Good Corporate Governance (GCG) As a Bridge between Accounting Information Systems (AIS) and Sustainability Balanced Scorecard (SBSC)

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Purpose: The purpose of this paper is to recognize the importance of good corporate governance as a bridge between accounting information systems and sustainable balanced scorecard.

Design/methodology/approach: This study uses meta-analysis as the explanation approach to finding out the accounting information systems that are supported by good corporate governance have the ability to perform sustainable balanced scorecard that can influence the management control system in implementing the strategic management may necessary be approved by empirical study for the next future research.

Finding: The important of accounting information systems that are supported by good corporate governance has capability to approach the sustainable balanced scorecard in terms of reaching the company profitability in global competition.

Originality/value: The characteristic of accounting information systems brings wider information that need certain knowledge in certain disciplines to gather data and producing information and would be resulted best by implementing good corporate governance so that by studying this information at each different kind of situation will affect not only management quality but also the different strategy of management to applied sustainable balanced scorecard based on the knowledge management level.

Keyword: accounting information system, good corporate governance, sustainable balanced scorecard.

Introduction

As the comparison between developed countries and developing countries, hereby, the accounting information systems seems the most important thing to perform in order to broaden strategic management that is supported by good corporate governance in term of approaching to sustainable balanced scorecard.

For example, based on accounting information systems, one company may consider as the tool of broaden knowledge to support decision making process around the world so that the product that may be necessary to be purchased by the consumers seems very easy to bring the benefits for the user to be purchased and get the product quickly.

More, nowadays sustainable balanced scorecard as one strategic management to increase company profitability still have limited information related to companies information, for example, small medium enterprises in developing countries is less informative than developed countries so that balanced scorecard seems costly to them.

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But it is little bit different from the big companies whereas the balanced scorecard may still exist for global company competition.

System itself, is used in relation to business operations, it identifies a group of elements or parts that are integrated through the common purpose of achieving some objective. Strategy specifies how an organization matches its own capabilities with the opportunities in the market place to accomplish its objectives. In other words, strategy describes how an organization can create value for its customers while differentiating itself from its competitors. For example, Wal Mart, the retail Giant, creates value for its customers by locating stores in suburban and rural areas, and by offering low prices, a wide range of product categories, and few choices within each product category. In formulating its strategy, an organization must understand its industry.

*Industry analysis focus on five forces :*
  1. Competitors
  2. Potential entrants
  3. Equivalent products
  4. Bargaining power of customers
  5. Bargaining power of input supplier

Many organizations have introduced balanced scorecard approach to track progress and manage the implementation of their strategy. *Poor design of Balance scorecard include :*
  - Too few measures in each perspective
  - Too many indicator without identifying the critical few
  - Failure of measures selected to depict the organization’s strategy

*Process failure causes of failure of the BSC include :* (Kaplan and Norton, 2001, p. 361)
  - Lack of senior management commitment
  - Too few individuals involved
  - Keeping the scorecard at the top
  - Overly long development process
  - Treating the BSC as one time measurement project
  - Treating the BSC as a systems project
  - Hiring inexperience consultants
  - Introducing the BSC only for compensation

Since all the failures, it recognized that BSC need either development of balance scorecard or sustainability Balance scorecard. As the BSC is one measurement strategy for firm performance, it needs to be questioned for research whether BSC interaction with ANP software (part of accounting information system) for supporting BSC development influence positively related to the firm performance so that the result will reliable enough for competitive performance in the future.

Although the study of performance measurement systems (PMS) has increased, literature covering PMS for SMEs is scanty (Hudson et al 2001, Anderson et al 2001). SMEs can obtain value from PMS but there are significant barriers to implementation lying in resource limitations and the fact that it can be too strategically oriented (Hudson et al 2001). In comparison with large organizations, SMEs are fundamentally different in three aspects : uncertainty, innovation, and evolution (Garenco et al 2005). The
frequent revision of the BSC meant that new data for the new measures must also be acquired. This made it impossible to track the cause and effect linkage between measures in the BSC and led to a waste of time and effort. (Assistant Prof. Dr. Nopado Rompho, 2011). It is well recognized in the literature that performance measurement and reward system should incorporate both financial and non financial measures (Banker and Datar, 1989; Dyson, 2000). Concerning the relation between the environmental and social performance of the firm and its economic performance, the literature I mainly based on empirical studies that refer to the correlation but not the causality between environmental and social measures and the economic success of firms (Pava and Krausz, 1996; Griffin and Mahon, 1997; Wagner, 2001; Schaltegger and Synnestvedt, 2002).

For example, Analytic Network Process (ANP) software is one of the Accounting Information systems to support development of Balanced scorecard (BSC). The preceding ANP example does not address the relationship between present financial performance and future performance. If the decision environment is such that the present and future performance are related, then the ANP model be as shown below which are four of the perspectives are interacting.
Modeling the total interaction in the BSC using the ANP (LC Leung, KC Lam, D. Cao, 2006). When the decision making process involves attributes that have a dependency relationship, the problem should be modeled as an ANP (Saaty, 1996).

Some previous researchers from The Brundtland Report (1989) defined sustainability as the capacity to meet the needs of the present without compromising those of future generation. On the other hand, the meaning of sustainability implies today debated such as from the question of whether growth and sustainability can ever go together (Daly, 1990); and from the creation of concept that can drive real sustainability (Walsh, 2010), to the urgent of today’s crises.

Previous researcher gave four contributions to the use ANP system implementation for development of BSC: Proposes an integrated, quantitative, solution, based on ANP and ISM models to the development of BSC; Links measures with organization’s objectives; Demonstrates the use of the cause and effect diagram in the context of real life case company; Determines the weightages for various perspectives of BSC based on leading-lagging indicator relationships (Jitesh Takkar, S.G Deshmukh, A.D. Gupta and Ravi Shankar, 2007).

The integration of cause and effect, Interpretive Structural Modeling (ISM) and Analytic Network Process (ANP) can set an appropriate basis for the development of the balance scorecard on following reasons (Jitesh Thakkar, S.G Deshmukh, A.D. Gupta and Ravi Shankar, 2007):

1. Approach begins from understanding strategic intent and keeps that a base for rest of the analysis
2. The measures are identified, for each objectives, using a systematic logic of cause and effect and provides a logical flow for the purpose
3. Approach develops an ISM model to identify driver, autonomous, linkage and dependent issues, which makes the development process more focuses.
4. ANP is a multi attribute decision making approach, based on knowledge, experience, and perceptions of experts in the filed. Even though it does not provide an optimal solution (from a cost perspectives, it is valuable for decision making, involving intangibles attributes that are associated with strategic factors present in the study. It provides the means to accommodate interrelationships of organizational objectives, for determining the weightages for various BSC perspectives and this makes the results more valuable and realistic.

On the other hand, definition of corporate governance that stated by Organization for Economic Cooperation and Development (OECD) is as following:

“Corporate governance is the system by which business corporation are directed and controlled. The corporate governance structure specifies the distribution of the right and responsibilities among different participants in the corporation, such as the board, managers, shareholders and other stakeholders.”

According to Jill Solomon and Aris Solomon in their book “Corporate Governance and Accountability” (2004) defined:
Corporate governance is the system of checks and balances, both internal and external to companies, which ensures that companies discharge their accountability to all their stakeholders and act in a socially responsible way in all areas of their business activity. Asian Development Bank (ADB, 2001) defined: A corporate governance system consists of

1) A set of rules that define the relationship between shareholders, managers, creditors, the government and other stakeholders (i.e., their respective rights and responsibilities
2) A set of mechanism that help directly or indirectly to enforce these rules.

The results from previous researcher showed a significant positive relationship between the numbers of commissioners with firm value the company and between corporate governance variables in the form of the level of transparency of financial statements with financial performance (Riyanto and Kusumawati, 2005). Previous researcher studied in an event study using IICG index, showed that the index IICG had significant information content and was responded by the market at around the announcement date of the index (Sifa and Luciana, 2006).

Previous studies by researcher using the G-Index and the governance index as measured by Bebchuk, Cohen and Ferrell (BCF, 2004) found firms with better governance is positively associated with performance during the year and the performance of the coming year (Bhagat and Bolton, 2008). Corporate governance research has focused on understanding the mechanisms that mitigate agency problems and support this form of economic organization. These value are include product market competition (Alchian, 1950; Stigler, 1958), the market for corporate control (Manne, 1965), and labor market pressure (Fama, 1980).

Moreover, as we know, there are three functions of Accounting information system in organization are as following:

1. Collecting and saving data of organization activities, resource that influenced by those activities, and the people that involve in those activities so that management, employees other side can review the event that have occurred
2. Changing the data become useful information for management for decision making in planning, implementation and monitoring activities
3. To provide the right controlling to keep up the organization assets, including organization data to ensure that data are provided is needed, accurate, and accountable

In fact, effectiveness on the IS function has proven practically impossible to define and measure (Niederman et al). Role of the IS function in business performance can be subtle and difficult to differentiated from other factors (Crowston & Treacy, 1986; Niederman, et. al). Others depend mostly on qualitative rather than quantitative measures (Hartog & Herbert, 1986; Marion, 1992; MeLean, Kappelman & Thompson, 1993). Previous researcher mentioned that information system as a reference discipline based on the theories and methods of these disciplines serve to set the standards by which the quality and maturity of IS researched should be measured (Richard L. Baskerville, Michael D. Myers, 2002). Another researcher investigates assessing the
impact from information system quality with the objectives of exploring the system quality based on test integrative model, which includes system quality as a determinant of the extent of system usage, the benefits derived from the system and the system impact on the user's jobs (Tor Guimares, D. Sandy Staples and James McKeen, 2007). Previous researcher also examines the need for IS assessment and suggests a comprehensive IS assessment framework linked to the organizational performance using existing IS assessment theory as a base and incorporating measurement concepts from other disciplines (Barry L. Myers, Leon A Kappelman, Victor R. Prybutok, 1997). More, previous study provides the first empirical test of an adaptation of DeLone and MCLean's Model in the user-developed application domain. The model provided strong support for the relationships between perceived system quality and user satisfaction, perceived information quality and user satisfaction, user satisfaction and intended use, and user satisfaction and perceived individual impact. (Tanya McGill, Valeerie Hobbs, Jane Klobas, 2003); also, study using DeLone-McLean Model to show that perceived system quality and perceived information quality are significant predictors of user satisfaction with the system, but not of system use. User satisfaction was found to be strong predictor of individual impact, whereas the influence of system use on individual impact was insignificant (Juharni Livari, 2005). Previous research describes the information system effectiveness to senior management (Mary C. lacity, Rudy Hirschheim, 1994); Information System (IS) function support in evaluating performance in one organization (Ahmad A. Rabaa‘l, Guy G. Gable, Wasana Bandara, Erwin Fielt, 2010).

Literature Review

Based on Al Qur’an: Al An Am 96

(He is the) Cleaver of the daybreak. He has appointed the night for resting,, and the sun and the moon for reckoning. Such is the measuring of the Al-Mighty, the All-Knowing.

The essence of sustainable development is simply this: to provide for the fundamental needs of humankind without doing violence to the natural system of life on earth (Pim Martens, 2006). This idea arose in the early 1980s and came out of a scientific look at the relationship between nature and society. The concept of sustainable development reflected the struggle of the world population for peace, freedom, better living conditions, and a healthy environment (NRC, 1999).

Previous studies have been, and are being conducted that develop and use sets of indicators for measuring sustainability (Bell & Morse, 2003; Bossel, 2001; Gustavson, Lonergan & Ruitenbeek, 1999; Schultink, 2000; Walker & Reuter, 1996). The multidimensional nature of sustainability requires that these indicators cover the three fundamental domains of sustainability: social, environmental and economic.

Since the sustainable balanced scorecard shows the information of strategic management form of interpretation of the information is firmed by seeing the people in knowledge capability to fulfill the company needs and reach the company goals.
Because of the reason above, hereby, the sustainability balanced scorecard needs to be existed, especially for global competition in quicker way of showing company performance compared to corporate social responsibility whereas its intention is to enhance the willingness of secure not only for present but also the future generation. It may involved some activities that may useful for historical data cycle such as.

1. Counting: when the data for information is no longer can be adapted during the crises, the breakdown ruled may chaos the accounting information system, so that it is necessary to established the most important discipline or the major factor of discipline that influence the accounting information system.

2. Analyzing: sustainability balanced scorecard position may involve some indicators that have strong support the persistence of accounting information system so that the comparable of sustainable balanced scorecard using variety indicators may give assessment to best percentage of sustainable balanced scorecard. (I choose at least 5 indicators other than only social, environmental and economic because of the 3 fundamental indicators are not recognizing the level of prosperity rationality for the profitability competition that they get is only for current situation to avoid the problem and just trying to find solution only but not having point of view for the firms profitability in the next future).

3. Standardizing: The quality of information for the current situation is firmed because of the previous information that are taken into action as its historically, whereas, actually, the high power action that can be concerned to create the information analysis may try to results some alternatives that consideration not only for the current information quality (short term information) but also can change their information strategy (into long term information) that involve the level of prosperity rationality so that the comprehensive development will contribute analysis the firms for all the countries.

4. Integrating: Quality of Information means the highest prosperity rationality that based on knowledge in one nation, so that distribution information of firms performance expectancy in one nation may be strictly based on the diversity disciplines. (for example, cooperation of the quality values with accounting information system values will be recognized firms performance expectancy in nation meaning the highest the information spread in nation can achieved the firms aim without intervention from any other countries values.

5. Structuring: The good corporate governance has the highest value to do the controlling not the machine. The brain development to control the resources of information may involve the accounting information system cycle that automatically will perform the balancing of the quality of sustainable balanced scored to show firm performance in one nation.

Advancing sustainability will require choice and decision making, and values are a fundamental part of this process (Lockwood, 2005). Values may be defined as broad preferences concerning appropriate course of actions or outcomes (Wood et. la., 1998, p. 107). Values in practice represent a person’s sense of right and wrong, or what ought to be. We must also keep in mind that concepts of the future may depend upon ethnicity, linguistic background, lifestyle, and life expectancy (Crabbe, 2006).
Other previous research stated that the role of scientists when assisting policy
development should be to provide the best evidence available as information for the
development of policy, to help monitor the effects of current policies, and to provide
solutions to unexpected events and policy failures (Lyytimaki and Hilden, 2007).
Previous researcher stated that the shift from strictly economic and ordinary policy
levels to constitutive, institutional, and psychological levels is a very important
expansion (Ascher, 2006).

Further research is needed to keep the knowledge base growing and to ensure that
sustainable development becomes ever more effective (Wilderer, 2007).

On the other hand, good corporate governance that the mankind runs the policy pretty
well is recognizing to enhance the firm profitability. The information becomes more
complex where, hereby, good corporate governance seems selecting and monitoring
which one is good information and which one is bad information, which one is good
news and which one is bad news. Previous researcher defined good corporate
governance is as the system by which business entities are monitored, managed and
controlled and good structure of corporate governance is that encourages balanced
relationship among shareholders, executive directors, and the board of directors (Prachi
Singh, 2012). Another researcher provided evidence that despite the standardization
and harmonization of financial reporting requirements, the informational and contractual
effectiveness of the public financial reports are still influenced by firm specific reporting
incentives (Maria Riesberg, 2005). Other previous researcher examined the state of
corporate governance in some countries in the Asia-Pacific region and the author
suggested that individual countries should first focus on improving national standards of
regulation and corporate practice rather than attempt to reach a common set of matrices
from the start.

In fact, The CIO (IS executive) should also be assessing the IS function using many of
the same factors as the CEO when measuring corporate performance, including market
share, customer satisfaction, margin and return on investment (Plewa & Lyman, 1992).
Previous researcher studied to analyze the architectural structure of corporate
governance, the problems if faces and how information systems can solve these
problems, and the author concerned in the context that Information Technology (IT) has
become an integral part of the business, a key element in the strategic development
growth performance of any organization; IT system is able to understand in a complete
and complex manner, out together all the components of a business and make them
work, eliminating incomplete or irrelevant information (Alzoubaidi Abdel Rahman,
Main Discussion

Sustainability Balanced Scorecard as Strategic Management (Counted of Highly Information Requirements)

Preliminary, as the proof numbers of information with policy development resulted strategic management development to those properties to avoid loss, variety of culture that influence the management system in many entities (harmonize of various culture), human resource quality, and the capability of technology can support the sustainability balanced scorecard. Previous researcher indicated the result that perceptions of sustainability varied between sub-catchments, which mans that perceptions relating to sustainability at the regional scale may mask local trends (Kevin O’Toole, Anne Wallis, Brad Mitchell, 2006).

As fundamental point, Good corporate governance becomes internal characteristic of the firms in interpreting the information requirement based on the certain discipline that may indicated the value and integrity of the firms; obviously the firms reputation may involved the well manner of knowledge. The previous research explored the relationship between go beyond conformance with regulations and equally support a performance dimension that can lead to better outcomes and the capacity for mindfulness, utilizing organizational theory that describes high reliability organizations and the author found that both conformance and performance dimensions of governance are significant determinants of the capacity for mindfulness (John J. Williams, Alfred E. Seaman, 2010).

Finally, the recognition of high technology in business performance will bring the competitive strategic management that might be used for not only short term prediction but also long term prediction and it goes to sustain the ability of counting, analyzing, standardizing, integrating, and structuring the information products that is provided by managers to management level. The previous researcher examined the effect of information systems outsourcing announcements on firm value by analyzing whether equity market reactions are associated with the management’s strategic intent for outsourcing and firm characteristics of the outsourcing firm and the author found the result that value is created for firms outsourcing with short-term operational intent rather than for longer term strategic reasons.

Urgency of Information

Advance information based on evidence of the accounting equation shows the firm activities annually, however, it is more necessary to perform accounting information system for both long lasting safety comprehensive and interpretation the content of good corporate governance to be implement for the future generation. The human intellectual may involve for such assumption for providing the advanced information and minimize the loss as much as they try to reach the accuracy, reliable and transparency sustainable balanced scorecard.
**Urgency of Quality Measurement**

The content of information resource would never end as the human being recognizes the integration of sustainable balance scorecard that needs reducing the information asymmetry by its costs and reducing the loss that may cause firm injury in the future through the number of forecasts that is accounted. The sustainability of information recovery sustainable balanced scorecard is the way to measure sustainability profit for the next generation. The information quality has to be protected and to be avoided from ruin.

**Urgency of Policy Development**

The implementation of good corporate governance brings the fluctuation costs based on quality of information that adapted competitive strategic management to perform the firm activities to reach their profit goals. Entities have to be guided by rules and so does the information management. When the sustainable balanced scorecard applied, the high risk may count into certain information measurement that influences the entities reputation in public.

**Urgency of Knowledge Measurement**

The range of advantage and disadvantage information measurement may bring the better adopted policy development based on information and it may result not only the adaptable policy in entities culture supporting the probability entities growth and providing the entities system as the prototype of using policy development for information measurement so that the standardizing expectancy can be fulfilled.

**Urgency of Human Characteristics**

Accounting information system is built by human being. It means the sustainability accounting information system must be developed and shaped by the human being activities performance and their brains; More, the accounting information system will be upgrading from time to time related to its influence to make sustainable balanced scorecard through human being knowledge adaptation as the information changed based on good corporate governance implementation that may discover and accounted for the power of firm profitability.

**Urgency of Technology Utilization**

The maximum capacity usefulness of technology innovation suppose to support the sustainability balanced scorecard as data measuring growth to reduce gap of information and to minimize the loss of the entities performance is the basic idea of avoiding the company crises.
Mankind Intellectual as the Dominant Factor for Controlling and Managing

For some reasons, the quality of mankind to develop the accounting information system has dominant activities because the key success factor of the growing accounting activities is to perform the better quality of standardizing expectancy that may involved to firms from country's mankind intellectual.

The crises itself may come from the wrong-interpretation intellectual of mankind that supporting only certain entities that conflict with public interest that may cause the injury of the accounting information system that supposed to be implemented. The mankind knowledge as the most important mindset may bring only two alternatives: be aware of the unreadable information or be accurate in measuring the accounting growth as sustainable balanced scorecard talks about the precise accounting information system and watching the existing information to perform higher future profit.

The mankind knowledge is building the foundation of the accounting information system that involves such as knowledge management, Risk management, Property management, and strategies management through implementation of good corporate governance.

Mankind knowledge may provide best assumption as long as the restricted implementation of ruled based does not become the power of data manipulation. For example, Entities have to concern between the long lasting of information resources that are provided and the number of interpretation may appear to be managed.

Suggestion and Discussion

It is suggested that accounting information system that produce accounting information should conclude both for qualitative and quantitative approach.

When the sustainable balanced scorecard seems facing difficulty to be developed it actually showing the growth of accounting information system performance that is supported by upgrading technology uses, and the better the strategic management will automatically had been implemented in its performance in the terminology of increasing not only the value of entities but also to have better profitability performance. Other concern that counted as most influence issue is how to perform the sustainability balanced scorecard as the key factor of sustainability forecast performance that is provided by analysts.

Conclusion

However, information based on languages becomes high interesting information among the mankind intellectual. Since then the differences point of view to find the best assumption based on languages must result to the numbers of accuracy, transparency and also showing the re-engineering of reporting on accounting performance itself.
Hereby, the mankind intellectual has tasks to perform the best assumption in providing information at all costs as well as they earned including to show the alert of crises through their reporting. Here is the proof that good corporate governance representative the mankind intellectual activities supposed to build good accounting information systems to make sustainable balanced scorecard can be well maintained.

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