11
	Percentile	1.7	6.9	24.1	48.3	19
The organization strategic focus area are well defined and understand	Frequency	1	6	15	31	5
	Percentile	1.7	10.3	25.9	53.4	8.6
Your directorate or department uses customer, financial, internal process, learning perspective to assure the balance in the organization strategies and measures	Frequency	1	10	9	27	11
	Percentile	1.7	17.2	15.5	46.6	19
Your directorate or department put customer satisfaction as a central position	Frequency	2	5	5	34	12
	Percentile	3.4	8.6	8.6	58.6	20.7
The financial perspective is the primary objective of your directorate or department balance score card	Frequency	4	18	18	14	4
	Percentile	6.9	31	31	24.1	6.9
Your directorate or department identify value proposition for key customer and stake holder's services attributes ( quality, timeliness, cost effectiveness, etc) image and relationship component	Frequency	1	11	14	25	7
	Percentile	1.7	19	24.1	43.1	12.1
Your directorate or department identify strategic result that ratify the successful execution of the strategic theme	Frequency	1	11	9	31	6
	Percentile	1.7	19	15.5	53.4	10.3
GU identify competitive critical success factors	Frequency	2	11	10	32	3
	Percentile	3.4	19	17.2	55.2	5.2

Source ; data generated from questioner

Table 4.4 item 1 reveals that 48.3% of the respondents agree that the strategic plan was formulated based on in depth analysis of the environment; 19% of the respondents were strongly agree that strategic plan formulation was based on internal and external in depth analysis.

Whereas 6.9% of the respondents disagree the in depth analysis of strategic plans formulation. This data shows that majority (67.3%) of the respondents were agree that strategic plan formulated based on in depth analysis of internal and external analysis of the environment.

Table 4.4 item 2: 8.6% of the respondents were strongly agree that organization strategic focuses are well defined and understand; 53.4% Of the respondents agree that organization strategic focus are well defined and understand. Whereas 12% of the respondents disagree that the organization strategic focus area are well defined and understand. From this data one can understand that the university strategic focuses area are well defined and understand.

Gambella university BSC document 2015-2020 depicted that four strategic focus area that are educational quality and relevance, research and technology transfer, community service and operational and administrative Excellency are identified as strategic focus area.

Table 4.4 item 3 indicates that 19% of the respondents strongly agreed that director or department uses those four perspectives to assure the balance in the organization strategies. Also 46.6% of the respondents agree that uses of four perspective to assure the balance in the organization strategies. Whereas 17.2% respondents were disagree. From this data one can understand that majority (65.6%) of the respondents agree that directorate or department uses customer, finance, internal process and learning and growth perspective to assure the balance.

As university BSC document of 2015-2020 is consulted to know whether or not the four perspectives and others are used; the university has chosen four perspectives such as finance, customer, internal process, learning and growth in balance way.

Table 4 item 4 indicates that 20.7% of the respondents strongly agree that customer satisfaction is central position; 58.6% of the respondents agree that they put customer satisfaction is central position. Whereas 12% of the respondents were strongly disagree and disagree about customer satisfaction as central position. This data shows that customer satisfaction is central position for the university.

Table 4.4 item 5 indicates that 31% of the respondents strongly agree and agree that financial perspective is that primary objective. In contrast 37.9% of the respondents strongly disagree and disagree that the primary objective is financial perspective. 31% of the respondents undecided.

From this data it is difficult to put financial perspective as primary objective because government has to meet the needs of customer and community. So Gambella University takes customer perspective as primary objective where as financial perspective is secondary

Table 4.4 item 6 indicate that 55.2% of the respondents were strongly agree and agree that directorate or department identify value proposition for key customer and stock holder. 24% Of the respondents were undecided. However 20.7% of the respondents were strongly disagree and disagree. This data shows that majority of the respondents agree that university identify value proposition for key customer and stakeholder. This data also supported by BSC document (2015-2020) the university identifies value proposition or what customer and stakeholders needs in quality, timeliness, cost effectiveness.

Table 4.4 item 7 indicates that 10.3% of the respondents strongly agree and 53.4% of the respondents also agree that each department or directorate identify the strategic result. However 15.5% of the respondents undecided and 20.7% respondents were strongly disagree and disagree. From this data one can understand that majority (63.7%) of the respondents identify the strategic result. University BSC document (2015-2020) depicted that relevant and high quality education, relevant research and transferred technology, improved community service and partnership, improved operational and administrative services are identified as strategic results.

Table 4.4 item 8 shows 5.2% of the respondents strongly agree that the university identify competitive critical success factors, also 55.2% of the respondents agree that Gambella university identify competitive critical success factors. However 17.2% of the respondents were undecided; 22.4% were strongly disagreeing and disagree. This data shows that the university identify competitive critical success factor. This data is supported by BSC document 2015-2020 of the Gambella university depicted that four strategic themes that are educational relevance and quality, research and technology transfer, community service and partnership and operational and administrative excellence are critical success factor.

In responding to the interview questions on whether or not the organization theme are linked with performance based budgeting, the interview from planning and budget directorate confirmed that university BSC is linked with program budget. According to them the ministry of

finance allots budget for Gambella university in line with four program such as administrative and development, academic, research and community service which are linked with strategic them. But Budget is not properly allocated to each working unit or directorate because it can be administered in central way and not supported by automation.

#### 4.4 strategic objectives

**This section is dealing with the third step of building BSC that is basically related with formulating strategic objectives**

Table 4.5 strategic objective

Variable		Strongly disagree	Disagree	Undecided	Agree	Strongly agree
Your directorate or department develop strategic objectives for each theme	Frequency	2	8	9	31	8
	Percentile	3.4	13.8	15.5	53.4	13.8
Your directorate or department strategic objective are placed in the themes	Frequency	2	4	9	39	4
	Percentile	3.4	6.9	15.5	67.2	6.9
Your directorate or department performance indicators are related to the objective of organization	Frequency	1	4	6	35	12
	Percentile	1.7	6.9	10.3	60.3	20.7
Your directorate or department has well-written objective statements which provide precise clarification of the meaning	Frequency	2	6	9	32	9
	Percentile	3.4	10.3	15.5	55.2	15.5

**Source ;** data generated from questioner

Table 4.5 item 1 reveals that 13.8% of the respondents strongly agree that each department or directorate develop strategic objective for each theme; 53.4% of the respondents agree that each department or directorate develop strategic objective for each theme. Whereas 15.5% of the respondents undecided and 17.2% of the respondents strongly disagree and disagree for the development of strategic objective for each theme. This data shows that majority of the respondents agree that each department or directorate develop strategic objective for each theme. University BSC document (2015-2020) depicted that for each strategic themes; twelve strategic objectives are developed under four perspectives. There is no gap in developing strategic objectives for each theme. All the strategic objectives are cascaded from strategic theme and logically linked.

Table 4.5 item 2 indicates 6.0% of the respondents strongly agree that each directorate or department strategic objective are placed in the theme; 67.2% of the respondents were agree that each strategic objective are placed in the theme. However 15.5% of the respondents were undecided and 10,3% of the respondents strongly disagree and disagree whether strategic objective are placed in them. From this data one can understand that each directorate or department strategic objective are placed in the theme

Table4.5 item 3 indicates that 20.7% the respondents strongly agree performance indicators are related to objective of the organization; 60.3% of the respondents agree that performance indicators are related to the objective of the organization. How ever 10.3% of the respondents strongly disagree and disagree that performance indicator are related to objective of the organization. This data shows that performance indicator is related to the objective of the organization. University BSC document (2015-2020) illustrated that thirty six(36) performance indicators are identified for twelve strategic objective.

Table 4.5 item 4 reveals that 15.5% of the respondents strongly agree each department has well written objective statement; 55.2% of the respondents agree that each department or directorate has well written objective statement. However 13.7% of the respondents undecided. This data shows each department or a directorate has well written objective statement. University BSC document (2015-2020) clearly stated that twelve strategic objective are presented which will be shared by all department or directorate.



## 4.5 strategic mapping

This section is dealing with the fourth step of building BSC that is basically related with strategic mapping.

Table 4.6 strategic mapping

Variable		Strongly disagree	Disagree	Undecided	Agree	Strongly agree
GU uses strategic map as tool of education and communication about organization strategy	Frequency	3	7	15	25	8
	Percentile	5.2	12.1	25.9	43.1	13.8
GU use strategic map to link the strategic objectives with its cause and effect relations and demonstrate how value is created through four perspectives	Frequency	2	8	9	34	5
	Percentile	3.4	13.8	15.5	58.6	8.6
GU use strategic map as tool for creation organizational alignment( each work unit, individuals link their strategic objectives to the strategic map)	Frequency	3	7	11	30	7
	Percentile	5.2	12.1	19	51.7	12.1
GU use strategic map to balance set of objectives , representing each of perspective	Frequency	3	5	17	28	5
	Percentile	5.2	8.6	29.3	48.3	8.6

[ Source ; data generated from questioner

Table 4.6 item 1 indicates shows that 56.9% of the respondents agree that the strategic map uses as tool to educate and communication about the organization strategy. Where as 17.3% of the respondents disagree that strategic map uses as tool to educate and communication about organization strategy and 25.9% of the respondents undecided about whether or not the strategic map uses as tool to educate and communication about the organization strategy. The data shows that majority of the respondents agree that university strategic map use as tool to communication and educate about organization strategy. University strategic map is serving as educating and communicating the internal staff and external customers about the organization strategy.

Table 4.6 item 2 concerns about 72.4% of the respondents agree that university use strategic map to link the strategic objectives with its cause and effect relation and demonstrate how value created through four perspectives. Whereas 17.2% of the respondents disagree and 15.5% of the respondents undecided about the university use strategic map to link strategic objective with cause and effect relation. This data shows that the strategic map links strategic objective with cause and effect relation.

Gambella university BSC document (2015-2020) depicted that all objects are linked with in cause and effect relation. For example objective that improve knowledge, skill and motivation of teaching and administrative staff is cause for improve working environment and organization culture. Its result is improve operational and administrative service that leads good service delivery. Eventually it leads to customer /stack holder satisfaction. All objectives are linked with in cause-and -effect relations. This does mean that there is logical link between the objectives

Table 4.6 item 3 indicates that 63.85% of the respondents agree that university use strategic map as tools for creation organizational alignment. Where as 17.3% of the respondents were disagree that strategic map tools for organizational alignment and 17.3% of the followed by undecided. One can understand from this data strategic map is tool for creation of organizational alignment.

Table 4.6 item 4 reveals that 56.9% of respondent agree that the university use strategic map to balance set of objective representing each perspective. Whereas 13.8% of the respondents disagree that university use strategic map to balance set of objective representing each perspective and 29.3% of the respondents were undecided about the issue. This data shows that the university use strategic map to balance set of objective representing each of four perspectives. No gap that the strategic map to balance set of objectives representing each of four perspectives. Gambella university strategic map has properly aligned strategic objective through four perspectives such as finance, customer, internal process and learning and growth.

## 4.6 performance measures

This section is dealing with the fifth step of building BSC that is basically related with performance measure.

Table4. 7 performance measures

Variable		Strongly disagree	Disagree	Undecided	Agree	Strongly agree
Your directorate or department performance measurement links to the organization visions through the objective on the strategic map that translate the university strategy in to operational terms	Frequency	2	7	11	32	6
	Percentile	3.4	12.1	19	55.2	10.3
Your directorate or department performance measurement are aligned other directorate and work units performance measurement	Frequency	3	9	8	33	5
	Percentile	5.2	15.5	13.8	56.9	8.6
Your directorate or department performance measures include leading, lagging ,quantitative and qualitative measures in balance way	Frequency	3	10	17	27	1
	Percentile	5.2	17.2	29.3	46.6	1.7
Your directorate or department performance measures in each perspective are capable enough to measure the objective	Frequency	2	11	11	29	5
	Percentile	3.4	19	19	50	8.6
Your directorate or department performance measurement is accurate and consistent	Frequency	4	9	14	30	1
	Percentile	6.9	15.5	24.1	51.7	1.7

**Source** ; data generated from questioner

Table 4.7 item 1 indicates that 65.5% of the respondents agree that performance measures links to the organization vision through the objective. Whereas 15.5% of the respondents were disagree that performance measures links to the organization visions through the objective and 19% of the respondents were undecided whether or not performance measures links to the organization vision through the objective.

This data shows that the majority of respondents agree that performance measures links to organization vision. Here no gap the highest numbers of respondents said performance measures links to the organization vision through objective.

Table 4.7 item 2 reveals that 65.5% of the respondents agree that performance measurements are aligned to work unit. Whereas 20.7% of the respondents disagree the performance measurement aligned to work unit and followed by 13.8% of the respondents were undecided. This data shows that majority of respondents agree that performance measurement are aligned to work unit. University BSC document (2015-2020) depicted that performance measures are aligned to work unit. Here no gap the performance measures are aligned to each work units.

Table 4.7 item 3 indicates 48.3% of the respondents were agree that performance measures include leading and lagging measures in balance ways. Whereas 22.2 % of the respondents of respondent disagree that performance measure include lagging and leading indicators in balance way. 29.3% were undecided .So from this we can understand a lot respondents are undecided and disagree that performance measure are not include leading and lagging indicators in balance ways . Gambella university BSC document of (2015-2020) illustrate that most of the indicators are leading (performance drives) measures are outweigh in number than the outcome measure or lagging indicators. Performance measures are not keeping the balance between leading (performance drives) and lagging (outcome measures).

Table 4.7 item 4 indicates that 58.6% of the respondents agree that performances measures are in each perspective are capable enough to measure the objective. Whereas 22.4% of the respondents disagree that performance measure in each perspective are capable enough to measure the objective and 19% of respondents undecided. From this we can understand that majority of the respondents agree that performance measures in each perspective are capable enough to measure the objective.

Table 4.7 item 5 reveals that 53.4% of the respondents were agree that performance measurement is accurate and consistent. Whereas 22.4% of the respondents were disagree that performance

measurement is accurate and consistent. This data shows that majority of the respondents agree that performance measurement is accurate and consistent.

Performance measures and Internal/external (domestic/international) benchmarking. To confirm the enquiry on whether or not the BSC team undertakes (domestic/ international) benchmarking to set performance measures ; the interviewee disclose that BSC study team undertakes internal benchmarking only from other higher public educational institutions such as Semera university, Hawasa university, and Deberemarkose university and no benchmarking from abroad. Here there is gap in external benchmarking to set performance measures. The university undertakes internal benchmarking only to get best practice.

#### 4.7 strategic initiatives

This section is dealing with the six step of building BSC that is basically related strategic initiatives.

Table 4.8 Strategic initiatives

Variable		Strongly disagree	Disagree	Undecided	Agree	Strongly agree
GU and your directorate or department identify potential strategic initiatives, developed selection criteria, analyze and selected strategic initiatives	Frequency	1	6	14	29	8
	Percentile	1.7	10.3	24.1	50	13.8
The initiatives are tied to strategic vision, mission, objectives and perspectives explicitly defined in terms of owners, schedules, action, steps, progress and expected results and fits with one of the strategic themes	Frequency	1	7	13	33	4
	Percentile	1.7	12.1	22.4	56.9	6.9

**Source;** data gathered from questioner

As table 4.8 item 1 indicates 63.8% of the respondents were agree that the university identify strategic initiative. Whereas 12% of respondents disagree and 24.1% of the respondents were undecided whether or not the university identify strategic initiatives. This data shows that

majority of the respondents agree that the university identify strategic initiatives, developed selection criteria, analyze and selected strategic initiatives.

Table 4.8 item 2 reveals that 63.8% respondents agree that initiative are tied to strategic vision, mission and objective. Whereas 13.8% of respondents disagree that initiative are tied to vision, mission and objective. From this data majority of the respondents are agree that strategic imitative are tied to vision, mission, objective and perspectives explicitly defined in terms of owners, schedules, action, steps, progress and expected results and fits with one of the strategic themes . University BSC document (2015-2020 ) reviewed and interview was conducted to test whether or not time tables, deliverables, resource commitments and ownership are defined. There for the initiatives’ implementation time table, deliverables, budget and ownership are defined. But due to resource constraints, some initiatives which have considerable impact on success of strategy objectives cannot be materialized. The initiative that is technology development, dissemination and industry linkage schemes.

## 4.8. BSC implementation

### 4.8.1 Automation

**This section is dealing with the seven step of BSC implementation (system roll out)that is basically related with automation.**

Table 4.9 automation

Variable		Strongly disagree	Disagree	Undecided	Agree	Strongly agree
Your directorate or department uses software to automate the collection and reporting the qualitative data	Frequency	9	27	15	6	1
	Percentile	15.5	46.6	25.9	10.3	1.7

**Source** ; data generated from questioner

Table 4.9 item 1 shows that 12% of the respondents agree that university uses software to automate collection and reporting data. Whereas 62.1% of the respondents disagree that university does not use software to automate the collection and reporting of data and 25.9% of the respondents undecided about whether the university use software or not. From this majority of respondents were responded that organization does not support its BSC with automation and BSC related software is not used in the collection, reporting and visualization of performance data. Gambella university ICT directorate officer were asked to check whether or not automation supports the organization BSC. That means using software to automate the collection, reporting and visualization of performance data. It is confirmed; however, the organization does not use soft ware which supports the data collection and reporting performance data.

#### **4.8.2. Cascading**

**This section is dealing with the eighth step of implementing BSC that is basically related with cascading.**

The BSC cascading basically deals with the function of translating high-level corporate strategy into aligned lower-level objectives and measures. It creates alignment around the organization's shared vision that make strategy actionable to work units and down to individuals. Cascading can also link departmental scorecards to corporate vision and strategy. The individual scorecard should be aligned to departments and support units objectives to tie with rewards, recognition, and incentives to results (The Balanced Scorecard Institute, 2007)

Translating high-level strategy into aligned lower-level objectives and measures. Gambella university BSC document (2015-2020) reviewed to test whether or not the organization high level strategy is translated in to lower level objective and measures. There for the organization four high level strategic themes and their subsequent results are cascaded and aligned to 12 strategic objectives and 36 financial and non-financial measures. Here no gap in cascading high level strategy in to lower level objective and measure. High level strategies are properly cascaded to the lower level strategic objectives and measures.

Regarding creating directorate or department scorecard is aligned to Gambella university vision, mission and strategy university BSC document (2015-2020) is reviewed to investigate whether

or not alignment is created around the organization shared vision, mission and strategy. Hence the university's four high level strategic themes and their subsequent results are aligned to the organization shared vision, mission and strategy. There is no problem of alignment with high level strategy and shared vision.

In order to check individual score card aligned to directorate or work process scorecard. Gambella university BSC document (2015-2020) , randomly selected directorate at university( procurement directorate, finance directorate, institutional change directorate, human resource directorate and audit directorate) and individual scorecards were reviewed to test whether the directorates and individuals scorecards are aligned to corporate score card and strategy; so the following problems are observed. Work units or directorates do not properly tailored the high level strategy and objective taking in to consideration their practical circumstances and role, some of the work units/directorates objectives and measures are totally delinked from corporate level scorecard, some work unit or directorate cascade objectives that are not related with their mandate, individual scorecard is not prepared across all working unit only departmental scorecard objective is there. In the university performance appraisal system is totally deviating from BSC concept and practice. The academics staff will be evaluated by the students (40%), colleagues (25% and head (35%) where as administrative staffs will be evaluated by immediate supervisor(60%) and colleagues(40%). There is gap in developing department & individuals scorecards, aligned to corporate score card and strategy. To validate whether individual and team scorecard aligned with recognition and incentive; the interviewee from human resource directorate suggested that incentive compensation scheme of individuals and work units is not attached to achievement of scorecard objectives and outcome in the university. Thus there is problem of aligning work units and individuals score card with recognition and incentives scheme.



### 4.8.3 Evaluation

This section is dealing with the ninth step of implementing BSC that is basically related with evaluation.

Table 4. 10 Evaluation

Variable		Strongly disagree	Disagree	Undecided	Agree	Strongly agree
Your directorate or department periodically reviews the directorate or department progress towards its strategic goals	Frequency	3	16	11	28	0
	Percentile	5.2	27.6	19	48.3	0
Your directorate or department uses evaluation to review organization planning, assumption, strategy, objectives, performance measures, strategic initiatives and budget	Frequency	5	21	15	16	1
	Percentile	8.6	36.2	25.9	27.6	1.7
Your directorate or Department use evaluation to put proposal for organizational change( restructuring) as needed	Frequency	10	17	16	13	2
	Percentile	17.2	29.3	27.6	22.4	3.4

**Source** ; data generated from questioner

Table 4.10 item 1 indicates that 48.3% of the respondents agree that periodic review is conducted towards the progress of the strategic goal. However 32.8% of the respondents were disagree and 19% of the respondents were undecided whether periodic review is conducted or not towards the progress of the strategic goal. From this we can understand each departments/ directorates does not undertakes periodically review towards the progress of the strategic goal of the university.

Table4.10 item2 shows that 27.6% of the respondents agree that each departments/directorate use evaluation to review organization planning, strategy, objectives, performance measures, strategic initiative and budget. Whereas 36.5% of the respondents disagree that each department/directorates does not use evaluation to review organization planning ,strategy,

objective, performance measure, strategic initiative and budget. 25.9% of respondents were undecided about this issue. From this a lot of respondents are disagree and unfamiliar about use of evaluation to review the organization planning, strategy, objective, performance measures, strategic initiative and budget. Here there is gap of the university does not use evaluation to review the organization planning, strategy, objective, performance measures, strategic initiative and budget.

Table 4.10 item 3 indicate that 25.8% of the respondents agree that each department /director use evaluation to organizational change. Whereas 46.5% of the respondents disagree and 27.6% of the respondents were undecided. From this the university does not use evaluation to organizational change. In responding to interview question on whether or not Gambella University undertakes structural change as per the result of the evaluation. Hence the university has done nothing organizational change by taking necessary inputs from performance evaluation feedback. This means the university does not use corporate evaluation report and its feedback for purpose of restructuring.

#### **4.9 person’s correlation among the independent and with dependent variable.**

To evaluate the effect and the relationships between the independent variable and among the effect of independent variable on implementation of BSC analyzed using person correlation as follow.

**Table 4.11. Person correlation**

<u>NQ</u>	<u>Independent Variable</u>	<u>Average BSC implementation</u>
1	Assessment	.563
2	Strategic plan	.477
3	Strategic objective	.370
4	Strategic map	.396
5	Performance measure	.349
6	Strategic initiative	.308

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

The relationship between the independent variable assessment, strategic plan, strategic objective, strategic map, performance measures and strategic initiative with dependent variable of BSC implementation was explored using person correlation coefficient. The result of correlation analysis in above table shows that, all the independent variable are positively and significantly correlated with the dependent variable of BSC implementation at 99% confidence level( $p < 0.01$ ).

The assessment has highest correlation ( $r=0.563$ ), followed by strategic plan( $r=0.477$ ), strategic objective( $r=0.370$ ), strategic map ( $r=0.396$ ), performance measure and strategic initiative( $r=0.306$ ). This indicates that if the assessment, strategic plan, strategic objective, strategic map, performance measure and strategic initiative are properly established in design of BSC then the implementation of BSC also be good the reverse is true.

#### **4.10 Analysis of inferential statistics**

In this section the association of variables were used by Pearson correlation to check the relationship between independent variable and dependent variables and linear regression indicated to identify the best predictable variables which can able to affect the dependent variable of implementation of BSC. This is performed for the purpose of identifying the effect of BSC design and implementation. With the help of statistical techniques, conclusion and decision were made. According to Duncan C. and Dennis H. (2004:38-41), correlation coefficient can range from -1 to +1. The value of -1 represents a perfect negative correlation while a value of +1 represents a perfect positive correlation and a value of 0 correlations represents no relationship.

In this parts of analysis linear regression model were taken as to test the effect of BSC design and implementation. From this BSC design has six independent variables and the average value of BSC implementation is dependent variable in a confidence level of 99% with 1% Significance which is strongly accepted the raw data of those variables.

#### **4.11. Assumption for statistical techniques**

##### **1. Normality Test.**

The normality of variables was checked by skeweness. As indicated by; Nancy L. leech, Karen C. barrett and George A. Morgan (2005:28), a simple guideline to decide the normality of the variable, if the skeweness is between -1 and +1, it is approximately normal. In this regard all variables of this research was negatively skewed which are the expected value ranging -.046 to 0.171. This implies all variables were normal. (See Appendix D)

## 2. Linearity Test.

As a general rule of thumb, predictor variables can be correlated with each other as much as 0.8 and less, unless there is a cause for concern about multi collinearity (Perry R. et al., 2004: 323). (See Appendix D)

## 3. Multi Collinearity among Independent Variable

From the (appendix –D ) which is attached at the end of this paper , the relationship between each independent variable with each other is positively correlated and the Pearson correlation coefficient range from 0.563 to 0.308 with 99% confidence level. It shows that the multi collinearity of the variables are acceptable, hence, the value is less than 0.8 as indicated in (Perry R. et al., 2004: 323) with strongly significant  $p < 0.01$ .

## 4.12. The impact of BSC design on implementation of BSC

**Table 4.12: model summary of linear Regression**

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.356 <sup>a</sup>	.327	.317	.27764

a. Predictors: (Constant), design of BSC

Source: own survey, 2017

From the above table (4.12), R value is 0.356. It indicates that 35.6% of BSC design has a strong effect on the dependent variable of BSC implementation. Likewise, the coefficient of determination R-square value is 32.7% variation of BSC implementation due to the factors of the independent variable of BSC design and 35.6% of independent variable influences dependent variables for those of six parameters (Montgomery, 1982).

Adjusted  $R^2$  is developed to minimize the impact of Sample size. i. e 31.7% of impact can be occur for the sample size .

**Table 4.13 ANOVA (Analysis of variation)**

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	59.296	5	11.859	39.223	.000
Residual	104.312	345	.302		
Total	163.608	350			

- a. Dependent Variable: Average BSC implementation
  - b. Predictors: (Constant), Assessment, strategic plan, strategic objective, strategic map, performance measure and strategic initiative
- Source : own survey, 2017

The table 4.13 above shows that F- Test which is helps to test to judge the significance. And it helps accepting and rejecting these hypothesis. Therefore, the significance of the hypothesis is less than 5% and the F-test is 39.223 this implies the overall model is fit which is accepting and also the BSC design and BSC implementation has significance association to have impact on BSC implementation. Hence, the model should be:-

$$\text{Average BSC implementation} = \alpha + \beta_1 (\text{ASS}) + \beta_2 (\text{STPL}) + \beta_3 (\text{strob}) + \beta_4 (\text{stra map}) + \beta_5 (\text{Perf. measure}) + \beta_6 (\text{strategic initiative}) + e$$

**Table 4.14. The value of BSC design and implementation**

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	1.629	.148		1.043	.000
Assessment	.144	.038	.196	3.834	.000
Strategic plan	.133	.039	.183	3.368	.001
Strategic objective	.136	.034	.198	4.031	.000
strategic map	.168	.037	.236	4.530	.000
Performance measure	.032	.035	.146	3.900	.000
Strategic initiative	.258	.045	.129	3.314	.369

- a. Dependent Variable: implementation of BSC
- b. Predictors: (Constant), Assessment, strategic planning, strategic objective, strategic map, performance measure, strategic initiative

From the table 4.14 above unstandardized coefficients shows for what extent dependent and independent variables 'make variation with other independent variable make constant. Moreover, the beta coefficient shows independent variable influence that of the dependent variable

- Strategic map (beta=0.236 , t=4.530 , p < 0.000) which has the highest significant impact on BSC implementation
- Strategic objective( beta = 0.198,t = 4.031, p < 0.000) ; Assessment(beta = 0.196. t = 3.834, p < 0.000) has moderately affect the dependent variable BSC implementation
- Strategic plan (beta = 0.183, t =3.368, p < 0.001), performance measure (beta=0.146,t=3.900, p<.000) both has impact for the dependent variable of BSC implementation.
- Strategic initiative(beta=0.129,t=3.314,p>5% which is 36.9%) is in significant does not affect the dependent variable.

In general, strategic map has high beta value and also it has strong impact on BSC implementation. Managers should be considered, day to day follow up, regularly monitoring, evaluating each activity or variable because this variable has significant impact on BSC implementation. Where as strategic Objective, assessment, performance measure and strategic plan has also moderate impact on dependent variable (BSC implementation). But when come to strategic initiative it has weak impact on BSC implementation.

# CHAPTER FIVE

## 5. Finding, conclusion and recommendation

### 5.1. Findings of the study

In Ethiopia a lot of public sector organizations have been employing BSC as change and strategic management system. The organizations that exercise BSC as change and management system have faced challenge with the design and its implementation. Therefore Gambella University is found among those public organizations which apply BSC and faced challenge and obtained result. In this chapter summary of finding are presented in sequential order. All questions, the response related to top management commitment is presented first, and then followed by six steps of building BSC and finally the data related with three steps of implementing BSC presented respectively. Leadership and management commitment evaluated from the parameters of involvement, conceptual understanding, communication and serving as change agent which are crucial for BSC building and implementation. The top management of Gambella university was involved in the introducing the concept and theory of BSC, launching the program with drafting and executing strategy plan, organizing and executing communication strategy, resourcing and training, monitoring and evaluation.

The six steps of building are very critical stages of the BSC system. The major tasks are organizational assessment; determining organizational mission, long term vision and strategic plan, identifying high level objectives for all BSC objective, reviewing strategic map, develop performance measures, and finally identify strategic initiatives. The major findings are presented in the form of strength and weakness as follows.

The major strength of Gambella university in the building of corporate BSC are : the university has properly analyzed the internal weakness and strength and external threats and opportunity in formulating strategic plan. The corporate vision, mission and core values are well defined. The strategic themes are identified and developed which are also demonstrated that they are aligned

with the organizational vision and mission. The customer and stakeholder needs and value proposition is well defined and identified. The strategic objective are develop for each themes. All the strategic objectives are cascaded from strategic theme and logically linked. The performance indicators are developed for each strategic objective on logical approaches. The organization uses the strategic map to link strategic objectives with cause and effect relation. Strategic map has properly aligned strategic objective through four perspectives such as customer, finance, internal process and learning and growth. The performance measure link to the organization vision through objective and are aligned to each work unit. The initiatives are properly identified and linking with objective.

The major weaknesses of the university in the building of the corporate BSC are; internal staff, external customer and stack holder are not properly participating in the strategic plan development. The organization does not provide training about change with communication in print and electronic media. The performance measure are not keeping the balance between leading (performance drivers) indicators and lagging (outcome measures) indicators. The organization does not undertakes external benchmarking to set performance measures. budget is not properly allocated for some critical initiatives that can bring organizational change.

The three steps that are directly related to BSC implementation or system roll out. The three critical phases include; Automation, cascading and evaluation. The major strength in Gambella university BSC implementation are; high level strategies are properly cascaded to the lower level strategic objectives and measures. The organization four high level strategic themes and subsequent result are aligned to the organization vision.

Major weaknesses in the Gambella university BSC implementation or system roll out are; the organization does not use software to automate the collection, reporting and visualization of performance data. Work unit or directorate objective and measures totally delinked from corporate level scorecard. Some work unit or directorate cascaded objective that are not related to their mandate. Individual scorecard is not prepared across all working unit. In the university performance appraisal system is totally deviating from BSC concept and practice. The organization incentive compensation scheme of individual and work unit is not attached to achievement of scorecard objectives and outcomes. The organization does not undertake periodic



review towards the progress of the strategic goal. The organization does not use corporate evaluation report and its feed back for the purpose of restructuring and updating strategy.

According to correlation and regression analysis result of the independent variables (assessment, strategic planning, strategic objective, strategic map, performance measures and strategic initiative has positive effect on dependent variable of BSC implementation.

## **5.2 CONCLUSIONS**

Based on the review of related literature so far and summery of finding of the study the following conclusion are drawn. The Gambella University has got considerable strength and limitation in BSC design and implementation. The most crucial strength of the Gambella University BSC is the top management commitment from inception of its design and implementation. The university is analyzing the internal weakness and strength and external threats and opportunity in formulating strategic plan. So these are key steps for defining the corporate vision, mission and core value. The customer and stakeholder needs and value proposition are identified after detailed SWOT analysis. The organization strategic themes are identified and developed which are aligned with the organization vision and mission. The strategic are well cascaded for each theme and logically linked. Besides , the performance indicators are well developed for each strategic objective on logical manner. The strategic map is used to link strategic objectives with cause and effect relations. The strategic map has properly aligned strategic objective through four perspectives such as customer, finance, internal process and learning and growth. The initiatives are properly identified and linking with objective. The four high level strategic theme and their subsequent result are aligned to the organization corporate vision.

Regarding to the weakness of the Gambella University in building the BSC in the organization it lack participation. BSC requires participatory strategic planning and development processes. However , the top management and BSC building team were merely prepare the strategic plan. The internal staff and external customer and stakeholders were not properly participated in the strategic plan development processes. The performance measures are not keeping the balance between leading (performance deriver) indicators and lagging (outcome measures) and this may cause adverse effect in the BSC. The organization does not provide training about change by

using communication through electronic media and print to educate the internal and external stakeholder. The balanced scorecard enables an organization to integrate its strategic plan with its annual budget processes. However adequate budget is not given to some critical initiatives that can bring organizational change. Budget are not properly allocated to each working unit/directorates.

In similar way the university BSC has got critical problem in its implementation or system roll out. That means that there is huge problem in employing software for data collection, reporting and visualizing of performance. So the performance data are not transfer in to the relevant information and use for performance measurement. Due to lack of appropriate recording of performance related data the performance evaluation of individual and team are against BSC concept this may open room to nepotism. Regarding cascading problem the organization faced challenges in translating high level strategy in to aligned lower level objective and measures. Some of directorate scorecards are not aligned to corporate vision and strategy. Individual scorecard are not aligned to operation and objectives this may poses problem in alignment of organization shared vision, to make strategy actionable from work units down to individuals.

It is important concluding remark that the activities performed under the BSC design phase were good whereas activities performed in BSC implementation is weak.

In general the researcher may appreciated the university effort to apply BSC , but in order achieve the expected results, the university may need to develop necessary software to automate the system and use evaluation to periodically review the strategy map and BSC, and finally has to engaged in proper cascading process.

In correlation and regression analysis result of independent variable strategic map has high beta value and also it has strong impact on BSC implementation. Managers should be considered, day to day follow up, regularly monitoring, evaluating each activity or variable because this variable has significant impact on BSC implementation. Where as strategic Objective, assessment, performance measure and strategic plan has also moderate impact on dependent variable (BSC implementation). But when come to strategic initiative it has less impact on BSC implementation. How ever if the independent variables of design phase of BSC is properly

established or prepared then the implementation of BSC also high or good. As discussed above, the findings of the study are consistent with the (yoseph sheferaw 2014 )

### **5.3 Recommendations**

On the basis of the major finding and conclusions drawn, the following recommendations were made.

- The significance challenges in the building of the BSC is directly associated with organizational assessment phase. The critical challenges indicated in the study which include participatory strategic plan development process, BSC linkage with budget, performance measures are not keeping the balance between lagging and leading indicators and training about change in media. Therefore the university should set up qualified BSC team which will be supported by professional experienced external consultant that conduct assessment and review about BSC building.
- BSC implementation could be realistic and successfully implemented if it is supported by software (automation). As indicated in the finding of this study the university did not use automation to collection, reporting and performance data. Therefore it is suggested that the university should automate the BSC system because it will improve the collection, reporting and performance record system.
- Cascading is the process of developing scorecards at all levels of the university. These scorecard align with the highest level scorecard by identifying the strategic objective and measures to lower level process. With regard this, the study revealed that there were problem to cascade work unit and individual scorecard level. It is therefore advisable that the university should undertake and revise cascaded objectives, measures and activities for better achievement.
- Evaluating of BSC process should start from the very beginning to final steps. It should not be one time job. The implementation of BSC will get refined and eventually become successful if we do evaluation in every step of implementation process. Therefore, the

university should arrange regular program every month to review the implementation process, to achieve expected result

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**APPENDIX A**  
**Jimma University**  
**Collage of Business and Economics**  
**Department of Management**  
**MBA Program**

**Questionnaire to be filled by all respondents**

My name is FikruTebeje a graduate student at Jimma University department of management. I am currently conducting a master's thesis entitled to the practices and challenge of business score card design and implementation at Gambella University. The purpose of the study is to obtain adequate and reliable information on the above issue and intended to serve for the partial fulfillment of the award of a Masters Degree in Business Administration(MBA). You are selected to participate in this survey, due to your important role in business score card design and implementation in Gambella University. Participation in this study is voluntary, and you are not required to disclose your name and responses will remain confidential and be analyzed together with the responses of others, solely for this study. I expect you to answer all questions truthfully. N.B you are only required to tick “√” or circle in one of the appropriate boxes among the choice

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**I. General Information**

<b>1</b>	Sex:	Male <input type="checkbox"/>	Female <input type="checkbox"/>		
		1	2		
<b>2</b>	Age:	18-30 <input type="checkbox"/>	31-40 <input type="checkbox"/>	41-50 <input type="checkbox"/>	51 and above <input type="checkbox"/>
		1	2	3	4
<b>3</b>	Education Level	Diploma <input type="checkbox"/>	First Degree <input type="checkbox"/>	Second Degree	Third Degree <input type="checkbox"/>

		1	2	3	4
4	Work positions:	Teacher <input type="checkbox"/>	Officer <input type="checkbox"/>	Team leader <input type="checkbox"/>	Director and others <input type="checkbox"/>
5	Work experience	> 2 years <input type="checkbox"/>	3-5 years <input type="checkbox"/>	6-8 years <input type="checkbox"/>	above 9 years <input type="checkbox"/>

6	<b>Management and leadership</b>	Strongly agree	Agree	Undecided	Disagree	Strongly disagree
		5	4	3	2	1
6.1	The senior management well defined the organization vision, mission and corporate values					
6.2	The senior management is fully committed in the process of the university BSC building and implementing					
6.3	The senior management understand the concept of BSC and educate the internal staff and External stack holders					
6.4	The senior management has the quality of tolerance and understanding of BSC implementation takes time and require change within the organization as at all level					
6.5	The senior management introduce BSC only for composition (salary, overtime, payment, top up etc) purpose					
6.6	The senior management empower your directorate or department to devise new ways of doing their day to day businesses					
6.7	Senior management style emphasis communication, participation, employee empowerment and innovation					
6.8	The senior management facilitate top-down and bottom-up communication					
6.9	The senior management form BSC team comprising of change agent and hire consultants to build the university BSC					



6.10	The university uses management meeting to work to gether in teams to identify problems, assess change in the operation and strategic environment					
7	<b>Building BSC (Assessment )</b>					
7.1	University analyze the internal weakness, strength and the external threats and opportunities in formulating strategic plan					
7.2	GU develop clear vision ,mission and core value to provide direction for the organization					
7.3	GU identify the customers and stake holder after understanding their needs and demands .					
7.4	GU strategic plan is developed by all of us , not just leaders and /or the planning directorate					
7.5	GU provide training about change with communication media					
8	<b>Strategic planning</b>					
8.1	GU formulated strategic plan based on in depth analysis of the internal and external Environments					
8.2	The organization strategic focus area are well defined and understand					
8.3	Your directorate or department uses customer, financial, internal process, learning perspective to assure the balance in the organization strategies and measures.					
8.4	Your directorate or department put customer satisfaction as a central position					
8.5	The financial perspective is the primary objective of your directorate or department balance score card					
8.6	Your directorate or department identify value proposition for key customer and stake holder's ser vices attributes ( quality, timeliness, cost effectiveness, etc) image and relationship					

	component					
8.7	Your directorate or department identify strategic result that ratify the successful execution of the strategic theme					
8.8	GU identify competitive critical success factors					
8.9	Your directorate or department strategic theme and goals are linked with performance based budget					
9	<b>Strategic objective</b>					
9.1	Your directorate or department develop strategic objectives for each theme					
9.2	Your directorate or department strategic objective are placed in the themes					
9.3	Your directorate or department performance indicators are related to the objective of organization					
9.4	Your directorate or department objective are too many					
9.5	Your directorate or department has well-written objective statements which provide precise clarification of the meaning					
9.6	Your directorate or department objectives describe the links in the chain of cause and effect evident in the strategy map					
10	<b>Strategic mapping</b>					
10.1	GU uses strategic map as tool of education and communication about organization strategy					
10.2	GU use strategic map to link the strategic objectives with its cause and effect relations and demonstrate how value is created through four perspectives					
10.3	GU use strategic map as tool for creation organizational alignment( each work unit, individuals link their strategic objectives to the strategic map)					
10.4	GU use strategic map to balance set of objectives , representing each of perspective					
11	<b>Performance measures</b>					
11.1	Your directorate or department performance measurement links to the organization visions through the objective on the strategic map that					

	translate the university strategy in to operational terms					
11.2	Your directorate or department performance measurement are aligned other directorate and work units performance measurement					
11.3	Your directorate or department undertakes internal or external benchmarking to set measurements and indicators.					
11.4	Your directorate or department performance measures include leading, lagging ,quantitative and qualitative measures in balance way					
11.5	Your directorate or department performance measures in each perspective are capable enough to measure the objective					
11.6	Your directorate or department performance measurement is accurate and consistent					
12	<b>Strategic initiatives</b>					
12.1	GU and your directorate or department identify potential strategic initiatives, developed selection criteria, analyze and selected strategic initiatives					
12.2	The initiatives are tied to strategic vision, mission, objectives and perspectives explicitly defined in terms of owners, schedules, action, steps, progress and expected results and fits with one of the strategic themes					
12.3	GU strategic initiative are wide reaching( entire organization) and solve a significant organization pain					
13	<b>Implementing BSC(system rollout) Automation</b>					
13.1	Your directorate or department uses soft ware to automate the collection and reporting the qualitative data.					
13.2	Your directorate or department transfer data in to relevant information and use for performance measurement					
14	<b>Cascading</b>					
14.1	Your directorate or department translates high level strategy in to aligned lower level objectives					

	and measures					
14.2	Your directorate or department scorecard is aligned to GU's visions, mission and strategy					
14.3	You developed individual scorecard aligned to directorates or work process					
14.4	Individual and team scorecard aligned with recognition and incentives					
15	<b>Evaluation</b>					
15.1	Your directorate or department periodically reviews the directorate or department progress towards its strategic goals					
15.2	Your directorate or department review of the BSC strategic planning and management system to determine where efficiency and effectiveness can be improved					
15.3	Your directorate or department uses evaluation to review organization planning, assumption, strategy, objectives, performance measures, strategic initiatives and budget					
15.4	Your directorate or Department use evaluation to put proposal for organizational change( restructuring) as needed					

## APPENDIX B

**Table 1 University objectives**

<b>Perspectives</b>	<b>University Strategic Objectives</b>
Customer	<ul style="list-style-type: none"> <li>• Increase satisfaction of stakeholders</li> <li>• Increase service beneficiaries/users</li> </ul>
Finance/Budget	<ul style="list-style-type: none"> <li>• Increase internal revenue</li> <li>• Improve resources utilization and asset management</li> </ul>
Internal Process	<ul style="list-style-type: none"> <li>• Enhance academic quality and relevance</li> <li>• Strengthen and enhance educational equity and accessibility</li> <li>• Enhance technology package development and linkage with industries</li> <li>• Improve community and stakeholders partnership</li> <li>• Diversify and improve programs/ services</li> </ul>
Learning and Growth	<ul style="list-style-type: none"> <li>• Improve working environment and organizational culture</li> <li>• Improve knowledge, skill, motivation and professional ethics of the staff</li> <li>• Improve necessary infrastructure and facilities</li> </ul>

### 3.1.1. Commentary on University Objectives

#### Strategic themes and their results

<b>No</b>	<b>Strategic themes</b>	<b>Strategic results</b>
1	Educational relevance and quality	Relevant and High Quality Education
2	Research and technology transfer	Relevant Research and Transferred Technology
3	Community service and partnership	Improved Community Service And Partnership
4	Operational and administrative	Improved Operational and Administrative

## APPENDIX C

### Gambella university strategic map

results	<p>Relevant &amp; high quality education</p>	<p>Relevant Research &amp; transferred technology</p>	<p>Improved operational &amp; Administrative services</p>	<p>Improved community service &amp; partner ship</p>
Customer	<p>Increase service beneficiaries /users</p>		<p>Increase satisfaction of customers /stockholders</p>	
or Finance	<p>Increase internal revenue</p>		<p>Improve resource utilization &amp; asset management</p>	
Internal work process				
and Growth	<p>organizational culture Improve working environment &amp;</p>	<p>ethics of the staff Improve knowledge, skill, motivation &amp; professional</p>	<p>facilities Improve necessary infrastructure &amp;</p>	

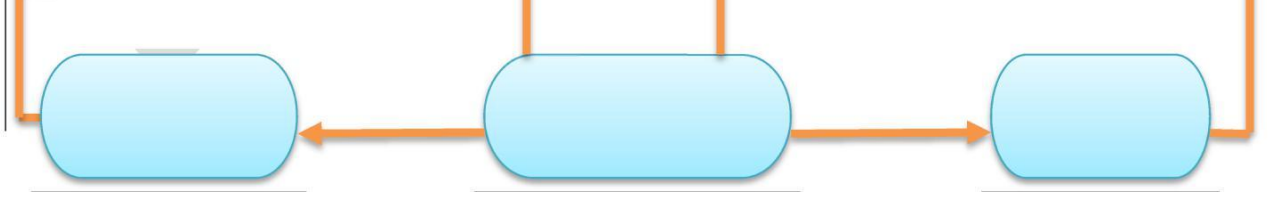


Figure 5 University Strategic Objectives and Map of Gambella University

## APPENDIX D

### Correlations

		Building assessment	strategic planning	strategic objective	strategic mapping	performance measure	strategic initiative	implementati on
Building assessment	Pearson Correlation	1	.400	.538	.584	.535	.577	.563
	Sig. (2-tailed)		.505	.462	.416	.353	.609	.323
	N	5	5	4	4	5	3	5
strategic planning	Pearson Correlation	.400	1	.317	.894	.128	.240	.477
	Sig. (2-tailed)	.505		.603	.106	.809	.846	.649
	N	5	9	5	4	6	3	9
strategic objective	Pearson Correlation	.538	.317	1	.756	.661	.543**	.370
	Sig. (2-tailed)	.462	.603		.454	.225	.	.540
	N	4	5	5	3	5	2	5
strategic mapping	Pearson Correlation	.584	.894	.756	1	.229	.693	.396
	Sig. (2-tailed)	.416	.106	.454		.771	.512	.704
	N	4	4	3	4	4	3	4
performance measure	Pearson Correlation	.535	.128	.661	.229	1	.693	.309
	Sig. (2-tailed)	.353	.809	.225	.771		.512	.551
	N	5	6	5	4	6	3	6
strategic initiative	Pearson Correlation	.577	.240	.543**	.693	.693	1	.348
	Sig. (2-tailed)	.609	.846	.	.512	.512		.356
	N	3	3	2	3	3	3	3
implementation	Pearson Correlation	.563	.177	.370	.296	-.309	-.848	1
	Sig. (2-tailed)	.323	.649	.540	.704	.551	.356	

N	5	9	5	4	6	3	10
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\*\* . Correlation is significant at the 0.01 level (2-tailed).

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.356 <sup>a</sup>	.127	.017	.27764

a. Predictors: (Constant), design of bsc

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.089	1	.089	1.159	.313 <sup>b</sup>
	Residual	.617	8	.077		
	Total	.706	9			

a. Dependent Variable: implementation

b. Predictors: (Constant), design of bsc

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.438	.779		4.411	.002
	design of bsc	-.230	.214	-.356	-1.077	.313

a. Dependent Variable: implementation

**Descriptive Statistics**

	N	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
implementation	10	2.6040	.28009	.171	.687	-.724	1.334
Building assessment	5	3.6973	.52951	-.085	.913	-2.078	2.000
strategic planning	9	3.4544	.26063	-.046	.717	2.014	1.400
strategic objective	5	3.5200	.32711	-.009	.913	2.268	2.000
strategic mapping	4	3.4500	.05774	.000	.014	-6.000	2.619
performance measure	6	3.3500	.12247	-.490	.845	-1.467	1.741



strategic initiative	3	3.4333	.20817	-1.00	.225	.	.
Valid N (listwise)	2						