# Corporate Governance through E-Governance Optimization: a Case Study of Banking Institutions of Indonesia

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***Abstract*- Corporate governance is regarded as a major issue during the post-financial crisis period in Indonesia. Particularly, the financial institutions have implemented corporate governance reforms to enhance the protection of shareholders and stakeholders interest. The consequences emerge as it allows for greater monitoring especially by the shareholders. Monitoring effectiveness and efficiency can be achieved through e-governance optimization. Nevertheless, there are general lack of awareness regarding benefits of e-governance and underutilization of existing ICT infrastructure as well as the process involved in implementing successful good corporate governance. This study analyzes the effectiveness of e-governance towards a good corporate governance achievement, particular on the listed banking firms in Indonesia Stock Exchange. This paper focused on the e-governance implications in improving the banking firms' performance. Corporate governance mechanism that serve to monitor the banking firms refer to the Bank Indonesia regulations. Lastly, this study suggests that there are best practices in e-governance implementation, which can increase the firms' performance in the market, as well as supporting the economic policies to minimize the impact of global economic crisis.**

***Keywords*- corporate governance, e-governance, firms' performance**

## I. INTRODUCTION

One of the major factors for the vulnerability of Indonesian companies to the negative impact of financial crisis was their weak internal corporate governance mechanism. The failure of Indonesian companies to implement prudent corporate governance practices in their company management was related to a number of factors, including a high concentration of company ownership and the lack of transparency in the procedures for corporate acquisitions and control. Moreover, the problem of inefficiency occurs especially when there was ineffective supervision by the Indonesian Board of Commissioner and inadequate monitoring by creditors.

Since the Indonesian banking sector was most seriously hit by the problems of double mismatch, which are the currency mismatch and maturity mismatch, and its high performing loans, therefore the banking sector was placed as the core of the government economic reform.

According to the Banking Code, which is issued by the National Committee of Corporate Governance, to create a healthy banking system through good corporate governance has five essential elements: fairness, transparency, accountability, responsibility, and independence. The important point that all five essential elements have is stated that banks should reveal their information punctually, adequately, clearly, accurately and comparably, and it should be easy for the stakeholders to access. Based on that statement, it is obviously needed a supporting tools in order to provide those information particular in a decision-making. Therefore, e-governance becomes one of the major factors in order to improve the good corporate governance and its controlling mechanisms.

## II. LITERATURE REVIEW

Mittal (2004) defined the term of e-governance refers to the process of using information technology for automating both the internal operations of the government and its external interactions with citizens and other business. This paper described the e-governance framework as a solution development platform that will lower the cost of developing, deploying, and managing government solutions. The framework provides repositories of solution components such as security handlers, record management components, and user interface components. The solution components are customizable for each solution independently through a wizardlike interface.

In similar, Heeks (2001) defined e-governance is the use of information and communication technologies to support good governance. These new connections strengthen existing relationships and build new partnerships within civil society. E-governance therefore embraces e-government, e-citizen, and e-business.

In a simple statement, Relies (2002) stated that e-governance as an opportunity for government to get closer to the citizen and to build a partnership with diverse communities of interest, practice, expertise, conviction, and inter-dependence.

Kanungo (2003) clearly defined e-governance is the application of information and communication technologies to transform the efficiency, effectiveness, transparency, and accountability of informational and transactional exchanges with in government, between government and government agencies of National, State, Municipal and Local levels, citizen and businesses, and to empower citizens through access and use of information. The paper emphasizes an insight regarding on evolution of e-governance technologies, present scenario effort in India, and the action plan for designing e-government projects for addressing immediate objectives. The result is the objectives of achieving e-governance and transforming India goes far beyond mere computerization of stand alone bank office operations. It will require basic change in work culture and goal orientation. In addition, it will require skilled navigation to ensure a smooth transition from old processes and manual operations to new automated services.

Particular on case study of Indonesia, Harijadi (2003) found that e-government, as an application of Information and Communication Technology (ICT), could improve government's ability in delivering services to the public. In this perspective, the conception of e-government covers a wide range of application such as government administration, health care, education, information provisioning, trade, agriculture and culture as well as businesses. The result stated the development and implementation of e-government in Indonesia are facing some challenges on financial constraint, inability to attract and retain good IT staff, low computer and internet penetration, insufficient telecommunication connection, regulatory environment and organization culture.

According to the literature reviews as above, this paper will emphasizes the implementation of e-governance particular on banking sector in Indonesia in order to improve the banking sector performance as well.

## III. RESEARCH METHODOLOGY

In particular, this research using the Case Study Method in order to investigate a contemporary phenomenon in real life context. Moreover, this study concerned with how things happen and why, in such case of e-governance in Indonesia's banking sector. The objective of this method is attempts to understand what is happening and link the contextual realities toward the lack of what was planned and what is the fact in a certain period.

The empirical tools usually play the central role at the early stage of the design of an e-Governance assessment, evaluation as well as formulate strategies. The implementation process, in its various components, is another important dimension along which governance assessment can vary and serve different purposes.

This paper use panel data that is combination between time series data and cross section data, particularly in annually data. The main sources of those data was collected from Indonesia Stock Exchange, in order to get the annually report of each banking firms which are listed on Indonesia Stock Exchange, during the period from 2003-2007. In order to get additional data to sharpen the analysis, this paper also optimize the Central Bank Annually Reports, the Government Regulation, the IMF Reports, and other publications and articles.

This paper will observe twenty-two banking firms that are listed on Indonesia Stock Exchange on five years periods of observation.

## IV. DISCUSSIONS

Adopting the concept as depicted in the figure below, communication, ICTs, and e-government applications play and essential role between policy makers, service providers, and communities.

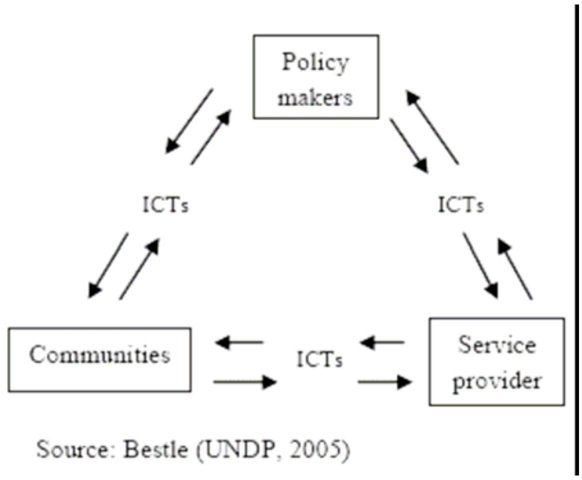



**FIGURE 1** ENHANCING ACCOUNTABILITY, TRANSPARENCY AND EFFICIENCY WITH E-GOVERNANCE

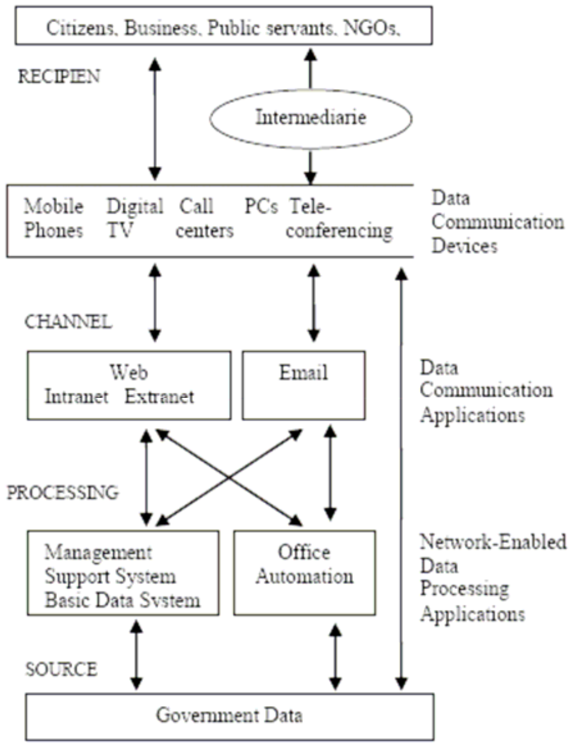
Using the figure above, e-governance through ICTs represents a mechanism for delivering services more directly to them, which are policy makers (government and Central Bank), service providers (firms), and communities (stakeholders and shareholders).

The lack of access to information and sufficient knowledge to understand the fundamental rights is a serious issue for the shareholders, particular on decision-making.

On the policy maker's side, they play a major role on controlling the corporate governance implementation, in order to minimize the negative impact of financial crisis, both on firms and shareholders.

The research of e-readiness for e-governance strategy in India (Sachdeva, 2002), give a valuable information and experience which can adopted in observing a case study in Indonesia as well. According to the paper, the priority to built e-readiness in order to strengthening infrastructural inadequacies, reducing the barriers to e-governance, and strengthening the drivers to e-governance, which are in seven areas; infrastructure, institutions, laws, leadership and commitment, human capacities, technology, and data systems.

The following figure is the architecture of e-governance that is used in previous study, and it will adopt in this paper to support the analysis of Indonesia case study.




Source: Sachdeva (2005)

**FIGURE 2** THE ARCHITECTURE OF E-GOVERNANCE

In order to analyze the relationship between e-governance implementation (DCA and DCD), internal controlling of corporate governance mechanisms (board of directors and board of independent directors), government regulatory monitoring (CAR), external controlling of corporate governance mechanisms (big 3 rating agency and big 4 external auditor), and banking performance (ROA), we construct a research model, given as follows:

$$CP_k = \alpha + \beta_1 DCA_k + \beta_2 DCD_k + \beta_3 SZB_k + \beta_4 INDB_k + \beta_5 CAR_k + \beta_6 BIG3_k + \beta_7 BIG4_k + e_k$$

for k = 1, 2, …, K, where:

K = Banking firms

CP = Corporate performance measured by ROA

DCA = Data Communication Applications (intranet, extranet, email)

DCD = Data Communication Devices (mobile phones, digital TV, call centers, PCs, teleconferencing)

SZB = Number of Director in bank t

INDB = Number of Independent Directors in bank t

CAR = Capital Adequacy Ratio

BIG3 = Rating of banks by reputable rating agencies (Big 3)

BIG4 = Auditing by reputable external auditor (Big 4)

e = Random error

$\beta i$ = Parameters to be estimated

From the observation of twenty-two banking firms in Indonesia Stock Exchange, during 2003-2007, the interesting findings are as follows:

### *A. MODEL INTERPRETATION*

$$ROA = -6.97 + 2.77DCA + 0.47DCD + 0.35SAB + 8.80INDB + 0.17CAR - 0.055BIG3 + 3.36BIG4 + e$$

From the output as above, we found that there is a positive relationship between data communication applications and data communication devices, which are proxies of e-governance implementation on each banking firms, with the return on asset, which as a proxy of banking firms performance.

The number of board directors, which as a proxy of internal controlling of corporate governance mechanisms, capital adequacy ratio, a proxy of government regulatory monitoring, and big 4 external auditor, a proxy of external controlling of corporate governance mechanisms, have a positive relationship with ROA which is represent of banking performance.

Nevertheless, we also found the unexpected relationship, which is a negative relationship between the number of independent directors and the big 3-rating agency, in order to influence the firms performance.

However, using the random effect model that applied in panel data analysis, the result confirmed only the board of directors and capital adequacy ratio, which are significantly influence ROA on ten percent level. It means that during the period of the study, the investors and market as well, give a high appreciation on the number of board directors and increasing in capital adequacy ratio as a positive sign in order to improve the banking performance through the implementation of good corporate governance.

### *B. CONSTRAINTS OF E-GOVERNANCE IMPLEMENTATION*

The main result that is one of these paper objectives is the insignificant result of e-governance implementation towards the banking firms' performance, which represent by the readiness of data communication applications and data communication devices.

We found that the major factor is the lack of firms' information of using the network infrastructure, particular on period 2003-2004. Moreover, there are insufficient infrastructures and unskilled human capacity in handling the information technology.

Through a Presidential Decree No.50 (2000), the government of Indonesia established the Coordinating Team for ICT Development (TKTI), high-level task force to advance the use of electronic media to facilitate the firms and government's internal function, relationship, interactions, and transactions. In addition, TKTI is also responsible for providing guidelines and recommendations on how to proceed with ICT development including the implementation of e-governance.

However, the study found a several constraint that generally happened on banking firms, given as follow:

1) Lack of coordination and integration
2) Inadequate and expensive of investment on telecommunication infrastructure and capacity
3) Insufficient sustained funding for the ICT and e-governance project or plan
4) The lack of awareness among the shareholders or investors on the ICT improvement

## V. CONCLUSIONS

In a case study of Indonesia banking sectors, the development and implementation of e-governance in order to improve the banking firms performance, are facing some challenges particular on financial constraint. Moreover, there is inability to improve the human capacity building of information technology, insufficient telecommunication connection, and regulatory environment that can drive awareness of information communication technology among investors, firms, and government as well.

Finally, in order to improve the banking performance through e-governance optimization, we strongly suggested having cooperation with other countries or international organization, particular on banking management support system that is an application of information communication technology. Therefore, we can eliminate the lack of awareness of information technology and optimize the utilization of existing ICT infrastructures.

In further research, it will give a better result by using a longer period rather than just five year, in order to be able to assess the effectiveness and the implementation of e-governance toward the corporate governance as well as the corporate performance. In addition, the further study should be able to accommodate the comprehensive analysis and appropriate proxies in order to measure the e-governance implementation, because these crucial factors can affect the corporate performance on the market as well.

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