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The Method for Measuring and Disclosure of Non- Financial Performance

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Abstract: A model describe that how the companies can measure and disclosure non financial performance and also, explain how the investors can make use of measuring of non-financial performance in decisions and evaluations of the firm. Since there is not a specific and standard framework related to non financial measurements.This paper can contribute to setting of accounting standards. This study attempted to offer a prepared and developed a model for users (investors) so that they can understand and interpret non financial information through some easy steps. A model that shows step by step how companies can measure and disclosure non-financial performance in accompany notes of financial statements. It is important because such measure and disclosure can prove forward-looking information that is not available from traditional accounting measure. Consequently, this paper developed a model for the companies and investors to evaluate measuring of non-financial performance and it will be of use to the firm to report its non-financial performance according to it. This model may decrease the challenges of judgment and making decisions internal and external users through measuring of non-financial performance. Researchers and analysts can use this model through having a sketch for concluding investors and measuring non-financial performance. Generally, it will be useful for both the firm and investors to apply these measuring in their decisions. This study attempted to close the gap between users (investors) and financial statements.

Key words: Non- financial performance; disclosure; measurement; model.

INTRODUCTION

Recent developments in performance evaluation systems have advocated the use of nonfinancial performance measures to overcome the inadequacies of traditional financial measures (Kaplan and Norton, 2001; Kaplan and Atkinson 1998). Financial measures have been criticized as too late, too aggregate, and too one-dimensional in nature to be useful (Lynch and Cross 1991; Titer and Larker, 1998). There are evidences indicating the influence of non financial measurements on the assessment of firms which have not been fully measured financially (Amir, 1996, Lev and Sougiannis, 1996). Lack of relationship between these measurements has been troublesome for firms. FASB suggest that firms must compensate for this vacuum and shortage through development and disclosure of non financial performance. Furthermore, Thales, (1999) has predicted that the future will focus on the study of financial behavioral and non financial measurements. The same idea is held by followers of change including CICA and SEC. The AICPA Jenkins Committee identified the types of data a firm must provide for investors and debtors. In 1994, the committee concluded that "a lot is right with today's business reporting in the United States.... Yet, many users are strongly critical of certain aspects of (financial) reporting."One of the committee’s recommendations to meet the needs of users is that financial statements should "focus more on the factors that create longer term value, including non-financial measures indicating how key business processes are performing.

Before presenting a the method to measure the non financial performance, it should be understood how investors can use the information similar to how they use the information from traditional accounting.Non financial information is different from that of traditional accounting: first, how firms extract the information and present them in their financial statements since no standard has been determined yet. Second, they can be shown in form of measures such as ratio. Therefore, there will be decision making problems unless a suitable method for non financial measures is offered. This paper to developed a model: a model that to convert non financial performance beads on Balance Scorecard (employee’s job satisfaction, customers, employees, firm’s internal processes) to financial information in step several through model of Jackson (2004) which can affect the decision making of users. This consistent with call for AAA FASC (2002). Disclosure of non financial performance can decrease some weaknesses of traditional accounting and increase users’ reliance on financial information. Eventually, the information could be measurement and disclosure through notes accompanying financial statements for the use of investors as leading indicators to predict the future performance of a company. My paper fills a gap in existing research on the usage of non financial measures in PMSs. We lack clear and consistent experimental evidence on whether adding non financial measures to traditional accounting measures improve financial statements, investor decision-making and reduce uncertainty.

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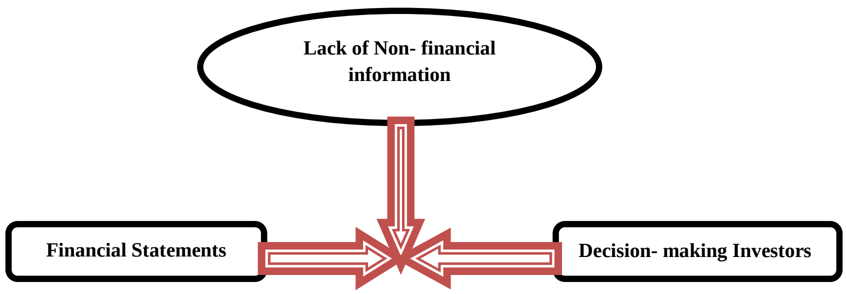
Why Non Financial Reporting:

In recent years, academics, regulators and practitioners have called for improvements in the measurement of business performance. Traditionally, the focus of measuring business performance has been on financial measures of performance such as operating profits, return on investment and return on assets. Typically, these financial measures focus on capturing the ability of firms to invest in and manage physical assets. But in a world where firms increasingly compete based on information and intangible assets, traditional financial measures may be less effective in capturing business performance along these distinct dimensions. The addition of nonfinancial measures in internal and external business reporting may provide valuable information regarding firm and business unit performance that may not be captured by financial measures alone. (Chartered Financial Analyst, 2005).

On the other hand, lack of information contributes to higher degree of uncertainty, which may negatively affect investors' decision-making and may even prompt them to postpone their investment decisions, thus affecting resource allocation. Improved disclosure contributes to more stable and orderly capital markets in addition to more efficient resource allocation. For example, consider an individual who is looking at two companies as possible investments. As he comes to his decision, we would expect this person to make trade-offs between the firms' attributes - for example A and B companies are alike in their financial structure, profitability records and relative share of the market. How can a potential investor who is interested in the perspective of these companies make a reasonable decision? However, in such a situation non-financial information supplement and the financial information are to help the process of decision making. For example, the situation of internal in company A is better (employee's job satisfaction, customer satisfaction, labor productivity) than in company B. As a result, investor will select company A.

.However, the main problem of investors is how to use the information since they are not financial and monetary items and cannot be understood by investors. What seems to be important is to convert non financial performance to financial information so that it can be revealed in financial statements at the disposal of investors to use for making judgments and decision makings.This paper will attempt decrease this problem.



A Model For Conducting Measuring Of Non-Financial Performance:

This model describe that how the companies can disclosure non financial performance and also, explain how the investors can make use of measuring of non-financial performance in decisions and evaluations of the firm. For example, as shown through some researches, measuring of financial performance has been used more than the non-financial one. The reason for this preference lies in familiarity and frequency of balance sheet,,income statement, cash flow, sell and costs for the users like investors (cohen, *et al.,* 2000). however, measuring of non-financial performance can be introduced by the means of useful scales for the investors. One scale of measurement of non-financial performance is a method of evaluating the practice itself (Siegal and Castellan, 1998).

The scales, as we know, have been classified into 4 categories. The very first and basic scale of measuring is that of nominal. The people or objects are substituted according to definite criteria. This method is used only for its ease of use like the using of zero for men and one for women. The second scale is the ordinal one in which the relative situation of people and objects, without taking into consideration, will be determined according to a characteristic. For example, if A>B and B>C, then A>C. the third type is gap scale which has both characteristics of nominal and ordinal methods. Not only the order of the objects or measured characteristics but also the gap between units of measuring are meaningful and clear-cut, like the gap among +5, 5, and 0 degrees of centigrade. Additionally, there is no zero in this type of scale. The fourth type is relative scale which has all the characteristics of nominal, ordinal and gap types. This scale is the most scrutinous one and it has zero in its domain. For example, meter which is used to measure the length has the zero for the start point. Concerned to the measuring of non-financial performance, ordinal scale can classify the performance (e.g. ranking staffs' and customers' satisfaction) of the firm or the values are measured (e.g. employees satisfaction has best, good, average and bad types of values).

It is very important for the investors and firms know the types of scale and this is especially true for those investors who make use of measuring of non-financial performance. The researches have shown that the users are more likely using financial measuring for making investing decisions (Lipe& Salterio, 2001). As far as the financial information are known for the users like investors, there is more tendency to use this type of information. On the other hand, this type of information is exposed in financial statement according to ratio scale. According to the accepted standards of accounting, for example,in order to prepare the financial statement, ratio scale should be used (FASB, 1984)، while for measuring the non-financial performance, there will be special scales for each type of information and there are various scales. For employee’s job satisfaction, one should use the ordinal scale.

While the investors are using financial measuring, there will be no variety of scales and consequently it's easier to understand. Investors will encounter problems while using non-financial measuring the performance. Consequently, this paper will develop a model for the investors to evaluate measuring of non-financial performance and it will be of use to the firm to report its non-financial performance according to it. This model will decrease the challenges of judgment and making decisions through the various scales of measuring of non-financial performance. Researchers and analysts can use this model through having a sketch for concluding investors and measuring non-financial performance. overall, my purpose is to expand a model in several stages that can be understood directly by the investors as well as contributing an approach for the professional investors who make use of it in measuring non-financial performance in their decisions and judgments about purchasing stocks of a firm. This model, generally, will be useful for both the firm and professional investors to apply these measuring (in both management and professional investment) in their decisions.

The Main Stages According To Which We Can Convert Non-Financial Performance Into Financial Information Are As Follow:

1) Determining the items of non-financial performance (like: employee’s satisfaction, customer’s satisfaction and internal process of firm).
2) Choosing the best benchmark as suggested by FASB and Balanced Scorecard (e.g. the best benchmark for employee's satisfaction will be employee’s turnover).

Benchmarks in the Process of Non Financial Performance Measurement:

Using benchmarking dates back to 1970s. American Productivity Quality Center (APQC) defines benchmarking as the process of definition, diagnosis and adjustment with leading organizations worldwide to enhance the performance of a firm. According to Kyros (2003), firms must develop benchmarking in order to progress. There are a lot of definitions for benchmarking. 42 definitions according to Heib and Daneval (1995) can be found for it, but none of them is comprehensive and well defined. It is a metric unit on a scale for measurement. From the viewpoints of managers, it is a systematic process to assess products and services and also the processes of a firm as the best identified method (6-3).

Elmulti and Kathawala, (1997) believes that benchmarking provides the following factors for a firm:

1. An instrument to be used to access a firm more easily. 2. An instrument to enhance the performance of a firm. 3. An instrument for potential growth of a firm. 4. An instrument for employees’ job satisfaction.

They believe that a benchmark has become increasingly important in a financial domain.Additionally; the findings of Per (2006) from studying 250 financial analysts working on 500 firms showed that intellectual capital can be used as leading indicator in prediction of future performance. Furthermore, in another study, 32 cases of qualitative data were investigated, among which the most significant benchmarks were financial performance, customers’ satisfaction and quality of services and products. The results showed that 37% 0f the firms never used a benchmark. The most important criteria in the study were: financial performance 42%, customers’ satisfaction 40%, quality of services and products 39%, cooperation spirit 19% and job satisfaction 2%. (Catherine, *et al*, 2001). Shrewd companies nowadays try to use a benchmark as a continuous process in an organization to explore the challenges their firms face.Benchmarking opens firms to a new method, idea and instrument to enhance efficiency and bridge gaps in a company so as to solve problems relevant to existing methods and show their influences (M. Punniyamoorthy, *et al*, 2008).

One of the most important benchmarks to be used for long term goals in a company is a Balanced Scorecard (M. Punniyamoorthy, *et al*, 2008). The results of their studies showed that they were able to identify those parameters whose relations were satisfactory or not. Also, assessment of a firm’s performance could be through assessment of a balanced use of those parameters to determine which could be financial or non financial. (M. Punniyamoorthy, *et al*, 2008). In addition, firms explore new ways to assess the performance using non financial factors such as quality, stock market, customers’ satisfaction, employees’ satisfaction, human resources, utility, productivity, motivation and learning. Thus, for such measurements, there must be a suitable benchmark (Catherine,*et al*, 2001). However, several benchmarks can be used in a financial statement. For example, for a customer’s satisfaction, a benchmark called customers’ complaint can be used throughout a year and turnover can be used to show the job satisfaction of employees. An appropriate benchmark value must measure the same non financial performance (for example turnover must show employees' job satisfaction in a firm) and the use of such a benchmark as a criteria for a value of non financial measurement should be observed.FASB showed the problems of investors while facing non financial performance benchmarks. They use different criteria while in financial statements only ratio is used as a criterion. Uniformity is important in the use of a benchmark.For example, when a firm uses turnover for employees' job satisfaction, it must use the same benchmark for the next year so that there must be a criterion for comparison.

In analyzing non financial measurements reported by an insurance company called Scandia, different criteria were observed in the reports.For instance, a criterion with a maximum value of 100 was reported by a company while it was not used by others to show customers' satisfaction. However, they used other criteria such as number of customers or contracts. Furthermore, the changes in measurement were different in different years. For example, a company used number of depositors in 1997 but number of customers in the following year. In sum, for each one of the independent variables in this study including customers, employees, internal process of firm, a specific benchmark is used as a representative of that parameter.For example, for customers, the registered. Number of customers' complaint is used or the number of returned items customers and for the employees, employee turnover benchmark will be used and … Accordingly, this study will try to convert the non financial performance of a company to a financial one to be finally included in financial statements.

3) Calculating benchmark according to rate or a formula that any of the benchmarks may have it. To calculate turnover, for example, we should use the following formula.

$$\text{Employees turnover} = \frac{\text{Number of employees who have left during the period}}{\text{Number of employees in that firm during the period}} = \frac{50}{385} = 13\%$$

4) Interpreting the benchmark according to the comparison of non-financial measured value of the last year. For example, the turnover of the employees of the last year have been 13% but now it decreases to 7%. At this stage, we evaluate this change as a Good or Bad news. In this example, when, as the result of decreasing turnover as much as 6%, we can take it as Good news **(**Jackson,2004)

Variance=13%-7%=6% Good news

Investors can integrate their nonfinancial measure assessments with other available information. The idea here is that investors need not consider nonfinancial measures in isolation. Instead, assessed nonfinancial measures can be integrated with other information to form investment-related judgments. However, investors only benefit from considering nonfinancial measures along with other information if investors perceive the nonfinancial information to be relatively useful for investment decisions, and if nonfinancial measures provide information distinct from financial measures. For example, if investors are willing to rely on a company's measure of customer satisfaction but the measure provides no more information than that already available from other measures, then investors gain less from also considering the nonfinancial measure.

5) In this stage, we should evaluate non-financial performance (that is good or bad news) according to a benchmark appropriate to the judgments and decision of investors (e.g. 6% / 2%= 3% means that two deviations marks depend on an approximate percent of change in prediction of future sale). (Jackson, 2004)

6) Prediction of future sale according to measuring non-financial performance (e.g. suppose that last year's sale of a firm has been 2000000 $, so we conclude that next year's sale will be 2000000 * 3%= 60000 according to non-financial information. What we have done here is the transformation of non-financial performance of the firm into financial data(in monetary units). The firms, at the end of the financial period and according to the last information and last year's sale, will plan and budget for the following year. This is only done just for financial, and not non-financial, performance. This method helps the firms to be able to predict and show their non-financial performance.

7) Calculating the prediction of whole sale of the firm in accordance to financial and non-financial performance (e.g. according to the sale of current year we can predict 5% growth for the next year and it's been predicted, according to the above evaluation, 3% growth has been predicted which is, all in all, equal to 8% growth for the next year's sale.

8) The firm will show all the details of financial and non-financial details related to prediction of sale in accompany notes.

9) Both of internal users (managers) and external uses (investors) will take into consideration all these information (non-financial) in their future decisions for the prediction of long-term performance.

The design of this model is in a way that let the investors make the best use of and understand better non-financial performance. There are several instances which emphasizes that the ideal condition for non-financial measuring are standardized across companies (FASB 2001). Therefore, when the investors or firms are going to compare the value of measuring non-financial performance by a benchmark, it's better to make use of standardization measurement (Jackson, 2004).

The 7th stage can be divided into 2 categories to lead to different discussions for the investors who use non-financial measuring and this part of the model introduces ideas of benchmark and scales. The rest of the model will take into consideration all the matters related to the understanding the measuring of non-financial performance accompanied with the financial data of the firm. The researchers have examined the aforementioned stages. I do the present research to clarify some problems which will be faced when using measuring both financial and non-financial performances. This model provides a new approach for the investors to use this kind of non financial performance measurements and may take different stages of this model easy. I'm going to explain the stages of the model. The model begins when company is going to disclosure non-financial performance and, on the other hand, the investors consider measuring non-financial performance and determine those measuring related to their own decisions. So we see that the investors search this type of information in their decisions and judgments. My paper is that how the companies and investors can use measuring non-financial performance and how this type of measuring influences their decisions. Anyhow, non-financial performance will not be explained in financial statement. Now, I explain this model more meticulously.

The first part will be the explanation of 1st stage to the 4th one (it means from the examination of non-financial factors to the evaluation of non-financial performance that can be taken as good or bad news).

At This Stage, the Firm Should Recognize Factors and Non-Financial Items:

As we know, according to the type of activity and it's characteristics, the information and factors of an industry will be different. In a hotel or restaurant, for example, the customers' satisfactions, and in other industries like the producing firms, employees'' satisfactions and workability's of the workers are of importance. Therefore, recognition and examination of non-financial factors for any firm that wants to expose non-financial items is necessary.

The Second Part Consists of Selecting Benchmark for Each Non-Financial Factor According to Those Items' Characteristics:

(For example, the best benchmark for the employees' job satisfaction is according to turnover of them). FASB claims that the investors compare the value of non-financial measurement of the firm with the value of a benchmark. Once the investors make their comparison, they will be able to interpret the function of non-financial performance measurement in their decisions and judgments. Our first model supports the idea of investors' comparison of the measurement of non-financial performance by the means of a benchmark. In the next part, according to the calculation from example 1, the rate of criterion will be concluded and then the interpretation of this rate as bad or good news. It is in this part that I will explain these terms and the real meaning of benchmark as well as giving some instances about how to use of non-financial information.

The Third Part: Converting The Value of Measurement of Non-Financial Performance (that is Good or Bad News) Into A Proper Criterion for the Investors' Decisions:

The model, here, lets the investors interpret the value of measuring non-financial by the means of a proper criterion. When the firms have to determine a method to specify value to the non-financial measuring, an investor must decide how to specify a value to the firm's value making. It means the investors should have a judgment's criterion to evaluate non-financial measuring. Valuation of non-financial measuring of the investors (like the employees job satisfaction is good news) is an appropriate scale provided that be in harmony with his judgment's valuation (like sales and future costs). When the non-financial measurement's valuation of an investor is in harmony with his scale of judgment, we can say the scale is that of adaptation (Jackson, 2008). Additionally, this scale is easier to use for the valuation of measuring non-financial performance of the investors as their values can directly influence their decisions and judgments. The investors who consider the report of measuring non-financial performance can make use of different types of scales.

For example, when an investor wants to use the measuring of customers' satisfactions according to ordinal ranking. Consider those investors who evaluate the customers' satisfaction of a firm as good news (1st stage of the model) to predict their evaluations. When, for example, the rate of scale is interval and it is 85 from 100 at a circumstance that customers' satisfactions has been done according to ordinal scale, the investor expects to trust as little as possible to the evaluations based on internal rather than ordinal scale. Therefore, we see that when the investor converts distance scale of customer's satisfaction into the ordinal scale, as explained on two models, the investor expects to trust more on the evaluations as it will be easier to understand, make decision and judgment.

The investors evaluate a firm's real value through the prediction of future sale, future costs and profits and also flow cash in future. They may gain more profits by interpreting measuring non-financial performance to a monetary unit that is more familiar to the investor. There are several reasons why change and interpreting measuring non-financial performance are useful for the investors. First, the investors are more interested in changing measuring non-financial performance into a monetary unit or scale because the latter is easier and trusty for them (investors).Second, measuring non-financial performance may have less useful information than a monetary scale or unit. For example, measuring non-financial performance according to ordinal scale has been limited to the interpretation and conversion of the performance levels of the firm. If Alfa firm has used ordinal scale for measuring a good's quality and it results as the best and the same measuring results in good for firm's quality of goods, it will be difficult to dominate Alfa over Beta. Hence we see that if ordinal measuring scale changes and interprets into a monetary scale and unit, differentiation among the firms will be much easier. It means if the best good's quality will be equal to 7% increase for the next year's scale of Alfa firm, consequently Alfa will be better than Beta and, at the same time, it will facilitate the investors' understanding of these information. Lip and Salterio (2000) have introduced some cases to convert measuring non-financial performance into monetary units that can be easier to use for the users.

They notice that measuring both financial and non-financial performances have great influences in business units over the evaluation of managers' performances concerned to separate financial measuring among the business units. Lip and Salterio's major measuring in their studies were financial ones (like sales' returns or sales' growth). On the other hand, the main measuring of the managers, by themselves, are non-financial information (like the rate of personal sales or the mistakes of the orderings). Their studies prove that the given measuring are better non-financial and based on monetary units (monetary scale) as it is easier for the users and investors to understand. As a result, measuring of non-financial performance can be used more if converted into monetary items. We know that one of the main suppositions of accounting is the measuring unit. But the base of judgment and decision of the users like investors may use non-monetary scales. For example, when the employees' and customers' satisfactions have been taken as an input to predict the future sales of producing or industrial firm, the investors have to use benchmark like turnover, quality of the goods and services (that is an indirect measuring for evaluation customers' and employees satisfactions. In such a situation, the scale of investors' decisions are greatly dependent upon the decision strategies. For example, when an investor uses a part of the firm's performance like customer's satisfaction (that is high quality), we can generalize it to the other aspects of firm's performance (like service's quality). Finally, as much as decision scale of investors is close to the monetary unit (monetary scale), investors' decisions and judgments will be better.

The Second of Parts: Merge the Nonfinancial Measure Assessment with other Information to Make Investment-Related Judgments:

Previous stages focus on investors’ use of a nonfinancial measure given its particular presentation. In the remaining parts of the method, I focus on using a nonfinancial measure when it accompanies other (especially financial) information.

Merging The Nonfinancial Measure With Financial Information:

Companies and investors can mix their nonfinancial measure estimations with financial information. The attitude here is that investors and companies need not think over nonfinancial measures in separation. In place of, appraised non-financial performance measures can be merged with financial information to form investment-connected judgments. Anyway, investors only benefit from considering nonfinancial measures along with financial information if investors sense the nonfinancial information to be relatively useful for investment decisions, and if nonfinancial measures provide information separate from financial measures. For instance, if investors are willing to lean on a company’s measure of customer satisfaction but the measure provides no more information than that already available from other measures, then investors gain less from also considering the nonfinancial measure. In addition, if the customer satisfaction measure provides unique information but investors are unwilling to rely on the measure then investors also do not benefit.

The Benefits of Non -Financial Information:

Numerous studies examine the benefits of non financial information in a variety of contexts. These include the prediction of corporate future performance, the characteristics of analyst forecasts and stock price behavior. A number of studies investigate the usefulness of forward-looking information for anticipating future corporate performance. One such study is Clarkson *et al*. (1994) which finds that the inclusion of forward-looking information in corporate annual reports is informative with respect to corporate future performance. Another study that links corporate disclosure with corporate future performance is Bryan (1997) which finds that indications of future operations and capital expenditures are associated with future short-term performance measures, after controlling for information contained in financial ratios. In addition, Clarkson *et al*. (1999) provide evidence that changes in the level of forward-looking information in the MD&A vary directly with future corporate performance. This suggests that forward-looking disclosures in the MD&A provide credible information. A further group of studies examines the effects of increasing the level of forward-looking disclosures on the stock market. For example, Schleicher and Walker (1999) and Hussainey *et al*. (2003) provide evidence that high levels of forward-looking disclosure in annual report narrative sections improve the stock market's ability to anticipate future earnings changes. The stream of research discussed above suggests that forward-looking disclosures are valuable to investors because they contain incremental information. This information is relevant in forecasting future performance.

Increasing Use of Nonfinancial Measures:

Most managerial performance measurement and reward systems are based on financial measures of performance (Nanni, Dixon and Vollman, 1990 ;Business International Corporation, 1990; Eccles, 1991). More recently, there has been an increased emphasis on nonfinancial measures such as customer satisfaction, employee satisfaction, productivity, product quality, and market share. For instance, Chrysler Corporation recently paid bonuses to its 200 top executives based on the attainment of vehicle quality and customer satisfaction targets in addition to measures of profitability [Wall Street Journal, 2-22-94, p.A3). A few academic studies have documented the use of nonfinancial performance measures. Ittner, Larcker and Rajan (1997) report that 36% of the companies surveyed use nonfinancial measures in executive compensation. Analyzing data collected from a cross-section of 317 firms, they provide evidence on factors influencing the relative weights placed on nonfinancial and financial measures in bonus contracts of senior executives. Analyzing survey data from 78 medium-size U.S. public companies, Keating (1995) reports the use of operational metrics in the evaluation of division managers' performance. A study by Mercer Inc. indicates that 76% of the electric and gas utility companies have specific customer satisfaction targets and that incentive compensation schemes based on customer satisfaction are common in the 25 largest companies (Hauser, Simesterand. W, 1994). There is evidence of increasing use of nonfinancial measures in other countries as well. Ernst & Young and the American Quality Foundation also report a dramatic increase in the reliance on quality measures for senior management compensation in U.S., Japan, Germany and Canada (Hauser, Simester and Wemerfelt, 1994). Other studies of Japanese and British companies also indicate increasing use of nonfinancial measures in performance measurement (Lothian 1987, Hiromoto, 1988). In summary, recent academic and practitioner literature point to the recency and increasing use of nonfinancial measures in managerial compensation.

Model of Convert Non Financial Performance To Performance Information ((Jackson's Method):

Jackson, (2004) introduced a method to convert of non financial performance to financial information in 4 steps:

1-Compare is the non-financial measures value to a similarly scaled benchmark to assess the value as Good or Bad news Jackson (2004).

2-Transform the assessment of the non-financial measures value to scale appropriate for their investment-related decision making Jackson (2004).

3-Integrate the non-financial measure assessment with other available information to make valuation-related judgment.(Lipe and Salterio ؛2001; Ittner and Larcker,1998; Banker, *et al*., 2000; Luft and Shields,2001; Jackson,2004)

4-Calculate valuation and use in investment decision.(Amir and Lev,1996;Ittnr and Larcker,1998; Demers and Lev, 2001; Kozberg, 2001; Rajgopal, *et al*., 2000; Jackson, 2004).

Model of Convert Non Financial Performance To Performance Information:

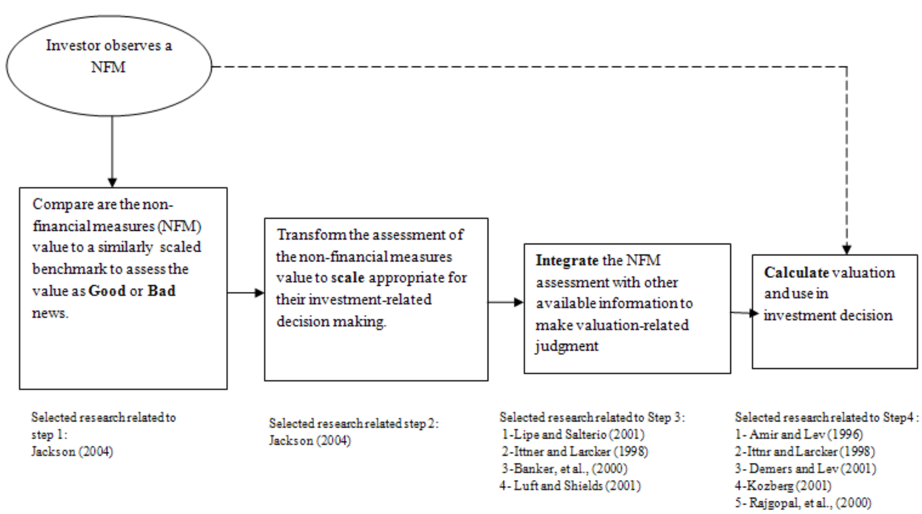
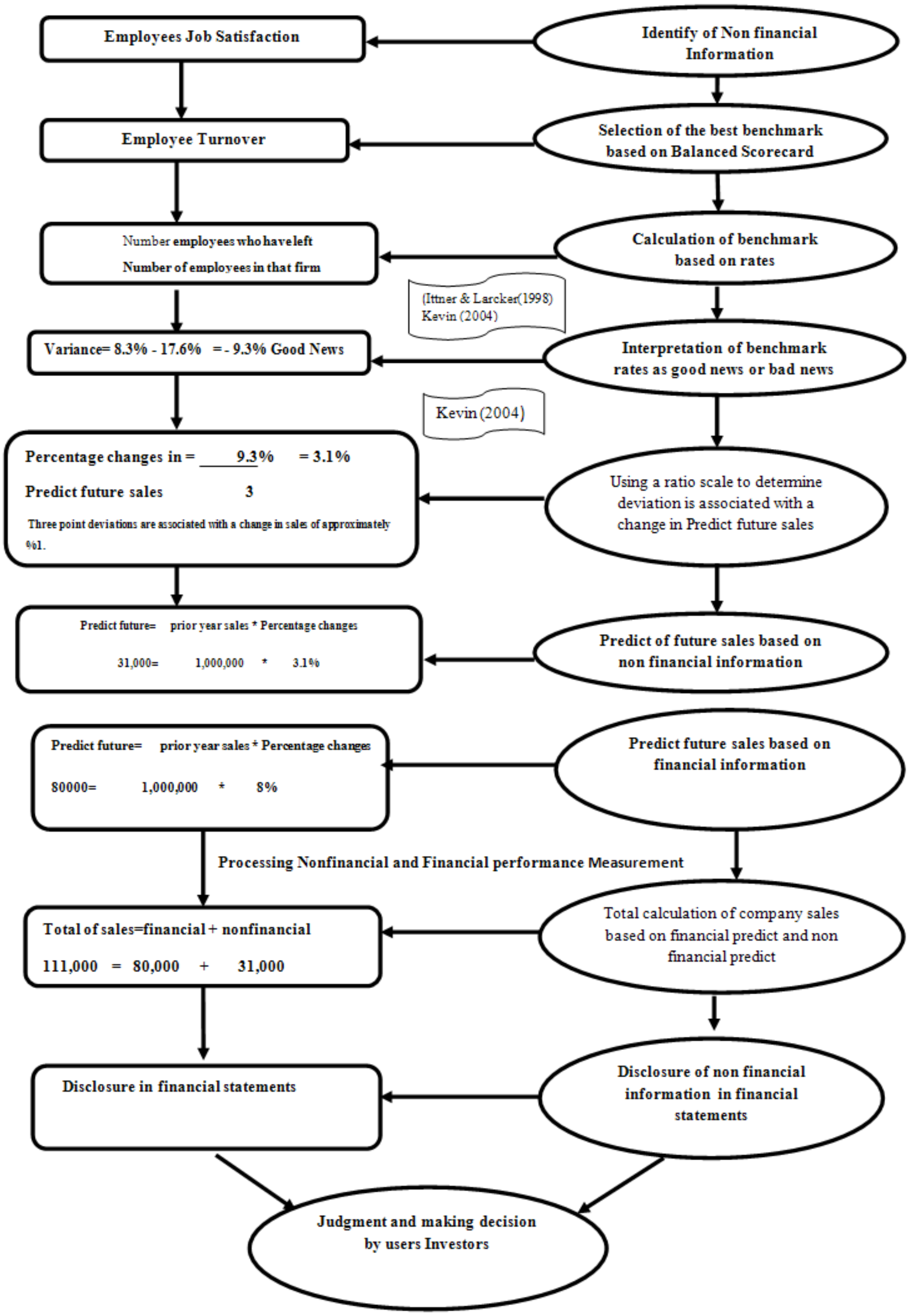


Fig. 1: (Jackson's Method).



See the Appendix 1 and 2 for dissection of the non-financial performance used in this study.

Fig. 2:

Part 3: Calculate and Disclosure Non-Financial Performance and Finally Make an Investment Decision:

After progressing through parts 1, and 2, calculating a valuation becomes a mathematical exercise. A nonfinancial measure influences valuation through its impact on the judgments that serve as inputs to the valuation calculation.

Disclosure of Non-Financial Performance:

Financial analysts, investors and valuers all use information in the financial statements of companies to make judgments about future firm performance. Despite the obvious importance of this function, there are asserts that the relatedness of financial reporting is decreasing (Eccles *et al* 2001), although others propose that the empirical proof is mixed on this question (Kachelmeier and King 2002). However, regardless of the empirical discuss on the connected go down (or not) in the value of financial reporting there have been calls from a number of individuals and groups for greater disclosure of nonfinancial information by corporations (Eccles *et al*. 2001; Lev 2001; AICPA, 1994). In response to calls for greater disclosure, the Financial Accounting Standards Board (FASB) (2001) produced a report called "Improving Business Reporting: Insights into Enhancing Voluntary Disclosures" to help companies improve their business reporting in relation to voluntary disclosures. This report did not state that non-financial performance measures must be disclosed but that companies should be encouraged to voluntarily report this type of information. Following from this report, a committee was set up to review the academic research with respect to this type of information. From the academic literature, they summarize that non-financial performance measures are relevant for predicting future financial performance and valuing corporate equity (American Accounting Association Financial Accounting Standards Committee (AAA FASC) 2002). Other studies have more specifically tried to evaluate the value relevance of non-financial performance indicators. Amir and Lev (1996) looked at the value relevance of non-financial information in the wireless communications industry. They found that non-financial indicators such as market penetration and population size are highly value related.

In this industry, financial information in itself was largely irrelevant for security valuation, however, combined with non-financial information earnings did contribute to security prices. Ittner and Larcker (1998a) investigated whether customer satisfaction is a good predictor of financial performance. They suggested that non-financial indicators of investments in "intangible" assets might be better predictors of future financial performance than historical accounting measures. Further research on whether non financial measures are leading indicators of financial performance was provided by Banker *et al*. (2000). On the other hand, external disclosure is diverse, not structured and unusual. The AAA FASC (2002) bring up a problem of whether companies should use an mixed framework for disclosure of non-financial and financial measures but investigated the ability of stock market participants to use this type of information appropriately. This was on the basis of the results of the studies that questioned how well even managers within firms could understand the linkage of this type of information and profitability (Banker *et al*. 2000; Ittner and Larcker 1998b). Anyway they concluded by stating that "…the FASB should investigate and encourage the development of models and frameworks that enhance the relevance of financial performance measures via the inclusion of non-financial performance measures."(AAA FASC, 2002, 361).

Contribution and Conclusion:

Regulators and standard setters recently have recommended that a framework be developed to incorporate nonfinancial measures into the financial reporting system (SEC, 2001; AICPA Special Committee on Financial Reporting, 1994; FASB, 2001). It is important to explore what and how to disclosure non financial performance to be comprehensible by users since there is not a specific and standard framework related to non financial measurements. On the other hand, firms must report their financial statements based on accepted principles and concepts of accounting so that it can be in harmony with universal principles of financial statements (FASB, 1994).This study attempted to offer a prepared and developed a models for users (investors) so that they can understand and interpret non financial information through some easy steps that it is compatible with Jackson's model (2004). A model that shows step by step how companies can measure and disclosure non-financial performance in accompany notes of financial statements. It is important because such measure and disclosure can prove forward-looking information that is not available from traditional accounting measure. Users are reluctant to use non-financial information unless it changes to monetary units since monetary measurement is more familiar and trust worthy than non-financial one; therefore, the contribution of this paper conversion of non-financial information to financial information by processing of non financial performance measurement. Since there is not a specific and standard framework related to non financial measurements.This research is interesting to standard setters, financial and accounting researchers, and managers of companies. This study will help future researchers, regulators and standard setters to develop an appropriate Accounting Framework for disclosure of non- financial performance. Non financial performance can be a suitable informational supplementary for financial statements to help users (investors) to make sound economic decisions. As explained above prior research referred to the lack of non- financial performance and also, investor uncertainty to the financial statements. Therefore, uncertainty to the financial statements is due to lack of non- financial information. This study attempted to close the gap between firm value and financial statements.

REFERENCE

American Institute of Certified Public Accountants (AICPA), 1994. Special Committee on Financial Reporting. (1994). Improving business reporting - A customer focus: Meeting the information needs of investors and creditors. New York, NY: AICPA.

Amir, E. and B. Lev, 1996. Value-relevance of non-financial information: The wireless communications industry. Journal of Accounting and Economics, 22: 3-30. HAST IN SAIT.

Anderson, E.W., C. Fornell and D.R. Lehmann, 1994. Customer satisfaction, market share, and profitability: Findings from Sweden. Journal of Marketing Research, 58: 53-66.

Admati, A. and P. Pfleiderer, 2000. Forcing firms to talk: Financial disclosure regulationand externalities. Review of Financial Studies, 13(3): 479-519. Retrieved May 14, 2004, from ProQuest database.

Belkaoui, A., 1995. The Linguistic Shaping of Accounting. Westport, CT: Quorum Books.

Banker, R.D., G. Potter and D. Srinivasan, 2000. An empirical investigation of an incentive plan that includes nonfinancial performance measures. The Accounting Review, 75: 65-92.

Brown, D.L., and M.M. Eining, 1997. Judgment and decision making, part IV: Information technology and decision aids. In V. Arnold & S. G. Sutton (Eds.), Behavioral accounting research foundations and frontiers (164-187). Sarasota, FL: American Accounting Association.

Belinda Hoff and David Wood, 2008. The use of nonfinancial information :what Do investors want? Boston College Center for Corporate Citizenship and is not to be reprinted without permission of The Cente.

Davila, Antonio, 1999. "Nuevas herramientas degestion: El Cuadrode Mando Integral" (New managerial tools: The Balanced Scorecard), IESE-Universidad de Navarra Technical Note, CN-205.

Eccles, R.G., R.H. Herz, E.M. Keegan and D.M.H. Phillips, 2001. The ValueReporting Revolution: Moving Beyond the Earnings Game.

Financial Accounting Standards Board (FASB), 2002. Action Alert 02-03. Norwalk, CT: FASB.

……………….., 2001. Business and Financial Reporting, challenges from the new economy. FASB, ed. W.S. Upton, Norwalk, CT.

…………………, 1984.Concept Statement No. 5, Recognition and Measurement in Financial Statements of Business Enterprises. FASB, Norwalk, CT., (1984).

Ittner, C. and D. Larcker, 1998. Are nonfinancial measures leading indicators of financial performance? An analysis of customer satisfaction. Journal of Accounting Research, 36(3): 1-46.

Ittner, C.D. and D.F. Larcker, 1998a. Innovations in performance measurement: Trends and research implications. Journal of Management Accounting Research, 10: 205-238.

Ittner, C.D. and D.F. Larcker, 1998b. Are nonfinancial measures leading indicators of financial performance? An analysis of customer satisfaction. Journal of Accounting Research, 3<5(Suppl.), 1-35.

Johnson, H.T. and R.S. Kaplan, 1987. Relevance lost: The rise and fall of management accounting. Boston, MA: Harvard Business School Press.

Jackson, K., 2004. "An Examination of Investors' Use of Nonfinancial Measure", PhD Dissertation, University of Texas at Austin,

Jackson, K., 2008. " De-biasing Scale Compatibility Effects When Investors Use Non-financial Measures to Screen Potential Investments" contemporary Accounting Reseach, 25: 803-826.

Kaplan., 1984. The evolution of management accounting. The Accounting Review, 59(3): 319-418.

Kaplan, R.S. and D.P. Norton, 1992. The balanced scorecard: Measures that drive performance. Harvard Business Review, 70: 92-100.

-———, 1996. The Balanced Scorecard: Translating Strategy into Action. Boston, MA: Harvard Business School Press.

kaplan and A. Atkinson, 1998. Advanced Management Accounting. Upper Saddle River, NJ: PrenticeHall.

kaplan and D.P. Norton, 2001. Transforming the balanced scorecard from performance measurement.

Kaplan, R.S. and D.P. Norton, 2001a. The strategy focused organization: How balanced scorecard companies thrive in the new business environment. Boston, MA: Harvard Business School Press.

Kaplan, R.S. and D.P. Norton, 2001b. Transforming the balanced scorecard from performance measurement to strategic management: Part I. Accounting Horizons, 15: 87-104.

Kida, Thomas and Smith, S. James, 1995. "The Encoding and Retrieval of Numerical Data for Decision-akin gin Accounting Contexts: Model Development", Accounting. Organizations and Society, 20(7): 585-610.

Koller, Timothy, 1994. "What is Value-Based Management?," McKinsey Quarterly, 3: 87-101.

Lev, B., 1997. The old rules no longer apply. Forbes, 7: 34-36.

Lev, B., 1999. Penetrating the book to market black box: The R&D effect. Journal of Business Finance and Accounting, 26: 419-449.

Lev, B., 2000. Knowledge management: Fad or need? Research Technology Management, 43(5): 9-10.

Lev, B., 2001. Intangibles: Management, Measurement, and Reporting. The Brookings Institution: Washington, D.C.

Lee, C.M., 2001. Market efficiency and accounting research: a discussion of capital market research in accounting by S.P. Kothari. Journal of Accounting and Economics, 31: 233-253.

Lynch, L. and K. Cross, 1991. Measure Up. London, U.K. Blackwell Publishers.

Ramirez, S., 2003. A flaw in the Sarbanes-Oxley reform: can diversity in the boardroom quell corporate corruption? St. John's Law Review, 77(4): 837-866.

Security and Exchange Commission, 2001. Strengthening financial markets: Do investors have the information they need? www.sec.gov.
Seidler, L.J., 1986. The fundamental limitations of accounting. Journal of Accounting, Auditing, and Finance, 1: 353-361.
Siegel, Gary and Helene, R. Marconi, 1989. "Behavioral Accounting",South Western Publishing Co.
Simons, R., 2000. Performance Measurement and Control Systems for Implementing Strategy: Text and Cases, Prentice-Hall, Upper Saddle River, NJ.
Thaler, R., 1999. The end of behavioral finance. Financial Analysts Journal, 55: 12-27.
Vagneur, K. and M. Peiperl, 2000. "Reconsidering performance evaluative style", Accounting, Organisations, and Society, 25(4/5): 511-25.
Young, B., 2003. Corporate governance and firm performance: Is there a relationship? Ivy Business Journal Online, Sep/Oct 1.

Appendix 1
Drawing of model implementation
Background information:

Financial measures	current year	last year
Sales	$ 1000,000	$ 800,000
Costs	$ 600,000	$ 550,000
Earning	$ 400,000	$ 250,000

Non- financial Measures	2009	2008	variance
Employees' job satisfaction	8.3%**	17.6% *	-9.3%

Step=1
1-1=the selection of best benchmark is based on the recommendation of FASB (Financial Accounting Standard Board) and Balance Scorecard
1-2= For example, the best benchmark is turnover showing job satisfaction and customer satisfaction.
1-3= How to calculate turnover:

$$\text{Turnover Rate}= \frac{\text{Number of employees who have left during the period}}{\text{Number of employees in that firm during the period}}$$

$$\text{Turnover Rate* for 2008} = \frac{53}{300} = \%17.6 \quad *$$

Example1: Employee's turnover for **300** employees in 2008.

	1	2	3=4/1	4	5	6=4*5
main area	number	annual salary	turnover rate	NO. Exits	Cost per exit	total($)
Operations	140	70000	19.2%	27	21000	567000
Processing and other Personnel	90	75000	14.4%	13	37500	487500
supervises	10	90000	10%	1	80000	80000
management &mine professionals	60	110000	19.6%	12	135000	1620000
Total	**300**			**53**		**2754500**

$$\text{Turnover Rate= For 2008} \quad \frac{53}{300} = 17.6\%$$

Employee's turnover for 300 employees in 2009.

	1	2	3=4/1	4	5	6=4*5
Mine area	number	annual salary	turnover rate	NO. Exits	Cost per exit	total($)
Operations	140	75000	11.4%	16	26000	416000
Processing and other Personnel	90	80000	7.7%	7	42500	297500
supervises	10	95000	10%	1	95000	95000
management &mine professionals	60	120000	13.13%	8	145000	1160000
Total	300			25		2754500

$$\text{**Turnover Rate=} \frac{25}{300} = 8.3\%$$

Turnover Rate in 2009 - turnover Rate in 2008=increase or decrease in job satisfaction
Variance= 8.3% - 17.6% = - 9.3% Good News

Interpreting:

If the rate of Employee's turnover is negative or lowers, the number of drop-out employees decreases indicating the job satisfaction of employees imposing lower expense due to turnover and vice versa.

Concerning the salary increase in 2009, since the turnover lowers, the expense of turnover in 2009 decreases compared to 2008 resulting in this conclusion that job satisfaction can lead to sale increase and decrease of non operational expense leading to profit making of the company.

Finally, step 1:

STEP=1: compare to similarly scaled benchmark:

Interpreting a current year employee's satisfaction score of 8.3% in separation would be difficult. However, the score is interpreted as good news because it compares favorably to the company's prior year score of 17.6% (i.e., the benchmark value).(keiven,2004)

Variance= 8.3% - 17.6% = - 9.3% Good News

Step 2:

STEP=**2 transform assessment to appropriate**:
The firm intends to predict future sales using a ratio scale (in monetary units).the firm determines (either through experience or purchased expertise) that a three point deviation from the benchmark employee's job satisfaction score is associated with a change in sales of approximately %1.

Variance= 8.3% - 17.6%= - 9.3%

$$\text{Percentage changes in Predict future sales} = \frac{9.3\%}{3} = 3.1\%$$

Predict of future sales based on employees satisfaction=prior year sales * Percentage changes in Predict future Sales based on job satisfaction

$$\underline{31000\$} = 1000{,}000 \quad * \quad 3.1\%$$

Thus, the employee's satisfaction good news represents a $31000 increase in future sales

Step=3

Integrate transformed assessment with other information:
The firm initial estimate of future sales was based on prior years sales of $1000,000 increased by $80,000 using an estimated growth of %8 and assuming the benchmark employees job satisfaction refines the estimate of future sales by another $31,000 for employees job satisfaction exceeds the benchmark value.
Estimated growth of sales based on financial =prior year sales *percentage of estimated growth information for Next year

80,000 = 1,000,000 * 8%

Predict future sales based on Job satisfaction= prior year sales * Percentage changes in Predict future sales based on job satisfaction

1 $ 31000 = $ 1000,000 * 3.1%

Total percentage of firm growth for next year= growth percentage of sales based on financial measurement + non financial measurement

2 Percentage 11.1%= 8% + 3.1%

3 Amount 111000= 80000 + 31000

Step= 4

Disclosure:

To identify and disclosure non-financial information (employee job satisfaction,) in financial statement**.**

Step=5

Judgment and making decision:

The users (investor) consider the implications of other nonfinancial measures for other components of fundamental valuation (e.g., cash flows, future costs) and calculates the company's valuation. As a result, judgment and making decision about firm.

Comparison of employee's satisfaction among similar companies:

Suppose two companies are alike in terms of their industry, profit making and the number of employees, we can calculate the non-financial performance of the company such as employee job satisfaction in two company such as company A and B.

Company A in 2009
Employee's turnover for 400 employees

	1	2	3=4/1	4	5	6=4*5
Mine area	number	annual salary	turnover rate	NO. Exits	Cost per exit	total($)
Operations	220	80000	16.8%	37	25000	875000
Processing and other Personnel	115	85000	13%	15	40000	600000
supervises	15	95000	20%	3	90000	270000
management &mine professionals	50	120000	14%	7	145000	580000
Total	**400**			**62**		**2,325,000**

$$**\text{Turnover Rate}= \frac{62}{400} = 15.5\%$$

High turnover in the catering industry has been regard as problematic ,offering the quality of products and services, incurring significant replacement and recruitment costs and therefore being likely to affect profitability (Johnson 1981).

Company B in 2009
Employee's turnover for 400 employees

	1	2	3=4/1	4	5	6=4*5
Mine area	number	annual salary	turnover rate	NO. Exits	Cost per exit	total($)
Operations	210	79000	8%	17	24000	408000
Processing and other Personnel	120	84000	5.8%	7	39000	273000
supervises	25	96000	4%	1	91000	91000
management &mine professionals	45	117000	6.6%	3	140000	420000
Total	**400**			**28**		**1,192,000**

$$**\text{Turnover Rate}= \frac{28}{400} = 7\%$$

Interpreting:

Comparison= turnover rate A - turnover rate B

8.5% = 15.5% - 7%

For each 3% of deviation, sale increase can be calculated leading to 1% sale and profit increase.

8.5%/3=2.83%

As a result, sale increase can be 2.83%.We can conclude that the employees of B enjoy more job satisfaction compare to the employees of A.