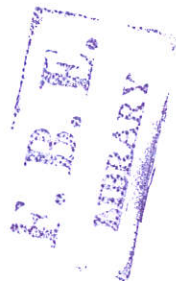


ADDIS ABABA UNIVERSITY  
FACULTY OF BUSINESS & ECONOMICS  
DEPARTMENT OF MANAGEMENT

**PERFORMANCE IMPACT OF MISSION  
STATEMENTS IN ETHIOPIAN BUSINESS  
ENTERPRISES: AN EMPIRICAL EVALUATION**

RESEARCH PROJECT REPORT  
SUBMITTED TO  
THE SCHOOL OF GRADUATE STUDIES OF ADDIS ABABA UNIVERSITY  
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF  
MASTER OF BUSINESS ADMINISTRATION



PROJECT ADVISOR: Dr. Meheret Ayenew

SUBMITTED BY: Getachew Degefu,  
ID No. 1388/98



July, 2007

Addis Ababa University  
School of Graduate Studies

Approval by the Board of Examiners

**Project Title:**

'Performance Impact of Mission Statements in Ethiopian Business Enterprises: An Empirical Evaluation'

**Submitted by:**

Getachew Degefu Wolde Sellassie

**Approved by:**

Name	Signature	Date
<u>Meheret Ayenew</u> Advisor	<u>Mehret Ayenew</u>	<u>Apr. 30/2007</u>
<u>Dr. G. K. M. M. M. M.</u> Examiner	<u>[Signature]</u>	<u>10.08.07</u>
_____ Examiner	_____	_____
_____ Examiner	_____	_____

## **Acknowledgements**

The author would like to extend his heartfelt appreciation and thanks to the management of all the respondent financial companies in Addis Ababa who have graciously cooperated by filling out the study questionnaires and supplying useful additional related documentation. The author would also like to thank Dr. Rakesh Belwal who has contributed in the identification of this research topic, and Dr. Meheret Ayenew who, as an advisor of the project, has dutifully extended his valuable guidance, improvement suggestions and support though out the exercise.

## **Abstract**

*Many Ethiopian business firms are nowadays observed adorning their entrance lobbies, annual reports and promotional materials with their 'vision' and 'mission' statements. 'Do such statements of strategic intent, business purpose and values have any meaningful impact on organizational performance?' is the central question of this research project.*

*The research has compiled and analyzed the mission statements and performance records of some ten Ethiopian business firms in the financial service sector. Various statistical inference techniques have been used to estimate whether there are any significant differences in performance among groups of firms with and without articulated mission statements, as well as among those with mission statements of different strategic orientations.*

*The study has shown that there are no significant differences in performance between the sample enterprises with mission statements and those without as well as among those with mission statements of different strategic orientations. The reason is probably due to the low strategic values of the articulated mission statements that are not well supported by strategic management processes within the organizations.*



## Table of Contents

Sec		Page No
1	<b>Introduction and background</b>	1
2	<b>The Research Objectives</b>	3
3	<b>Review of the Literature and Previous Studies</b>	3
3.1	Mission statements and organizational purpose	3
3.2	Characteristics of effective mission statements	6
3.3	Strategic orientation of mission statements	7
3.4	The relationship between mission statements and performance	8
4	<b>Formulation of the Research Problem</b>	10
5	<b>The Research Design and Methodology</b>	13
5.1	Procedures for statistical inference through hypothesis testing	14
5.2	Limitations of tests of significance	17
5.3	Tests of significance used in this research	17
6	<b>Collection of Data and Information</b>	23
7	<b>Analyses and Interpretations</b>	27
7.1	Analysis of performance data with and without mission statements	27
7.2	Analysis of sample mission statements	31
8	<b>Conclusions and Recommendations</b>	35
	<b>References</b>	38
	<b>Appendices:</b>	
	I - Data collection questionnaire	i - ii
	II – Detail significance test computations	i- iii

### List of Tables

<b>Table No</b>	<b>Title</b>	<b>Page No</b>
1	List of Respondent Enterprises	21
2	Mission Statements of Respondent Enterprises	22
3	Performance Indicators of respondent Enterprises	24
4	Comparison of Performance Indicators	27
5	Results of Significance Tests – growth in sales revenue	28
6	Results of Significance Tests – growth in gross profits	28
7	Content Composition Analysis of Mission Statements	30
8	Strategic Orientation and Performance	31
9	ANOVA table	35

### List of Figures

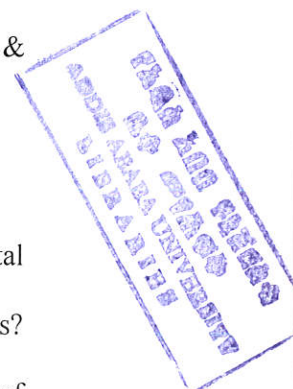
<b>Figure No</b>	<b>Description</b>	<b>Page</b>
1	Research model	11

## 1. Introduction & Background

It can be observed, especially these days, that quite a few business enterprises and non-business organizations in the Country, both in the public and private domains, are seen adorning the walls of their entrance lobbies, promotional literature, annual reports and web-sites with boldly written vision and mission statements. 'Does the disclosure of such well crafted statements of organizational purpose and values have any meaningful impact on organizational performance?' is the central question of this research project.

Proper mission statements attempt to define the purpose and values of the organization to serve as a basis for the development of further organizational objectives, strategies, and plans of action whose implementation is believed to bring about better performance and changes to the organization. No meaningful strategies can be developed without first knowing the central purpose of the organization. (Lynch, 2003). It is also widely agreed that well crafted and communicated vision and mission statements promote a common understanding of organizational purpose and direction thus motivating and inspiring management & employees towards the achievement of organizational goals.

If so, do such vision and mission statements actually serve their fundamental purpose in bringing about better performance and effectiveness to organizations? Are they worth the time and effort spent upon them? These are the kinds of questions some have pondered to answer in the literature also. (e.g. Artill, et al 2005; Rarick and Vitton, 1995) Such studies have used various approaches to



investigate the relationships between financial performance and mission statements. Some have concluded positive relationships while others have indicated negative or no relationships between mission statements and organizational performance. This study has also attempted to investigate whether or not articulations of mission statements have actually contributed in any significant way towards the improvement of organizational performance in Ethiopian firms.

In order to carry out this study, the required data and information have been collected from a sample of some 10 Ethiopian business firms in the financial sector by means of a prepared questionnaire. Almost all of the respondents have indicated that they have articulated mission statements. However, only those firms that have published their mission statements before or at least towards the beginning of the period for which the performance indicators have been collected are taken as firms having mission statements with some possible impact on performance. The others are considered as having no mission statements within the relevant period of evaluation.

Suitable significance tests have then been used to check whether those with published mission statements have significantly different or better performance results as compared to those that do not have such articulated vision/mission statements. It is also attempted to analyze the contents of the mission statements and whether certain strategic orientations of mission statements have been more effective than the others.

## **2. The Research Objectives:**

2.1. The basic objective of this research project was to empirically evaluate whether there have been any significant relationships or not between articulations of mission statements and improved organizational performance in Ethiopian business enterprises.

2.2. The other secondary objectives were to evaluate how Ethiopian business firms have been formulating their mission statements, and to study the general contents and strategic orientations of the mission statements.

## **3. Review of the Literature and Previous Studies:**

### *3.1. Mission statements and organizational purpose*

Mission statements are articulated to define organizational purpose and direction. Organizational purpose is a complex and multifaceted concept, unique to every organization. A firm's mission statement defines 'the unique purpose that sets apart the firm from others and identifies the scope of its operation. It describes the product, market, technical areas of emphasis, reflecting values and priorities of strategic decision makers. (Pearce II and Robinson, 1997). It embodies why the organization exists, who it is meant to serve and how its value added is to be generated and distributed. (Lynch, 2003)

There are varied views and perspectives in the literature on what organizational purpose is and how it should be shaped and defined. Some believe in simple

definition of the most essential requirements of the organization like profit maximization, survival, or growth. (Porter, 1980; Williamson, 1991) Others recommend a more structured analysis of organizational roles to embody all important aspects of the organization in relation to its environment and stakeholders. (Lynch, 2003) Still others like Collins and Porras advocate for more abstract core values and core purpose that should be more enduring and long lasting, guiding the organization to success within the turbulent environment. (Collins and Porras, 1996)

According to Lynch, organizational purpose is developed within the context of the organizational environment and its stakeholders. A number of factors influence the development of organizational purpose and hence the articulation of vision and mission statements:

- ◆ The opportunities and threats in the general and immediate organizational environment
- ◆ Internal abilities and resources to create value
- ◆ Organizational culture
- ◆ Vision, knowledge, leadership style and ethical standards of strategic decision makers (owners, board of directors, CEO's and senior managers).
- ◆ Relative importance of shareholders and other stakeholders in the organization, etc.



A simple definition of organizational purpose may fail to capture the full range of roles of the organization. However, Lynch, agrees that simple definitions may be

more helpful in providing a means for communication of organizational and values and a forum for focusing on its future direction. (Lynch, 2003)

Pearson and Robinson (1997) assert that the mission statement should set 'the fundamental purpose that sets the firm apart from others of its type and should identify its operations in product and market terms. It is a broadly framed but enduring statement of the firm's intent, business philosophy and the primary customer needs the firm will attempt to satisfy.

There are two major schools or approaches in strategy theory. The prescriptive approach, backed by rational decision theory and strategic choice perspectives, stipulates that organizations can and should, through careful analyses of their external environment and internal competencies and resources, develop clear mission statements of long term organizational purpose based upon which corresponding objectives and strategies can rationally be chosen and pursued. In the more recent emergent approaches, however, the relevance of long term strategic planning is strongly criticized by citing the unpredictable and ever changing nature of the environment. Instead, these emergent theorists advise for more flexible and contingent approaches that can adapt with the ever changing environment and the complex behavior of people. (Lynch, 2003)

Despite all the above different views and perspectives on how organizational purpose should be shaped and vision and mission statements articulated, many agree that a clear definition of the purpose of the organization has to be made first

in order to formulate any meaningful long term or short term business objectives and strategies that have to be pursued for better organizational performance.

### 3.2. *Characteristics of effective mission statements*

Since the mission statement is expected to define the ultimate purpose and philosophy of a firm being in a particular industry, it is of utmost importance that it should be well composed and clear to all stakeholders inside and outside the organization. Only then can it provide a basis for increased organizational performance and effectiveness. Different authors have somewhat different views regarding the content of mission statements. Ackoff, (1986) has identified five pertinent characteristics of a good mission statement:

- ◆ Definition of the business area the firm is or wishes to be in
- ◆ It should differentiate the firm from its rivals
- ◆ Should enable the formulation of objectives
- ◆ Should be exciting and motivating
- ◆ Should be relevant and clear to all stakeholders inside and outside the organization.



Lynch (2003) identifies the following essential elements of a good mission statement:

- ◆ Consideration about the nature of the firm's business
- ◆ Responses to customer needs
- ◆ Basic values and beliefs of the organization
- ◆ Means of sustainable competitive advantage

- ◆ Main reasons for choice of approach.

Pearce II & Robinson (1997) have identified the following essential and non-essential components:

- ◆ Business activity defined by product or service, primary market, principal technology;
- ◆ Company goals of survival, growth and profitability
- ◆ Company philosophy – beliefs, values and aspirations
- ◆ Good public image
- ◆ Company self concept

In recent trends of development of vision and mission statements, sensitivity to customer needs and concern for quality have become prominent. Prescriptive strategists like Collins and Porras (1996) have emphasized company philosophy and self concept when they recommended for articulation of combined vision and mission statements in terms of 'core ideology' and 'envisioned future'. Core ideology is to be composed of 'core values' and 'core purpose' while the 'envisioned future' is composed of one 'Big, Hairy, Audacious Goal (BHAG)' for 10-30 years with a vivid description of what it would be like in achieving such a goal. The core values are 3-5 fundamental, deeply held and shared values while the core purpose represents the company's fundamental reason for being, reflecting the peoples idealistic motivation for working for the company. The two authors emphasize that core ideology is to be discovered while the envisioned future should be created.

### 3.3. *Strategic orientation of mission statements.*

The content of a mission statement can give indications to a firm's basic values and strategies. A number of empirical studies that have investigated contents of mission statements have noted variations or strategic orientations in the mission statements. For example O'Gorman and Doran (1999) have found that the mission statements of small and medium size enterprises tend to place more emphasis on concern for survival, product and services than concern for customers and the market. Pearce and David (1987), on the other hand, found that specifications of target customers and markets are more prominent as opposed to concern for public image. Artill et al (2005) have identified 48 enterprises (from among 143 UK firms) that are oriented to general stakeholders (customers, employees, shareholders, etc.) and comparable numbers of about 30-33 firms that are more oriented to customers, shareholders, or the market.



### 3.4. *The relationship between mission statements and organizational performance:*

Despite the plethora of articles and texts concerning organizational purpose and vision/ mission statements, the empirical evidence on the relationship between articulation of mission statements and performance is rather sparse.

Few studies have considered the relationship between mission statements and financial performance. These studies have used various approaches and measures of financial performance and have often reached at conflicting results.

Some studies have tried to compare profitability in companies with and without mission statements. For example, Rarick and Vitton (1995) have found that return on investment within 500 small and medium size firms is significantly higher for those businesses with mission statements than for those that do not have such statements. Klemm et al (1991) and Coats et al (1991) have on the other hand concluded earlier that there is no significant difference in profits between similar groups of businesses.

Pearce and David (1987) had analyzed the mission statements of large US businesses and found that businesses with more comprehensive mission statements have significantly higher profit margins. O’Gorman and Doran (1999) on the other hand studied small scale Irish businesses and found no significant relationships between sales growth and the use of comprehensive mission statements.

Some authors have questioned the value relevance of mission statements altogether. For example Piercy and Morgan (1994), Simpson (1994) say that many mission statements are empty public relation initiatives, with no relationships with important stakeholders like employees. They say good companies actually live their missions and need not compress them into vague statements.

Bart and Baetz (1998) have also come up with a surprising result through a study of Canadian businesses. They have found that inclusion of financial goals in mission statements is negatively related with performance. The authors have surmised to explain this finding by stating that probably low performing



businesses have tended to include financial goals in their mission statements as a means of emphasizing management concern, or the financial goals have tended to detract the main motivational purpose of the mission statements.

Artill et al (2005) after analyzing the mission orientations of 143 UK listed companies have found that there is no significant relationship between mission orientations and return on equity in the service sector, while return on equity over three years was associated with companies having shareholder orientated mission statements in the non-service sector. Stock returns were also influenced by shareholder orientation of mission statements.

Review of the findings of the above studies clearly shows that the empirical research on mission/performance relationship has still a long way to go before any conclusive convergence is established.

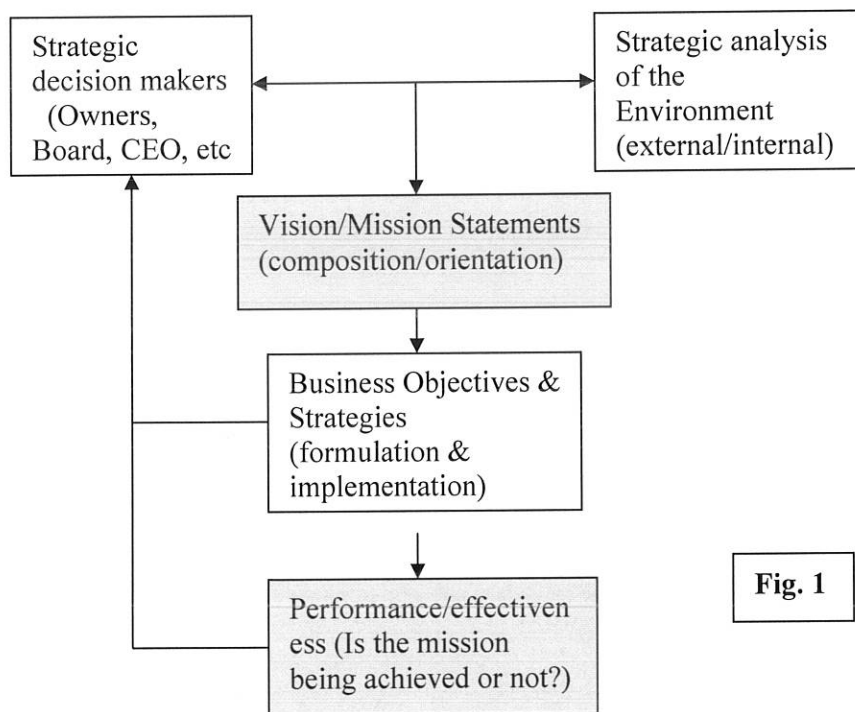
#### 4. Formulation of the Research Problem:

The conceptual framework or model of the research has been formulated as here below (**Fig. 1**) based on the linkages of the various variables that go into the formulation of strategic mission statements and the causal relationship between mission statements and organizational performance.

As per strategic management theory, mission statements must be formulated or approved by the strategic decision makers of the organization through in depth analysis of both the internal and external environment of the organization. The opportunities and threats in the external environment and the strengths and



weaknesses of internal organizational resources must be considered together in light of the visions of the strategic decision makers and owners to formulate the mission statement. The mission statement is then the basis for the formulation and implementation of major business objectives and strategies. Hence, the research model shows that vision and mission statements do not actually impact organizational performance directly but through the moderation of general business objectives and strategies. It can also be noted that it is not the vision/mission statements themselves that are important but their content and strategic orientation that influences the formulation and implementation of general business objectives and strategies that actually impact performance in the end.



**Fig. 1**

In view of the above conceptual framework, it can be assumed that there is a causal relationship between the use of a properly formulated mission statement and better organizational performance. That means Ethiopian businesses that have

used such mission statements for consolidating and directing the efforts and resources of their organizations should have achieved better performance than their counterparts that have not done so. This research attempts to empirically evaluate whether this assumption is true by testing the following propositions about the impact of mission statements on business performance in a sample of Ethiopian business enterprises:

H1: Ethiopian business enterprises that have publicized and used well crafted mission statements should generally perform significantly better than those who have not formulated and used such mission statements.

H2: Ethiopian business enterprises with distinctly different mission statements in terms of compositions and strategic orientation should have significantly different performance results.

The converse or negative of the above statements shall be the null hypotheses.

*Organizational performance* is a construct of a concept that can be interpreted in many ways. In this study it shall be operationalized through measurement of the following specific quantities related to organizational performance:

- ◆ Annual growth of sales revenue or income as measured in percentage of the previous year for the last three relevant years.
- ◆ Annual growth in gross profit measured in percentage of the previous year for the last three relevant years.

*Strategic orientation* of mission statements is also a vague concept that can be interpreted by different views differently. In this study, the mission statements of

sample firms shall be classified into one or the other of the following three categories:

- *Profit/owner oriented*: if the mission statement emphasized the financial goals of profitability and shareholder value.
- *Stakeholders oriented*: if the mission statement is geared to satisfaction of multiple stakeholders like employees, suppliers, society, etc in addition to shareholders.
- *Market/customer oriented*: if the mission statement emphasizes customer value and market requirements like cost leadership, differentiation, etc.

## **5. The Research Strategy & Methodology**

The major objective of this research exercise is to evaluate empirically whether there are any meaningful relationships between articulation of mission statements and enhanced improvements in performance in Ethiopian business enterprises.

For this purpose, the required data and information have been collected from a small sample of 10 formal business enterprises in Addis Ababa. The criteria for selection of these enterprises were that they are fairly big formal business belonged to the same industrial sector to avoid influences of possible inter-sectoral differences, they are all privately owned and there is a relatively good level of competition amongst them. The number of enterprises also constituted more than 60% the number of companies in the sector.

The data and information, collected by means of a prepared questionnaire (**Appendix I**), consisted of information about the formulation, publication and use of mission statements as well as performance indicators operationalized in terms of growth and/or decline percentages in annual sales and gross profits for the last three recent years of 2004 - 06 within which the mission statements are thought to have been applied.

Some of the enterprises of the above sample of enterprises have not yet formulated and published formal mission statements. Others have only formulated their mission statements only recently so that the mission statements have not influenced performance in the relevant years of operation considered. The enterprises in these two groups are considered as enterprises with no formal and publicized mission statements. The data relating to performance indicators of these enterprises is then compared with the enterprises that have had formal and publicized mission statements effective in the operational years considered.

Appropriate tests of significance applicable for small samples were then used to discover whether there are any statistically significant differences between the performance data of the enterprises with and without mission statements and between mission statements of different strategic orientations.

The mission statements of the enterprises were also analyzed with respect to their strategic composition and orientation to identify any distinct groups with respect to

strategic orientation, and to see whether there are any significant differences in performance among these groups.

### 5.1. *Procedures for statistical inference through hypothesis testing*

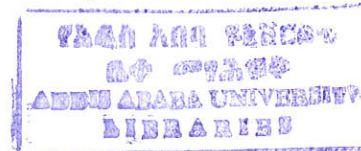
In hypothesis testing one wishes to test some assumption or expectation about a population parameter based on statistics obtained from samples taken from the population. The first step is to formulate the hypothesis about the population parameter. Sample data are then collected to produce sample statistics and use the information to decide how likely the hypothesis about the population parameter is correct.

The conventional approach for hypothesis testing is to construct two hypotheses in such a way that if one is accepted the other is rejected. Such dual hypotheses are referred to as the 'null' hypothesis and the 'alternative' hypotheses. The null hypothesis is very useful in testing the significance of difference. In its simplest form the hypothesis asserts that there is no difference between the sample and the population (or a larger sample) in the particular parameter under consideration. The assumption is that the difference found is not significant but only accidental, arising only due to fluctuations of sampling.

Against the null hypothesis, the alternative hypothesis specifies the expectations the researcher believes to be true, and of course hopes that the sample data shall lead to acceptance of this hypothesis. However, it is often

easier to prove something is false rather than prove it is true. Hence the null hypothesis is often used for significance testing in order to lead to the acceptance of the alternative hypothesis when it is proved false or rejected.

Once the hypothesis is set up, the next step is to test the validity of the null hypothesis against the alternative hypothesis at a certain level of significance. The confidence with which the experimenter/researcher rejects or accepts a null hypothesis depends upon this level of significance. The level of significance represents the probability of rejecting a true hypothesis, that is making a Type I error, often denoted by the Greek letter  $\alpha$  (alpha). A low probability level of 0.05 or 0.01 is usually acceptable for this level of significance, which means that the probability of making a Type I error (rejecting a true null hypothesis) is only 5% or 1%. Type II error is committed by accepting a null hypothesis when it is false. The probability of committing Type II error is denoted by  $\beta$  (beta).



While testing hypothesis the aim is to minimize both types of error. However, it is often not possible to control both types of error simultaneously. Actually, there is a trade off between the two types of error ( $\alpha = 1 - \beta$ ). Managers decide the appropriate level of significance by examining the costs and penalties attached to both types of errors. It is often more dangerous to accept a false hypothesis (Type II error) than rejecting a correct one (Type I error). Hence, one tries to keep the probability of making the Type I error, which is the level of significance, as low as possible. It is usually fixed at 5% level which means that the probability of accepting a true hypothesis is 95%.

After setting the required level of significance, an appropriate probability distribution is selected to serve as a test criterion for the particular test. Selection of the probability distribution suitable for a particular test depends upon the nature of the distribution of the population, sample size and the data type. For example, the tests of significance for attributes (nominal scale) use the binomial probability distribution, while tests of significance involving variables that can be measured at the interval and ratio scale levels use the continuous normal distribution or one of its variations. The sampling distributions of large samples can be assumed to approximate the normal distribution while smaller samples ( $< 30$ ) use test statistics based on the Student's t-distribution, and other special techniques like the Z-test and the F-test which are used to test the significance of differences in certain parameters of small samples.

Once a complete statistical test is designed going through the above mentioned steps, various computations are then carried on the random samples taken from the population as per a sampling plan. These calculations include the determination of the test statistic and the standard error of the test statistic. Based on these results, statistical decisions can then be made by rejecting or accepting the null hypothesis.

### *5.2. Limitations of tests of significance:*

Tests of significance can serve only as one input to make inferential decisions. There may be situations where real differences exist but the samples do not

produce evidence that there are any statistically significant differences or the other way round.

The conclusions drawn should be given in terms of probabilities instead of certainties. When a test shows a statistically significant difference, it means that the difference is probably not due to variations by chance.

The tests do not tell why the difference exists. It is up to the interpreter that should identify the probable causes. Good judgment and knowledge of the subject must be combined to draw any definitive conclusions.

### 5.3. *Tests of significance used in this research:*

- i. *The Student's t-test for testing the significance of the mean of a small sample:*

In determining whether the mean of a sample drawn from a normal population deviates significantly from an assumed or hypothetical mean of the population, when the variance of the population is unknown, the t-statistic is calculated as follows: (Gupta, 1982)

$$t = \frac{(\bar{X} - \mu)\sqrt{n}}{S}$$

$\bar{X}$  : mean of the sample,

$\mu$  : actual or hypothetical mean of population

n: sample size

S: the standard deviation of the sample

- ii. *The Student's t-test for testing the difference between the means of the two independent small samples:*

Given two independent samples of size  $n_1$  and  $n_2$ , with means  $\bar{X}_1$  and  $\bar{X}_2$ , standard deviations  $S_1$  and  $S_2$ , the hypothesis that the means of the two samples are significantly different or come from the same normal population can be tested by the t-statistic below: (Gupta, 1982)

$$t = \frac{\bar{X}_1 - \bar{X}_2}{S} \sqrt{\frac{n_1 n_2}{n_1 + n_2}}$$

$\bar{X}_1$  : mean of first sample

$\bar{X}_2$  : mean of the second sample

$n_1$ : number of observations in the first sample

$n_2$ : number of observations in the second sample

$S$  : combined standard deviation of the two samples

The value of S is calculated using the formula below:

$$S = \sqrt{\frac{\sum (X_1 - \bar{X}_1)^2 + \sum (X_2 - \bar{X}_2)^2}{n_1 + n_2 - 2}}$$

When the actual means are in fraction, the deviations should be taken from assumed means. In such a case, the combined standard deviation can be obtained as follows:

$$S = \sqrt{\frac{\sum (X_1 - A_1)^2 + \sum (X_2 - A_2)^2 - n_1 (\bar{X}_1 - A_1)^2 - n_2 (\bar{X}_2 - A_2)^2}{n_1 + n_2 - 2}}$$

$A_1$  = assumed mean of first sample

$A_2$  = assumed mean of second sample

$\bar{X}_1$  = actual mean of first sample

$\bar{X}_2$  = actual mean of second sample

When the standards of deviation of the two samples ( $S_1$  and  $S_2$ ) are known the following formula can be used to calculate the combined standard deviation  $S$ :

$$S = \sqrt{\frac{(n_1 - 1)S_1^2 + (n_2 - 1)S_2^2}{n_1 + n_2 - 2}}$$

If the calculated value of the t-statistic is greater than the table value at a selected significance level, the difference between the sample means is said to be significant at the given significance level. Other wise the data is said to be consistent with the null hypothesis, i.e. there is no significant difference between the sample means other than those attributable to chance variations in random sampling.

- iii. *The Variance Ratio Test – F-test*: The objective of the F-test is to see whether two independent estimates of population variance differ

significantly, or whether the two samples can be regarded as drawn from two normal populations of the same variance.

$$\text{The ratio } F = \frac{S_1^2}{S_2^2}, \text{ where } S_1^2 = \frac{\sum (X_1 - \bar{X}_1)^2}{n_1 - 1}$$

$$\text{and, } S_2^2 = \frac{\sum (X_2 - \bar{X}_2)^2}{n_2 - 1}$$

where  $n_1$  and  $n_2$  refer to the number of observations in sample I and sample II respectively.

If the calculated value of F exceeds the table value for F at certain significance level, say 0.05, and  $(n_1 - 1)$ ,  $(n_2 - 1)$  degrees of freedom, one concludes the ratio is significant at the 5% level. If it is less than the table value, the two samples could have come from two normal populations with the same variance. The numerator should be always the greater variance. (Gupta, 1982)

- iv. *Analysis of variance (ANOVA)*: In a situation where one has more than two samples to be compared, an alternative procedure is required to test the null hypothesis that states all samples could likely be drawn from the same population. This procedure or technique developed by R. A. Fisher is called the analysis of variance or ANOVA. Basically, it consists of classifying and cross-classifying statistical results and testing

whether the means of a specified classification differ significantly. In this way, it is determined whether a given classification or treatment is important in affecting the results.

ANOVA methods can be used to analyze data classified based on one or more criteria. If there is only one classification criterion, the classification is said to be one-way, and if there are two classification criteria, the classification is two-way and so on. For our purpose we use only the one-way classification technique described as follows:

Calculate the variance between samples:

- Calculate the sum of squares (SSC) of the deviations between sample means and the grand mean for all observations.
- Calculate the mean square (MSC) between samples (the variance) by dividing the above sum of squares (SSC) by the degrees of freedom between the samples (k-1)

$$MSC = \frac{SSC}{k-1} = \frac{\sum_1^k N_i (\bar{X}_i - \bar{X})^2}{k-1}, \text{ where,}$$

$\bar{X}_i$  : the mean of the  $i^{\text{th}}$  sample

$N_i$  : the number of elements (observations) in the  $i^{\text{th}}$  sample

$\bar{X}$  : the grand mean of k samples =  $\frac{\bar{X}_1 + \bar{X}_2 + \dots + \bar{X}_k}{k}$

$k - 1$ : is the degree of freedom between k samples

Calculate the variance within samples:

- Calculate the sum of squares (SSE) of the deviations between the sample observations and the sample means for all samples
- Calculate the mean square (MSE) within the samples (variance) by dividing the above sum of squares (SSE) by the degree of freedom  $N-k$ , where  $N$  is total number of observations in all samples and  $k$  is the number of samples:

$$MSE = \frac{SSE}{N - k} = \frac{\sum_{j=1}^k \sum_{i=1}^{N_j} (X_{ij} - \bar{X}_j)^2}{N - k}, \text{ where,}$$

$X_{ij}$  : the  $i^{\text{th}}$  observation of the  $j^{\text{th}}$  sample

$\bar{X}_j$  : mean of the  $j^{\text{th}}$  sample

$N_j$  : number of observations in the  $j^{\text{th}}$  sample



Calculate the variance ratio  $F$  as follows:

$$F = \frac{MSC}{MSE}$$

The calculated value of  $F$  is finally compared with the table value at degrees of freedom  $v_1 = k - 1$  and  $v_2 = N - k$ . If the calculated value is found to be less than the critical value of the table, the difference in the mean value of the samples is not significant, which means that the samples could have come from the same source or universe. (Gupta, 1982)

## 6. Collection of Data and Information

Data and information was collected through a prepared questionnaire (**Appendix-I**) distributed to the concerned officials (mostly managers of corporate planning and business development) of the following business enterprises:

**Table 1. List of Respondent Enterprises**

	<b>Name of the Enterprise</b>	<b>Year of Establishment</b>	<b>Paid up capital (million Birr)</b>
1	Dashen Bank	1995	280
2	Nyala Insurance	1995	35
3	Bank of Abyssinia	1996	265
4	United Bank	1994	31
5	United Insurance	1995	26.95
6	Awash International Bank	1995	200
7	Wogagen Bank	1997	230.5
8	Africa Insurance	1994	30
9	Nib International Bank	1999	297
10	Nib Insurance	2002	28

The available mission statements and performance indicators for the ten respondent enterprises are tabulated as below:



**Table 2. Mission Statements of Respondent Enterprises**

	<b>Name of Organization</b>	<b>Mission Statement</b>	<b>Year of formulation/publication</b>	<b>Analysis of composition/orientation</b>
1	Dashen Bank	To provide efficient and customer focused domestic and international banking services, overcoming the continuous challenges for excellence through the application of appropriate technology.	As revised 2002	-Efficiency , -Customer focus - Product/market -Continuous improvement -Appropriate technology
2	Nyala Insurance	Guarantee care and protection.	Formulated since 1995	-Customers (indirect)
3	Bank of Abyssinia	To provide domestic and international banking services through innovative utilization of technology, human and other resources and be recognized as quality focused, result oriented, financially sound and socially responsible bank.	Formulated in 2004	-Product/ market -Innovation, -Resources (human, etc.) -Quality, result orientation, -Financial soundness -Social responsibility
4	United Bank	To render quality commercial banking services to the best satisfaction of its customers; to enhance shareholder value; to be one of , if not the best, employers in the industry, to discharge its corporate responsibilities to both the community in which it operates and the environment which it shares with the world.	As revised in 2006	-Product -Quality -Customers -Shareholder value -employees -Corporate governance
5	United insurance	Continue to strive to be the best insurance company in the country: the most professional, commercial and responsible to best satisfy its constituencies.	As revised in 2006	-Product -Industrial leadership -All stakeholders

	<b>Name of Enterprise</b>	<b>Mission Statement</b>	<b>Year of formulation/publication</b>	<b>Analysis of Composition/orientation</b>
6	Awash Bank	None	-	-
7	Wogagen Bank Sh. Co.	To provide a wide range of quality banking services through a dynamic workforce and up to date IT solutions to satisfy the desires of all stakeholders.	As revised 2005	-Product range, -Quality -Employees, -IT -All stakeholders
8	Africa Insurance	-To provide quality insurance services and reliable security at a reasonable price in the best interests of our existing and potential customers -To put customers at the center of decision making; - To be productive, profitable and competitive -To generate adequate and reasonable return - To be economically strong, socially responsible, environmentally conscious and financially liquid. - To develop professionalism and outstanding use of modern technology - To develop high ethical standards	Formulated in 2006	-Product -Quality, -Reasonable price -Customer satisfaction & focus -Profitability -Financial liquidity -Social responsibility -Ethical standard
9	Nib bank	None	-	-
10	Nib Insurance	Nib Insurance strives to make business in the country more productive by meeting the growing needs insurance service needs and effectively utilizing public and private funds for sustainable profitability and growth	Formulated recently in 2007	-Product/market -Sustainable profitability -Growth

**Table 3: Performance Indicators of Respondent Enterprises;**

	Name of Enterprise	% Annual Growth in Sales Revenue/Income			% Annual Growth in Gross Profits		
		2004	2005	2006	2004	2005	2006
1	Dashen Bank	43	22	56	113	29	90
2	Nyala Insurance	(17)	44	(2)	(7)	3	19
3	Bank of Abyssinia	77	26	51	612	51	50
4	United Bank	45	103	39	27	357	43.7
5	United Insurance	(8)	44	70	(133)	75	1900
6	Awash International Bank	20.3	33.8	56.9	119	30.9	112.5
7	Wogagen Bank	81.9	40.1	45.3	193.4	41.9	49
8	Africa Insurance	8.9	19.3	(3)	(44.8)	7.8	59.4
9	Nib International Bank	41.1	45.8	16.4	151.9	34.8	21.2
10	Nib Insurance	40	22	15	NA	NA	NA

## 7. Analysis and Interpretations

### 7.1. *Analysis of performance data of enterprises with and without mission statements:*

The following **Table 4** (page 30) presents the performance indicators of the two groups of enterprises. It can be seen that 60% of the respondents have utilized formally formulated and published mission statements while 40% have not as indicated here in above.

The mean, median and standard deviation values are calculated as shown in the table for the three years performance data for all sample observations relating to both growth in sales revenue and growth in gross profits.

There are a number of univariate and multivariate statistical techniques used for analyzing relationships between variables depending upon the data type, measurement scales, number of measurements per sample, number of samples, and independence/dependence of samples. With the detail calculations shown in **Appendix II**, the following significance tests are carried out to accept or reject the null hypothesis (H<sub>10</sub>) that 'there is no significant difference in performance between Ethiopian businesses with published mission statements and those without such published mission statements':

- *t-test for the significance of the mean of a sample* - the three year mean performance data for the enterprises with mission statements as compared with the three year mean performance data of the whole sample of respondent enterprises.

- *t-test for significance of difference between means of two independent samples* - three year mean performance data for the sample of enterprises with mission statements and those without mission statements;
- *The variance ratio test (F-test)* for significance of differences between the variances of the mean of the three year mean performance data for the two independent samples of enterprises with and without mission statements.

The results of the above tests relating to both performance data groups of three years average performance in terms of percentage growths in sales revenue and gross profits are shown in the following **Table 5** and **Table 6** below:



**Table 4: Comparison of Performance Indicators**

	Category / Enterprise name	% growth/decline/ of sales revenue/income						% growth/decline/ of gross profit					
		2004	2005	2006	mean	median	S. dev.	2004	2005	2006	mean	median	S. dev.
	<b>With Mission Statements:</b>												
1	Dashen Bank	43	22	56	40.3	43	17.2	113	29	90	75.7	90	46.2
2	Nyala Insurance	(17)	44	(2)	8.3	-2	31.8	(7)	3	19	5	3	13.1
3	Bank of Abyssinia	77	26	51	51.3	51	25.5	612	51	50	237.7	51	324.2
4	United Bank	45	103	39	62.3	45	35.4	27	357	43.7	142.6	43.7	185.9
5	United Insurance	(8)	44	70	35.3	44	39.7	(133)	75	1900	614	75	1118.6
6	Wogagen Bank	81.9	40.1	45.3	55.8	45.3	22.8	193.4	41.9	49	94.8	49	85.5
	<b>With out Mission statements:</b>												
7	Awash International Bank	20.3	33.8	56.9	37	33.8	18.5	119	30.9	112.5	87.5	112.5	49.1
8	Africa Insurance	8.9	19.3	(3)	8.4	8.9	11.2	(44.8)	7.8	59.4	7.5	7.8	52
9	Nib International Bank	41.1	45.8	16.4	34.4	41.1	15.8	151.9	34.8	21.2	69.3	34.9	71.8
10	Nib Insurance	40	22	15	25.7	22	12.9	NA	NA	NA	NA	NA	NA

**Table 5: Results of Significance Tests (based on sample data for three year average % growth in annual sales revenue)**

	Test type	Sample enterprise groups	Sample sizes	Sample means	Standard deviations	Test statistic values	
						Calculated	Table value @ 5% s.l.
1	t-test of significance of the sample mean	With mission	6	42.2	19.3	<b>0.8</b>	<b>2.6</b>
		With and without	10	35.9	18.2		
2	t-test of significance between sample means	With mission	6	42.2	19.3	<b>1.43</b>	<b>2.31</b>
		Without mission	4	26.4	12.9		
3	The variance ratio (F-test)	With mission	6	42.2	19.3	<b>2.66</b>	<b>9.12</b>
		Without mission	4	26.4	12.9		

**Table 6 Results of Significance Tests (based on sample data for three years average % growth in gross profits)**

	Test type	Sample enterprise groups	Sample sizes	Sample means	Standard deviations	Test statistic value	
						Calculated	Table value @ 5% s.l.
1	t-test of significance of the sample mean	With mission	6	194.9	219.3	<b>0.52</b>	<b>2.6</b>
		With and without	9	148.2	188.2		
2	t-test of significance between sample means	With mission	6	194.9	219.3	<b>0.72</b>	<b>2.36</b>
		Without mission	3	54.8	41.9		
3	The variance ratio (F-test)	With mission	6	194.9	219.3	<b>27.4</b>	<b>19.3</b>
		Without mission	3	54.8	41.9		

The above analysis shows that the data does not produce any evidence against the null hypothesis except for the case of the variance ratio test related to three year average percentage growths of gross profits. This result is again not very reliable because of a strong bias by the presence of data anomalies relating to the gross profit performances of two enterprises, namely Bank of Abyssinia and United Insurance. Hence, the analyses of the samples imply that there is no significant difference in performance between the enterprises that have published mission statements and those that have not.

#### *7.2. Analysis of mission statements:*

As indicated in **Table 2** here in above, eight out of ten of the respondent enterprises have some kinds of formulated and published mission statements. Two of these enterprises, however, have formulated their mission statements only recently, in which case one can deduce that the performance results of these enterprises in the last three years could not be directly impacted by their mission statements. Hence, these mission statements were not considered in the above analysis for the direct impact of mission statements on performance. They are included in this part of the analysis, however, because of their general relevance in indicating the general strategic orientations of the respective organizations.

The indicated mission statements are quite varied both in content and format as well as strategic orientation. With regard to content, the following observations (**Table 7**) can be made:

**Table 7: Content composition analysis of sample mission statements**

	<b>Identified content constructs and concepts</b>	<b>Number of mission statements (out of eight) that have included the contents</b>
1	Basic products/services or range	7
2	Primary market area	2
3	Technology (IT, appropriate technology)	2
4	Survival goal	none
5	Growth goal	1
6	Profitability goal	2
7	Shareholder value goal	1
8	Financial soundness, liquidity	2
9	Customer focus	3
10	Customer satisfaction	3
11	Employees	2
12	General stakeholders	2
13	Reasonable price (cost advantage or lower margin?)	1
14	Quality	4
15	Efficiency	1
16	Innovation	1
17	Continuous improvement	1
18	Industrial leadership	1
19	Social responsibility and corporate governance	3

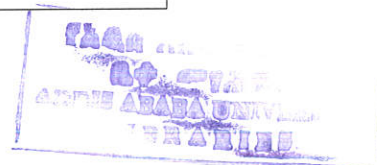
One can see from the above table that many of the mission statements of the respondent enterprises are far from being comprehensive, mostly not even including the most basic and essential elements of content that effective mission statements should have. With respect to format, most (6 out of 8) are written in the form of a single fairly short paragraph or one long sentence. Only one is written relatively longer in a bulleted style, while another one is simply a four word motto.

With regard to strategic orientation, the categories indicated earlier in Section 4 can somehow be identified from the contents of the mission statements of the various sample enterprises as indicated in **Table 2** (page 25) above. The enterprises with mission statements classified into the three categories of strategic orientations are shown below along with the respective performance indicators:



**Table 8: Strategic orientation & performance**

	<b>Orientation Category/ Enterprise Name</b>	<b>Average 3 yrs % annual sales growth</b>	<b>Average 3 yrs annual % growth in gross profit</b>
1	<i>Profit oriented:</i>		
	Nib Insurance	25.7	NA
	United Bank	62.3	142.6
	<i>Average</i>	<b>44</b>	<b>142.6</b>
2	<i>Stakeholder oriented:</i>		
	Wogagen Bank	55.8	94.8
	United Insurance	35.3	614
	<i>Average</i>	<b>45.6</b>	<b>354.4</b>



3	<i>Market oriented:</i>		
	Dashen Bank	40.3	75.7
	Nyala Insurance	8.3	5
	Africa Insurance	8.4	7.5
	Bank of Abyssinia	51.3	237.7
	<i>Average</i>	27	81.5
	<b>Overall (grand) average</b>	<b>38.9</b>	<b>192.8</b>

It can be observed that four out of eight enterprises in the above **Table 8** are market oriented while two are profit oriented, and the other two are stakeholder oriented. If one carries out ANOVA tests on the performance data of three years average sales growth shown for six of the enterprises (leaving out Africa Insurance and Bank of Abyssinia from the market oriented group to make the data symmetrical) one finds the following results to test the second null hypotheses (H20) that stipulates ‘there is no significant difference in performance among Ethiopian businesses with mission statements that are distinctly different in strategic orientation’ (details shown in **Appendix II**):

**Table 9: ANOVA Table - Test of significance on sales growth performance among three strategic orientations of mission statements**

Source of variation	Sum of squares	Degrees of freedom	Mean square
Between samples	561.4	2	280.7
Within samples	1392	3	464
<b>Total</b>	<b>1953.4</b>	<b>5</b>	<b>744.7</b>

$$F = 280.7/464 = 0.6$$

The table value of F at 5% significance level and degrees of freedom 2 and 3 is 9.55. Hence, again, there is no significant difference in performance between the three groups of strategic orientation.

## **8. Conclusions and Recommendations**

Strategic management is the set of decisions and actions that result in the formulation and implementation of plans designed to achieve organizational objectives. The mission statement is at the apex of the strategic management model. It defines the unique and fundamental purpose of the firm that sets it apart from firms of its type and also identifies the scope of its operations. (Pearce and Robinson, 1997) This brief research attempt on the performance impact of mission statements in Ethiopian enterprises, with all its limitations, has produced some interesting results:

- Eight out of ten of the sample enterprises have some kinds formulated and published of mission statements. This may give an impression at first glance that strategic management is being practiced by many Ethiopian business enterprises.
- Looking merely at the sample three year average performance data, it seems as if those with mission statements have performed better, both in terms of percentage growths in sales revenue and gross profits. However, all the tests of significance carried out on the relevant sample data have indicated that the differences are not statistically significant even at 5% level, and hence could have happened as a result of simple chance fluctuations in sampling. Hence,

one cannot deduce for sure that articulation of mission statements has brought about better performance results in Ethiopian enterprises.

- In addition, most of the mission statements in the sample business enterprises do not even mention some of the most important strategic issues an effective mission statement should include or address. For example, customers, primary markets and employees have been mentioned only by two or three mission statements out of the total eight that have published mission statements.
- The mission statements have been mostly formulated, in a somewhat generic fashion, by outside consultants and/or ad-hoc committees, not involving the participation of important strategic decision makers, management and general employees of the organizations. Hence, they do not seem to reflect or define the 'raison d'être' of the enterprises vis-à-vis the existing and potential competition as well as the visions and aspirations of top management and the shareholders. As a result, they have not served much their primary functions of unifying efforts in the organizations and in being used as a basis for further strategic planning and implementation process.
- In addition, though a number of the respondent authorities of the sample enterprises have indicated that the publications of their mission statements have very much contributed to changes in organizational behavior towards better performance, informal interviews of downstream employees has shown that many organizational members are neither much impressed nor know much about the importance of the mission statements. The mission statements

are hence probably formulated to actually serve a PR purpose of showing off, mostly to the external audience, that some kind of modern strategic management is being practiced.

Hence, it can be concluded that a lot remains yet to be done before the procedures of strategic management are effectively understood and utilized in Ethiopian business firms. Strategic management can be practiced at various levels of formality. In small and medium sized firms, the entrepreneurial and adaptive modes can be used, whereby a single owner manager and his close aides attend to the planning and implementation of strategies, often employing more intuitive approaches. In bigger sized, more complex organizations however, the more formal strategic planning and implementation is a must, and should be organized and practiced at all the corporate, business and functional levels.

Finally, it can be stated that the articulation and publication of mission statements does very little, if not worse, by itself. It must be supported by a well designed strategic management process. The mission statement can then serve its basic functions of ensuring unanimity of purpose within the organization and guiding the translation of this purpose into well defined goals in such a way that cost, time and performance parameters can be assessed and controlled. Only then can an enhanced performance be expected as a direct impact of mission statements and the strategic management process.

## Bibliography

1. Artill, P. Omran, M. and Pointon, J. 'Company Mission Statements & Financial Performance' *Corporate Ownership and Control* /Vol. 2, issue 3, 2005
2. Ackoff, R.L., *Management in Small Doses*, John Wiley, Chichester, 1986.
3. Bart, C. K. and Baetz, 'The relationship between mission statements and firm performance: an exploratory study', *Journal of Management Studies*, Nov, Vol. 35, issue 6, 1998
4. Coats J., Davis E., Longden S., Stacey R., and Emmanuel C, 'Objectives, mission and performance measures in multinationals' *European Management Journal*, Dec. 1991.
5. Gupta, S. P., *Statistical Methods*, 18<sup>th</sup> ed., Sultan Chand and Sons, New Delhi, 1982.
6. Collins, J. C. and Porras, J. I., 'Building your company's vision' *HBR*, Sept-Oct, 1996.
7. Kelmm, M., Sanderson, S. and Luffman, G. 'Mission statements: 'Selling corporate values to employees' *Long Range Planning*, 23, 1991.
8. Lynch, J. *Corporate Strategy*, 3<sup>rd</sup> ed. Pearson Education Ltd. Essex, UK, 2003
9. O'Gorman, C. and Doran R. (1999) 'Mission statements' in small and medium size businesses' *Journal of Small Business Management*, October, Vol. 37, Issue 4, p. 59
10. Piercy, J. and Morgan, N. 'Mission Analysis: an operational approach', *Journal of General Management*, 1994
11. Pearce, J and David F 'Corporate Mission Statements: The bottom line', *Executive*, 1. 1987.
12. Pearce J. A. and Robinson JR, R.B. *Strategic Management: Formulation, Implementation and Control*, 6<sup>th</sup> ed. McGraw Hill, NY, 1997.
13. Porter, M. E., *Competitive Strategy*, the Free Press, NY. 1980
14. Rarick, C. and Vitton J. 'Mission statements make cents' *Journal of Business Strategy* 6. 1995
15. Simpson, D. 'Rethinking vision and mission', *Planning Review*, 22 (5) 9-12, 1994
16. Williamson, O. 'Strategizing, economizing and economic organization', *Strategic Management Journal*, 12, 1991.

Appendix I

**Addis Ababa University  
Faculty of Business & Economics**

**Questionnaire for an MBA Research Project**

**Research Topic: “Performance impact of mission statements in Ethiopian  
business enterprises: an empirical evaluation”**

*The data and information collected by means of this questionnaire shall be used  
strictly for academic purposes only.*

1. Full name of your organization and address:

---

---

2. Year of establishment: \_\_\_\_\_

3. Paid up capital: \_\_\_\_\_

4. Current Net worth: \_\_\_\_\_

5. Do you have a published mission statement for your business organization?

Yes

No

6. If you have a published mission statement, please state it fully along with the dates /years of its first publication and revision(s), if any. Attach papers if required.

---

---

---

---

---

---

7. How was your mission statement initially formulated, before its approval by top management?

- a.  By the CEO him/herself;
- b.  By the planning/business development department;
- c.  By an ad hoc committee of senior managers/experts ;
- d.  By an external consultant;
- e.  By the contribution/participation of all or most employees.

8. Why did you formulate and publish your mission statement? State your major reasons: \_\_\_\_\_

---



---



---



---

9. Do you think publishing the mission statement has better geared organizational behaviors towards the achievement business goals?

- a.  Yes, very much,
- b.  Yes, appreciably,
- c.  Yes, a little,
- d.  No, not at all.

10. What factors/components of the following do you think should be included in your mission statement? Number the ones you would include in their order starting with #1 for the most important.

- a. Specifications of basic products/services, primary markets and principal technologies
- b. Goals of survival and profitability for growth
- c. Company (business) philosophy (basic beliefs, values, aspirations and priorities)
- d. Company self-concept
- e. Company public image
- f. Commitments to customers
- g. Commitments to quality
- h. Commitments to other company stakeholders (shareholders, employees, suppliers, communities, etc.)
- i. Commitments to social responsibility

11. Please indicate as here below the actual performance indicators of your business organization in **the last three years**:

	Description	Growth/fall as % of previous year		
		Year 1	Year 2	Year 3
1	Production value			
2	Sales revenue			
3	Gross profit			
4	Additional investment/ capital expenditure			

Respondent's Name: \_\_\_\_\_

Position in the organization: \_\_\_\_\_

Date: \_\_\_\_\_

Please affix the official seal of your organization: \_\_\_\_\_

Appendix II - Microsoft Excel computation sheets - Tests of significance

Page i - Raw data sheet

		% growth in sales revenue						% growth in gross profits					
		2004	2005	2006	Mean	Median	S. Dev.	2004	2005	2006	Mean	Median	S. dev
1	Dashen Bank	43	22	56	40.33	43	17.16	113	24	90	75.67	90	46.20
2	Bank of Abyssinia	77	26	51	51.33	51	25.50	612	51	50	237.67	51	324.18
3	Hibret Bank	45	103	39	62.33	45	35.35	27	357	43.7	142.57	43.7	185.89
4	Hibret Insurance	-8	44	70	35.33	44	39.72	-133	75	1900	614.00	75	1118.55
5	Nyala Insurance	-17	44	-2	8.33	-2	31.79	-7	3	19	5.00	3	13.11
6	Wogagen Bank	81.9	40.1	45.3	55.77	45.3	22.78	193.4	41.9	49	94.77	49	85.49
	Mean	36.98	46.52	43.2	42.2	37.7	28.7	134.2	92.0	358.6	194.9	52.0	295.6
	Median	44	42.05	48.15	45.8	44.5	28.6	70.0	46.5	49.5	118.7	50	135.7
	S. Dev	41.61	29.21	24.53	19.34	19.66	8.41	258.87	132.10	755.46	219.33	29.84	418.63
7	Africa Insurance	8.9	19.3	-3	8.40	8.90	11.16	-44.8	7.8	59.4	7.47	7.8	52.10
8	Awash Bank	20.3	33.8	56.9	37.00	33.80	18.51	119	30.9	112.5	87.47	112.5	49.10
9	Nib International	41.1	45.8	16.4	34.43	41.10	15.79	151.9	34.9	21.2	69.33	34.9	71.83
10	Nib Insurance	40	22	15	25.67	22.00	12.90						
	Mean	27.6	30.2	21.3	26.4	26.5	14.6	75.4	24.5	64.4	54.8	51.7	57.7
	Median	30.15	27.9	15.7	30.05	27.9	14.35	119.0	30.9	59.4	69.3	34.9	52.1
	S. Dev	15.7	12.1	25.3	12.9	14.1	3.2	105.4	14.6	45.9	41.9	54.3	12.4

Appendix II- Page ii - Student's t-test computations

Difference between means of samples (Three years mean growth in sales revenue)

$X_1$	$X_1 - X_1$	$(X_1 - X_1)^2$	$X_2$	$X_2 - X_2$	$(X_2 - X_2)^2$	n1	n2	S	t2
40.3	-2	4	8.4	-18	323	6	4	17.22	1.43
51.3	9	83							
62.3	20	404	37.0	11	113				
35.3	-7	48	34.4	8	65				
8.3	-34	1150	25.7	-1	0				
55.8	14	183							
253.4	0.0	1871	105.5	0	501				
Total Mean	42.2		26.4						

Difference between means of samples (Three years mean growth in gross profit)

$X_1$	$X_1 - X_1$	$(X_1 - X_1)^2$	$X_2$	$X_2 - X_2$	$(X_2 - X_2)^2$	n1	n2	S	t2
75.7	-119.26	14223.3	7.47	-47.3	2236.03	6	3	186.71	0.72
237.70	42.74	1826.6	87.47	32.7	1070.16				
142.57	-52.39	2744.9	69.33	14.6	212.38				
614.00	419.04	175593.1							
5.00	-189.96	36085.4							
94.80	-100.16	10032.4							
1169.77	0.00	240505.7	164.27	0.0	3518.57				
Total Mean	194.96		54.8						

Difference between the sub sample and the whole sample (population)

Growths insales revenue			Growths in gross profits	
	X1	X2	X1	X2
	40.3	40.3	75.7	75.7
	51.3	51.3	5	5
	62.3	62.3	237.7	237.7
	35.3	35.3	142.6	142.6
	8.3	8.3	614	614
	55.8	55.8	94.8	94.8
		8.4		7.5
		37.0		87.5
		34.4		69.3
		25.7		
Mean	42.23	35.89	194.97	148.23
STDEV	19.34	18.18	219.32	188.19
t1		0.80		0.52

Appendix II- Page iii - ANOVA computations

Comparison performance between firms of different strategic orientations  
(Three year average % growth in sales revenue)

Observations	Categories:		
	Profit	Market	Stakeholders
1	25.7	40.3	55.8
2	62.3	8.3	35.3
<b>Total</b>	88.0	48.6	91.1
<b>Mean (Xm)</b>	<b>44.0</b>	<b>24.3</b>	<b>45.6</b>
<b>Grand mean (Xgm)</b>	<b>38.0</b>		

	$X_1 - X_{1m}$	$(X_1 - X_{1m})^2$	$X_2 - X_{2m}$	$(X_2 - X_{2m})^2$	$X_3 - X_{3m}$	$(X_3 - X_{3m})^2$
	-18.3	334.89	16.0	256	10.3	105.1
	18.3	334.89	-16.0	256.00	-10.3	105.1
<b>Total</b>	<b>0</b>	<b>669.78</b>	<b>0.0</b>	<b>512.000</b>	<b>0</b>	<b>210.1</b>

SSE  
MSE

1391.9  
464.0

	$(X_{1m} - X_{gm})^2$	$(X_{2m} - X_{gm})^2$	$(X_{3m} - X_{gm})^2$
	36.6	186.3	57.8
	36.6	186.3	57.8
<b>Total</b>	<b>73.2</b>	<b>372.6</b>	<b>115.6</b>

SSC  
MSC

561.4  
280.7


F

0.60

## Signed Declaration

I, the undersigned, declare that this project report is my original work and has not been presented for a degree in any other university, and that all other sources of materials used for the work have been duly acknowledged.

Getachew Degefu Wolde Sellassie (ID No. 1388/98)



Dr. Meheret Ayenew (Advisor)

\_\_\_\_\_