

Board interaction with information based on grounding theory

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Abstract

The present dissertation is based on a contextual approach and in order to provide a model based on the risk and complexity of board interaction as a pillar of corporate governance with information based on grounding theory. In order to validate the field research and in fact, as a kind of initial practice, a pilot sample has been used. In addition to the interviews, in this research, field notes were also used, which were also recorded and coded in the field. These notes produced a total of 46 codes with a total of 96 sources, and the final reviews produced 76 codes and 142 sources. The pilot interview highlighted the need to focus more on listening during the interview and to ensure that the coding was done effectively in the research and that trends and activities were examined. The first stage of the survey was to draw potential study lines and one-page feedback was prepared for the interviewees the second stage of the survey was received from the interviewees in four stages by e-mail. In addition, two of the initial interviewees were re-interviewed based on the findings. The other three interviews at this stage were conducted using a one-page report for the structure of the interview.

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1 Introduction

"Transparency of financial information" and "information asymmetry" are among the key features of good governance or corporate strategy. Financial information and corporate governance have been important areas of research since the 1960s, but recently researchers have become more interested in studying the relationship between corporate governance and information disclosure. A review of the research literature based on the results of previous studies shows that good corporate governance practices are aimed at improving communication policies with stakeholders, especially shareholders [6]. Lee and Phan's [20] study demonstrates the importance of corporate governance in improving the disclosure of reliable information. However, the rapid changes that have taken place have a serious impact on financial information. Because the transparency of information for external users of annual reports is considered and it is referred to as the mechanism of corporate governance outside the organization because it helps to protect against the opportunism of managers. However, external users, including shareholders and creditors, often exercise external control over companies. In this regard, corporate governance mechanisms are emerging as a tool through

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which we can control agency conflicts and encourage CEOs to act verbally and behaviorally based on the interests of stocks [25].

The relative importance of financial information has been discussed in the corporate governance literature. Because the effectiveness of corporate governance is realized if it helps to reduce the opportunistic behavior of managers and reduce information asymmetry. Disclosure of information should enable various stakeholders, especially shareholders, to control and monitor top executives in the company by reducing information asymmetry. As a result, information transparency can be considered a behavioral variable to the extent that it is the result of a predetermined choice. Similarly, the relationship between corporate governance mechanisms has been investigated by some researchers [33].

Although some previous research has been done on the interaction between governance mechanisms [16, 23], a review of the research literature shows that few empirical studies have been conducted on the relationship between external and internal mechanisms. Organizational corporate governance has been accomplished. In fact, all of the above arguments improve the causal relationship between information transparency and corporate governance mechanisms. In this case, researchers have not studied this causal relationship in detail. What is not yet clear is the impact of information and its transparency on corporate governance practices. Most researchers analyze corporate governance and assume that the governance of an external is variable. Recent research, however, has addressed the endogenous nature of specific corporate governance mechanisms. In order to study the endogenous personality of managerial ownership, some researchers have focused on studying the relationship between managerial ownership and company performance [8, 12]. In this regard, Abraham [1] stated that the performance of companies can affect the composition and performance of the board. Similarly, the researchers showed that none of the companies under study sought to increase the percentage of independent managers. Corporate governance is related to the characteristics of the manager and the company. In this regard, among the first researchers who have tried to apply the simultaneous equations approach in the study of corporate governance, management, and company characteristics, we can mention Cadbury [5]. Eccles [10] used the model of structural equations and simultaneous equations to explain the relationship between both categories of internal and external organizational mechanisms of corporate governance and their impact on firm performance. Donaldson and Davis [9] used the simultaneous equation system to explain the interaction of four governance mechanisms, namely board independence, managerial ownership, and debt level, and showed that some governance mechanisms have a significant impact on firm performance. However, past research has not addressed the relationship between risk and the complexities of the board of directors as the mainstay of corporate governance and information. Therefore, considering the gap in the literature of the present study, considering the importance of information in the realization of effective corporate governance through the board of directors, in order to achieve the basic goal of "explaining the complexity of board interaction as a pillar of corporate governance with information based on field theory" Done.

2 Theoretical Foundations and Background

The necessity of corporate governance arises from the conflict or friction of the interests of the participants (stakeholders) in the corporate structure. Conflict of interest, which is interpreted as a matter of representation, is itself due to two main reasons; The first is that each participant has different goals and preferences, and the second is that each does not have complete information about other actions, knowledge, and preferences. Obviously, this separation, assuming the absence of effective mechanisms or mechanisms of corporate governance, will create a basis for managers to act in their own interests and not the interests of shareholders [11].

One of the dimensions of corporate governance is the board of directors. It is fascinating for the researcher to understand the actual process of board operations inside and outside the board meeting [13]. And this research has been done because it has been assumed that if a person's knowledge of what is happening inside the board meeting is increased and he has a deeper understanding of this field, he will be better and more effective. It can be used to create a positive impact on the organization and shareholders.

In addition, different managers have different ways of absorbing and using information. This difference, it seems, can be explained and interpreted on the basis of a theory to reveal the dimensions of this problem. These cases have inspired this research and based on it, the present dissertation has been compiled. Finally, as Judge [19] has stated, "... my wish is to know step by step and enter the world from the perspective of the participants in the game so that by seeing the world from their point of view and in making these discoveries, we can say that it helped to develop empirical knowledge."

The necessity of corporate governance arises from the conflict of interests of the participants (stakeholders) in the corporate structure. Conflict of interest, which is interpreted as a matter of representation, the conflict or friction of

the mentioned interests itself originated from two main causes; The first is that each participant has different goals and preferences, and the second is that each does not have complete information about other actions, knowledge, and preferences. Obviously, this separation, due to the lack of effective executive mechanisms of corporate governance, will create the ground for managers to act in the interests of themselves and not the interests of shareholders [18].

One of the dimensions of corporate governance is the board of directors. For the researcher of the actual process of operations, the board is attractive inside and outside the board meeting, [17]. It is expected that if a person's knowledge of what happens inside the board meeting increases and a better understanding is gained, such knowledge can be used to have a positive impact on the organization and its stakeholders, especially Used by shareholders.

The long-term average cost chart of the cement, gypsum, and lime industry shows that there are economies of scale in this industry and costs can be reduced by moving towards the optimal point. Production capacity is increasing. The following equation is estimated to estimate the translog cost function for the cement, gypsum, and lime industries.

$$\begin{aligned} \log\left(\frac{TC_{31}}{PK_{31}}\right) = & c(1) + c(2) \times \log(q_{31}) + 0.5 \times c(3) \times \log(q_{31})^2 + c(4) \times \log\left(\frac{PL_{31}}{PK_{31}}\right) + c(5) \times \log\left(\frac{Pm_{31}}{PK_{32}}\right) \\ & + 0.5 \times c(6) \times \log\left(\frac{PI_{31}}{PK_{31}}\right) \times \log\left(\frac{Pm_{31}}{PK_{31}}\right) + 0.5 \times c(7) \times \log\left(\frac{Pl_{31}}{PK_{31}}\right)^2 + 0.5 \times c(8) \\ & \times \log\left(\frac{Pm_{31}}{PK_{31}}\right)^2 + c(9) \times \log(q_{31}) \times \log\left(\frac{Pl_{31}}{PK_{31}}\right) + c(10) \times \log(q_{31}) \times \log\left(\frac{Pm_{31}}{PK_{31}}\right) \\ & + c(11) \times \log(T) + 0.5 \times c(12) \times \log(T)^2 + c(13) + c(14) + c(15) \times War + c(15) \times Fall \quad (2.1) \end{aligned}$$

Different organizations, and their managers, have different needs and require different information in this regard depending on the type and nature of these needs. In addition, different managers have different ways of absorbing and using information. This difference, it seems, can be articulated by a theory to better reveal the dimensions of the research problem. These cases have inspired the present research and the compilation of the forthcoming dissertation.

Research indicates that the mechanisms outside the organization and within the company are as follows:

1. External mechanisms: These mechanisms mainly include the following:

- Legal oversight: Develop, approve and establish appropriate oversight laws.
- Legal regime: Establish an appropriate legal regime.
- Capital market efficiency: expanding the capital market and strengthening its efficiency.
- Major shareholder oversight: Motivate shareholders to engage in activities such as buying controlling stakes.
- The role of institutional investors: encouraging and expanding investors.
- Supervision of minority shareholders: Respect for the rights of minority shareholders and the permissibility of minority supervision over the company's activities.
- Require independent auditing: given its oversight role.
- Activities of rating agencies: Creating facilities for the activities of rating agencies.

2. Mechanisms within the organization: These mechanisms mainly include the following:

- Board of Directors: Selection and establishment of a capable, reputable and impartial board of directors.
- Executive management: division of responsibilities between executive management and the establishment of appropriate software.
- Non-executive management and independent managers: There are independent and non-executive managers in the board of directors.
- Committees: Audit Committee, Law and so on.
- Internal controls: Design, formulate and implement appropriate internal controls (financial, legal, risk management, internal audit, etc.).
- Organizational ethics: Development and expansion of the code of professional behavior and organizational ethics.

In order to estimate the Translog cost function for the wood and wood products industries, the following relation is estimated.

$$\begin{aligned} \log\left(\frac{TC_{32}}{PK_{32}}\right) &= c(1) + c(2) \times \log(q_{32}) + 0.5 \times c(3) \times \log(q_{32})^2 + c(4) \times \log\left(\frac{PL_{32}}{PK_{32}}\right) + c(5) \times \log\left(\frac{Pm_{32}}{PK_{32}}\right) \\ &+ 0.5 \times c(6) \times \log\left(\frac{PI_{32}}{PK_{32}}\right) \times \log\left(\frac{Pm_{32}}{PK_{32}}\right) + 0.5 \times c(7) \times \log\left(\frac{Pl_{32}}{PK_{32}}\right)^2 + 0.5 \times c(8) \\ &\times \log\left(\frac{Pm_{32}}{PK_{32}}\right)^2 + c(9) \times \log(q_{32}) \times \log\left(\frac{Pl_{32}}{PK_{32}}\right) + c(10) \times \log(q_{32}) \times \log\left(\frac{Pm_{32}}{PK_{32}}\right) \\ &+ c(11) \times \log(T) + 0.5 \times c(12) \times \log(T)^2 + c(13) + c(14) + c(15) \times War + c(15) \times Fall \end{aligned} \quad (2.2)$$

$$Sl_{32} = c(4) + c(6) \times \log\left(\frac{Pm_{32}}{PK_{32}}\right) + c(7) \times \log\left(\frac{Pl_{32}}{PK_{32}}\right) + c(9) \times \log(q_{32}) \quad (2.3)$$

$$Sm_{32} = c(5) + c(6) \times \log\left(\frac{Pl_{32}}{PK_{32}}\right) + c(8) \times \log\left(\frac{Pm_{32}}{PK_{32}}\right) + c(10) \times \log(q_{32}) \quad (2.4)$$

"There is a very limited understanding of work processes and their effects on the board," said Roberts et al. [28]. Orna [26] has also focused on board behaviors in several empirical articles. Virtanen [32] focused on the internal performance of the board. They have considered the concern of increasing laws, regulations and scientific studies on the structural aspects of the composition of the board of directors, but based on the findings of the research during the study, the activities of the board of directors have not been examined.

Existing gaps include the following:

- The current knowledge about how the board of directors reacts and interacts with the received information has not been analyzed yet and there is no deep knowledge in this regard.
- We can take steps to improve the corporate governance system by creating a model for this issue.
- Executive managers can be helped to provide better information to the board.
- It is possible to recognize the complex dimensions and risks associated with the collision of information by the board.

The long-term average cost chart of this industry shows that there are economies of scale in this industry and by moving towards the optimal point, costs can be reduced. Production capacity is increasing. The following equation is estimated to estimate the translog cost function for the glass and ceramic industry.

$$\begin{aligned} \log\left(\frac{TC_{33}}{PK_{33}}\right) &= c(1) + c(2) \times \log(q_{33}) + 0.5 \times c(3) \times \log(q_{33})^2 + c(4) \times \log\left(\frac{PL_{33}}{PK_{33}}\right) + c(5) \times \log\left(\frac{Pm_{33}}{PK_{33}}\right) \\ &+ 0.5 \times c(6) \times \log\left(\frac{PI_{33}}{PK_{33}}\right) \times \log\left(\frac{Pm_{33}}{PK_{33}}\right) + 0.5 \times c(7) \times \log\left(\frac{Pl_{33}}{PK_{33}}\right)^2 + 0.5 \times c(8) \\ &\times \log\left(\frac{Pm_{33}}{PK_{33}}\right)^2 + c(9) \times \log(q_{33}) \times \log\left(\frac{Pl_{33}}{PK_{33}}\right) + c(10) \times \log(q_{33}) \times \log\left(\frac{Pm_{33}}{PK_{33}}\right) \\ &+ c(11) \times \log(T) + 0.5 \times c(12) \times \log(T)^2 + c(13) + c(14) + c(15) \times War + c(15) \times Fall \end{aligned} \quad (2.5)$$

Numerous studies have been conducted on the effectiveness of corporate governance mechanisms in safeguarding the interests of shareholders, but at the same time have yielded conflicting results.

Research by Zou et al. [35], Tricker [31], Lewis [21], Gibson and Hartman [14], Hillman et al. [15], Allegrini et al. [2], Bloomfield [3] and ... Cited. An area that has been less addressed is the attention to risk and complexity of the board's interaction as a pillar of corporate governance with information based on grounded theory in various dimensions.

Several different theoretical frameworks have been proposed to explain and analyze corporate governance. Each of them has used different words and in a different way to address the issue of corporate governance, which is due to a specific scientific field that refers to the issue of corporate governance. For example, agency theory is derived from the financial and economic context, while transaction cost theory is derived from economic, legal, and organizational theories, and stakeholder theory is derived from a social perspective on corporate governance. Although there are significant differences between different theoretical frameworks (because each views the issue from a different perspective), they have distinct aspects.

According to the review of research in the field of corporate governance, it was found that all research has used a quantitative method, while in this study, the qualitative approach is emphasized, which is an innovation in research.

3 Methodology

The present research method is applied according to the purpose. The present study is in the section of explaining the model based on theoretical field theory and in field implementation to rely on theoretical support on the one hand and expect to improve decisions related to investing in the company or allocating credit to companies in applying governance mechanisms. A company based on information is of a practical type according to the expected achievements of the research. Types of research based on methods including descriptive research, historical research, content analysis research, laboratory research, correlation research, survey research, comparative causal research and other cases are expressed. According to the classification according to the inference method, the present study is based on descriptive and correlational methods. In implementing a descriptive research design, the researcher does not manipulate the variables, and because none of the research variables are manipulated and controlled, it is sufficient to describe the collected data mainly in a theoretical and Delphi-persuasive survey of experts. Since in the present study, purposeful and non-random sampling method has been used to study the statistical population of experts and contextual analysis has been used to determine the relationship between variables. In general, according to the above, the research method is descriptive in terms of inference. Due to the fact that in order to collect data in the research, experts' and experts' opinions have been relied on to explain the complexity of the board's interaction as a pillar of corporate governance with information based on grounding theory, a "survey" research design has been used.

In this study, based on the field finding theory, a specialized interview with the Delphi method has been used to persuade experts through the following steps:

1. In this regard, first the interviewees try to express their understanding during the in-depth interview process.
2. The researcher then tries to understand the logical answers of the participants, because the analysis of the data depends on the researcher's perceptions. In almost all cases, data analysis begins and continues simultaneously or at very short intervals (up to 72 hours) after the interview. It is necessary for the researcher to identify the hidden concepts in the heart of the collected data and divide them into the smallest conceptual components. This process is called coding, which is done in three steps as follows. The researcher's next task is to compare and categorize Concepts are extracted from the heart of the data, which is done in two stages, namely axial coding and selective coding. The second round of coding involves refining and restructuring the text of the interviews coded in the first round (finding connections between categories). Most importantly, the interview data encoded in the first round are redefined according to their properties. In the second round of coding, several themes are identified and clustered called axial coding. In axial coding, the process of assigning code to the concepts contained in the data becomes completely open and takes a selected form.
3. In the last stage of coding, which is known as selective coding, the researcher pays more attention to the coding process according to the codes and concepts identified in the previous two stages, and by emphasizing the parts that can play a more important role in developing the theory, facilitates the next steps. it helps. The third round of coding reflects the researcher's sense of the interviewees' logic and reasoning (conceptualizing and reporting communication at a higher level of abstraction). In this round of data analysis, interview data is reduced to more nuclear classes.

It is necessary to explain that in the method based on grounding theory, the method of data analysis and interpretation has priority over the method of collecting it, and the quality of the desired ground theory is related to sampling and correct data collection, correct coding and data analysis, and formulation of linking theory. They are not performed consecutively and overlap and are performed simultaneously. Significance, compatibility of observation with theory, theoretical and analytical generalizability, reproducibility, accuracy and confirmation are the most important traits of desirable theory.

4 Analysis of Data and Findings

Demographic findings: In order to conduct the present study based on the field approach, during the first six months of 1400, at least one manager was requested to be interviewed from among the members of the board of directors of listed companies. In addition, a number of information processing and analysis specialists and professors and experts in the field of finance and management familiar with the issues of corporate governance were selected by available sampling method.

In cases where the possibility of an interview was provided, it was tried to do this interview in person as much as possible, and otherwise, the possibility of an interview was provided by e-mail or the use of social networks. In this survey, it was assumed that a simpler sample could be a more effective way to attract participants. "A convenience example is one that is easily accessible to the researcher through accessibility [4]." Provide contact information for other potential interviewees [7].

A total of 28 participants agreed to participate in the first phase of data collection and oral survey or interview. The other three were identified in the second phase of data collection using the same methods, and two interviewees from phase one also agreed to participate in phase two of the interview. Ethically, the confidentiality of the interviewees' personal information was considered and therefore the interviewees were coded. Therefore, in this section, a sample of 31 people used in an in-depth Delphi interview is described.

4.1 Board processing

The purpose of the board of directors' package is: the agenda of the board of directors, a collection of reports, documents that have been provided to each member of the board of directors before the board meeting to prepare for commenting or participating in the upcoming meeting. Have a decision.

The processing of the board of directors took place in two stages: 1) discussion in the board meeting and 2) formulation of approvals and creation of outputs. Most of the members of the board of directors under consideration meet in person to convene a meeting of the board of directors. Some of them use telephone calls or virtual communications in special situations, such as companies that have members abroad or to arrange coordination meetings between the main meetings. However, most managers stated that they had little contact with each other between meetings (Expert #9).

The number of board meetings varied from once every six months (Expert No. 11) to monthly (Expert No. 11). Most of the interviewees in this study, who were elected as members of the board of directors, emphasized on holding quarterly or bi-monthly meetings of the board of directors. The length of each board meeting varied, and most of their meetings lasted between two and four hours. The sessions observed as experimental observations used in this study lasted approximately three hours. Except for the first meeting of the board of directors, which followed the annual general meeting of the relevant company and lasted two hours. "Board meetings should ideally be a maximum of three to four hours. Prolonging board meetings beyond this amount is often a waste of time and is not recommended," said Expert #2.

1. Processing in session

During an empirical observation of the board's behavior in processing the board package, the agenda of the meeting clarified the expected action for each item. for example; 1) Explanatory notes, 2) Review, and 3) Discussion. Expert No. 13 emphasized: "The board of directors package has different and distinct sections, so we are discussing a section where only the documents correspond to the notes and we do not deal with other sections. But these sections as well. They provide an opportunity to share governance cases or information that stakeholders may have or may find useful, but these sections are not necessarily Hath was not present at the meeting to formally review it as part of the agenda items. It should be noted that almost some of them are just reports of facts about which there is no problem. Therefore, if there were any controversial issues in this regard, we would raise them, otherwise, the relevant reports are for reminder or information only."

This separation of board reports allows members to focus on agenda discussions and give all managers a clear picture of the expected outcome or action. This is effective in saving time devoted to the topics discussed on the board. As Expert No. 22 has stated: "Each item on the agenda of the Board of Directors is given a specific time and is mentioned at the beginning of the meeting, the items that should be discussed in this meeting, including items a. B, C and D. According to the defined schedule, members should act in such a way that each discussion is passed in time and the next discussion is addressed, so the board of directors and the managing director should spend their efforts managing the time of the meeting. In this case, a lot of time is not spent on minor issues and people jumping from one branch to another or deviating from the discussion is prevented, in this case, it is ensured that the members are focused on things and the time is managed properly."

Separating the discussion on the board and scheduling the discussion enables the board to chair the meeting effectively. However, in some cases, the discussion of the issues continues beyond the expected time and this depends on the management of the meeting by the chairman of the board. Expert 22 states: "As Chairman of the Board, I feel that in all meetings, the agenda or final issues have not been well discussed, usually the subcommittee reports are hastily drafted or discussed. It has not been located."

Based on the surveys conducted by the participants in the survey, the style of submitting reports in the meetings of the board of directors is different. For example: "Sometimes reports are delivered to board members in the form of written reports or are read orally at a meeting. The presenter gives an explanation and then a very general discussion about the subject. Most of the issues discussed are related to a specific industry or a specialized field, and some industry experts are present at the meeting, so they are often asked to explain and listen to what they have to offer." (Expert No. 11).

The reporter is sometimes a member of the board and in other cases, a person outside the board may be invited to report. In one of the board meetings, which was considered an empirical observation, the presenters of the report at different times included lawyers, consultants, and suppliers of company resources (Expert No. 4). Or in another empirical observation, the reporters were company experts who, in most cases, sat at the back of the board and reported when necessary.

Experimental observations of board meetings showed that the term "guest" was often used when referring to the reports in question. The use of these people in the meetings of the board of directors caused the return to the previous discussion when the managers read and revised the content of the report. In addition, it was observed that when using this phrase, less attention is paid to the reporter than when the reporter predicts the content plan.

In experimental observations of board meetings, the use of various technologies was observed. Expert No. 24 mentioned that he is taking his tablet (iPad model) to the meeting. During the observations, board members sometimes used smartphones and sometimes tablets or laptops. However, experience has shown that most managers continued to refer to the transcripts of the reports included in the meeting.

2. Outputs

Outputs from board meetings include: 1) unpublished notes such as reports of conflicts of interest between senior management and other stakeholders; 2) published reports that are sometimes accompanied by minor questions, such as status or performance reports. The company's finances, 3) the issues discussed and their approvals, 4) request for more information, for example, strategic review.

In case of requesting more information and explanations, this request is usually made for one of two reasons: 1) the information provided is insufficient and 2) the issue in question has a certain complexity. In the case of the former, the request for additional information or explanation is generally specified at the beginning of the discussion and the discussion ends at that stage. But in the second case, the complexity of the issues, the discussion between the members often filled the allotted time, and many managers participated in the discussion. Expert #10 explained how to manage a complex issue that requires additional information and explanation: Effectively form and hire a sub-group so that heavy work is done by three or four people and then any advice or decision before the board discussion and if necessary "Explanations will be adopted."

A number of interviewees focused on the use of subgroups, or as Expert No. 6 described them, as an "ad hoc committee set up for a specific purpose," to help the board draw conclusions. Back to data:

This section expands the collected data by looking at the codes and categories identified in step one of the data collection. This section then examines specific areas of the data set, areas that exist in the initial analysis of the gaps in understanding the theory under study.

4.1.1 Codes and classifications

As mentioned in the previous section, in the first stage of data collection, surveys, observations of board meetings, and holding technical meetings were used. Interviewees included nine board members, ten non-executive directors, four CEOs, three information providers to the board, a board consultant, and an industry and university expert. The observations related to the meetings of the board of directors are a total of five sessions and two technical sessions have been used which have examined specific cases in the interviews and observations. As shown in Figure 2, a summary of the initial polls shows a significant number of iodine codes and classes. During the data collection process, notes are recorded in relation to these codes and categories. These notes are used to categorize concepts and codes, while more notes are written during the sorting process. These notes will be the beginning of the process of identifying the main category and finally presenting the theory. The ultimate goal is to move from code to a conceptual level that defines the underlying issue. Likewise, this part of the analysis of the findings does not pay attention to individual codes or even categories, but to the higher-level conceptualization that is developed in the continuation of the analysis of the findings.

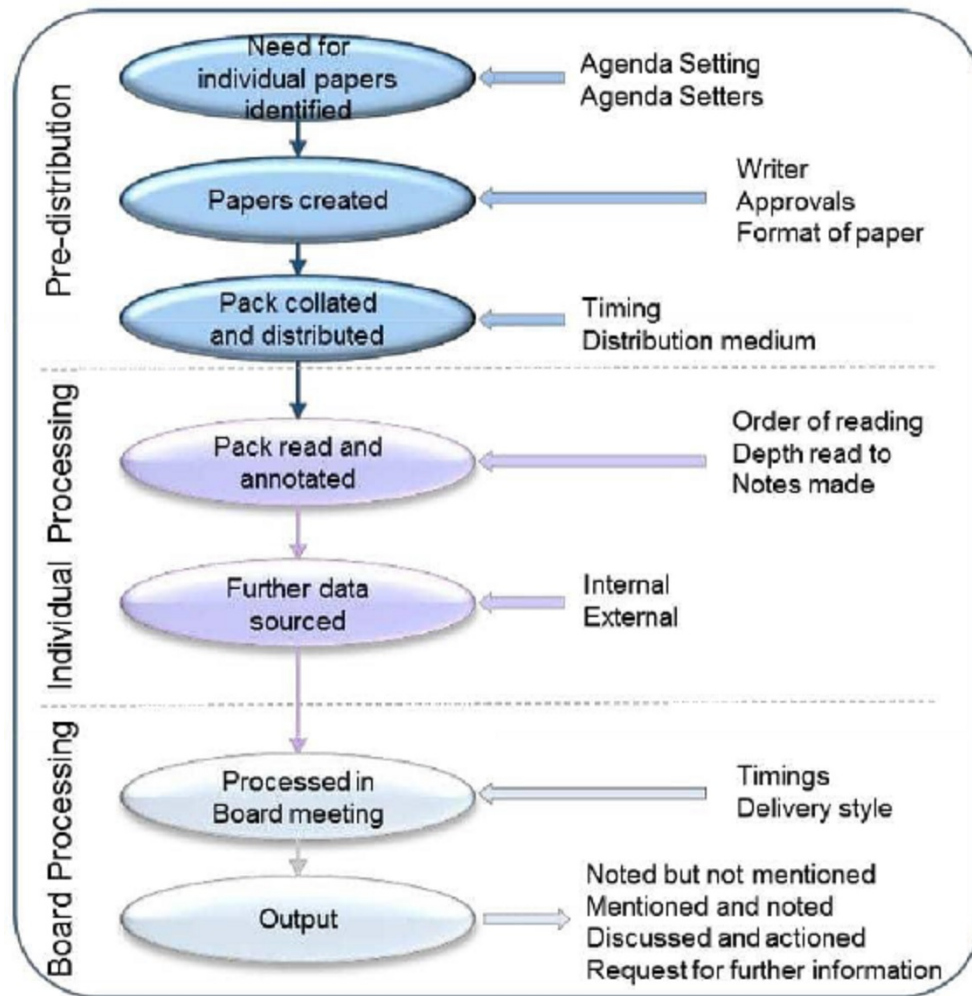


Figure 1: The Journey of a Board Pack with Inputs and Outputs

In the final stages of phase one, storytelling is started using stories and written diagrams. The storyline technique has two valuable features, which are: 1) as a process to develop the theory and 2) as a tool to present the result of the underlying theory. Initially, the story lines were based on a combination of notes and short diagrams, which has evolved.

In the advanced coding stage, gaps were identified in the collected data. Thus, a return to the contextual approach was necessary to examine some of the areas that seemed to underlie the main elements of the draft story. These issues included six specific codes as follows:

Acquisition methods: What effect does technology have on the individual evaluation process in the field of board analysis?

Support Subcommittees: How does the use of permanent and temporary subcommittees affect board processing?

How to study: Does gender difference affect the process of reading the board package?

Chairman's style - Role acceptance: To what extent is the relationship between the CEO and the chairman of the board vital?

Decision-making method: What effect does voting have on the board's processing process?

Heart depends on the role: To what extent does the content of the role affect the level of readiness of the person to play the role?

4.2 Feedback from survey participants

The present report outlines the initial findings of my doctoral research in accounting. The content of this summary report is based on 28 polls, two technical meetings and 5 observations of the board of directors. The polls were conducted with the participation of 9 board chairmen, 10 non-executive directors, 4 executive directors, 4 board advisors and an industry expert. Based on the personality traits of the survey participants, 6 of them were female and the rest were male, and most of the interviewees were in the age range of 45 to 50 years. During the initial stage of data collection, a number of common items were identified that can be classified into three categories: distribution technology, the use of subgroups, and the preparation of board meetings.

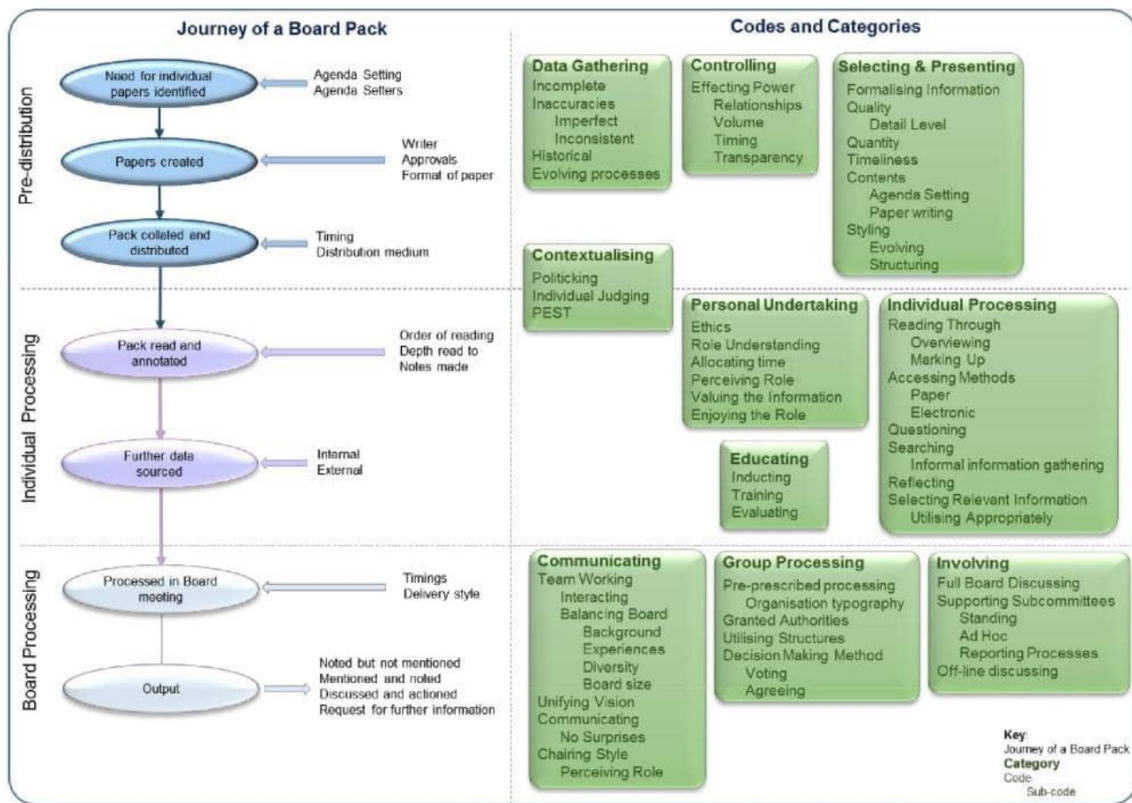


Figure 2: Journey of a Board Pack Overlaid with Codes and Categories

One of the most important industries in the country is the construction equipment industry. Given that our country has a basic need for housing. And the number of building units is increasing every day. Therefore, it is one of the leading industries. The long-term average cost chart of this industry shows that there are economies of scale in this industry and by moving towards the optimal point, costs can be reduced. Production capacity is increasing. The following equation is estimated to estimate the translog cost function for the construction equipment industry.

$$\begin{aligned} \log\left(\frac{TC_{34}}{PK_{34}}\right) &= c(1) + c(2) \times \log(q_{34}) + 0.5 \times c(3) \times \log(q_{34})^2 + c(4) \times \log\left(\frac{PL_{34}}{PK_{34}}\right) + c(5) \times \log\left(\frac{Pm_{34}}{PK_{34}}\right) \\ &+ 0.5 \times c(6) \times \log\left(\frac{PI_{34}}{PK_{34}}\right) \times \log\left(\frac{Pm_{34}}{PK_{34}}\right) + 0.5 \times c(7) \times \log\left(\frac{Pl_{34}}{PK_{34}}\right)^2 + 0.5 \times c(8) \\ &\times \log\left(\frac{Pm_{34}}{PK_{34}}\right)^2 + c(9) \times \log(q_{34}) \times \log\left(\frac{Pl_{34}}{PK_{34}}\right) + c(10) \times \log(q_{34}) \times \log\left(\frac{Pm_{34}}{PK_{34}}\right) \\ &+ c(11) \times \log(T) + 0.5 \times c(12) \times \log(T)^2 + c(13) + c(14) + c(15) \times War + c(15) \times Fall \end{aligned} \quad (4.1)$$

$$Sl_{34} = c(4) + c(6) \times \log\left(\frac{Pm_{34}}{PK_{34}}\right) + c(7) \times \log\left(\frac{Pl_{34}}{PK_{34}}\right) + c(9) \times \log(q_{34}) \quad (4.2)$$

$$Sm_{34} = c(5) + c(6) \times \log\left(\frac{Pl_{34}}{PK_{34}}\right) + c(8) \times \log\left(\frac{Pm_{34}}{PK_{34}}\right) + c(10) \times \log(q_{34}) \quad (4.3)$$

4.3 Distribution technology

The problem is not the use of smartphones like the iPad, but a culture of change (Expert No. 26). The field of technology has provided a change in the board of directors compared to the past. Many interviewees stated that the board package varies from a set of paper reports to virtual content and that many board members use a tablet or laptop to read or refer to the board package. This change in reporting format has enabled the board to be more flexible in convening and directing meetings via Skype, WhatsApp, and audio or video conferencing, resulting in greater membership participation. Despite the possibilities of electronics, tablets, and laptops, people are still accustomed to paper reports that make it difficult to quickly refer to or refer to a particular subject (Expert #6). This indicates that some information providers have not yet fully benefited from the change in technology. Observation of experimental sessions showed that the level of tablet use is more than lip gloss and at the same time less than paper reports. In short, the use of technology is the beginning of a change in the way in which the board of directors has acted as a high level of oversight but has not yet led to a cultural change.

4.3.1 Using subgroups

Utilizing subgroups enables the board of directors to break down the business into different divisions and to reflect more broadly (Expert No. 20). Almost all of the interviewees believed that the board of directors of subcommittees such as the audit committee, the special committee, and the reward committee. These committees are governed by international law. However, describing when the board interacts well with these subcommittees focuses on subgroups, communication, and temporary formation in order to focus on a particular issue. Effective communication between subcommittees and the board of directors takes more than a few minutes to present at the board meeting and requires time to discuss the reports (expertise number 6) and reassurance that a recommendation or decision is based on the discussion. Is the Board of Directors (Certificate No. 10).

The second aspect of sub-committees was the creation of ad hoc groups for specific purposes. As Expert No. 8 has stated: "When If we are going to make a decision in a specific field or we are facing a double challenge, in this case, there is a need to use a small specialized group." "This group increases the ability and flexibility of the board to focus on a specific issue and effective communication, and facilitates the work of the board."

4.3.2 Preparation of the board meeting

The last item is the preparation of the meeting of the board of directors and subcommittees. The preparation process was different based on the polls, so that according to expert number 15, there is no need to review the full details of the board reports, because they have twice studied the board package in the first study and in the second review. Accuracy in special cases. He added that he had conducted a review before the meeting and would have made contacts with the chairman or drafters of the report in order to resolve the ambiguity. This level of preparation is usually common among women who are more careful. The men interviewed commented on the women's photo: "I may not read all the reports word for word (Expert No. 10.) In short, while there is no way for men to describe that no preparation has been done, women They feel the need to feel that they have sufficiently understood the subject and are sufficiently prepared to comment on the board meeting or to participate in decision-making (Expertise No. 16).

4.3.3 Other observations

There have been other notable findings in the initial data collection, including:

- The role of the board of directors is generally the role of a guide for the CEO and a reassuring agent in key areas of the organization.
- When voting methods are used as a decision-making tool, approvals are not mandatory or imposed, and boards are often not inattentive, politically motivated, and unproductive.
- Dependence is a key factor in preparing and involving individuals in the decision-making process.

Garlic in the board package is one of the aspects of information absorption by managers. The other part is the governance of the company in which the managers operate. This section is collected as a result of a one-page summary of information, and based on this, during the second survey, the following items were done and all this data was coded according to the process that was previously specified:

- Three first-round interviewees commented via email on the summary of comments, including experts No. 9, 10, and 18.
- Two first-round interviewees agreed to follow up on subsequent interviews, including the professor and researcher participating in the pilot and expert survey No. 4.
- Three new people were interviewed who were experts number 31 and 32.

Two more technical sessions were held, the first with a management dashboard software provider and the other with an entrepreneur launching a non-executive manager skills sharing project.

4.4 Additional data

In this part of the analysis of findings, issues related to requesting additional information and explanations in addition to the board of directors package, during which items such as evaluation methods - information distribution technology, support subcommittees, study-preparation method, department-understanding style Role, voting and decision-making methods, depending on the role, are discussed.

1. Evaluation methods - information distribution technology

In the first phase of the survey, more than half of the interviewees stated that most of them, or board members, used smartphones, tablets, or laptops in the meetings. Almost all interviewees had the opportunity to receive the reports included in the board package electronically. A number of survey participants also stated that they receive board packages both electronically and on paper.

However, the ability to have a board package in a non-paper format has created problems in itself. As Expert No. 26 states: "The use of virtual communications is not just dependent on the advent of smartphones or other technological advances, but is in fact a cultural change." This cultural shift extends throughout the organization, from board members to the level of information providers. As one information provider put it: "Even simple aspects such as page orientation that are horizontal or vertical should be taken into account when presenting electronic templates" (Expertise 32). However, for most interviewees, the content of board reports, their size, and style have not changed significantly as a result of the transition to electronic versions of the board package. Interviewees identified some positive and negative issues related to technology mixing. Expert No. 30 emphasized that using the electronic content of the board of directors package as an information provider would allow him to send the reports to the board two days earlier because he no longer needed to post and send the shipment. This allowed board members to have more time to read the reports before the board meeting. However, this resulted in an increase in his expectations regarding their level of readiness.

The issue of data security was a major concern for some of the interviewees. For many interviewees, security issues can be resolved using a third-party software solution that facilitates the management and distribution of board reports. As Expert No. 4 in his second interview, one of the reasons for becoming an electronic package software system of the board of directors was to increase data security compared to just sending documents via email. This software is usually in the form of an electronic portal that is hosted in a very secure IT platform. A system where reports are uploaded and administrators can access them remotely. Access is usually controlled through a secure login process (information specialist). Reports are usually accessed via laptop or tablet, and sometimes via smartphone.

For some board members, the use of third-party software has also made it possible to take notes or annotate reports. All interviewees selected from among the board members stated that when reviewing the board's reports in preparation for the meeting, they would write down the views, issues, and questions they would like to ask. Some of the interviewees believed that technology restricts people too much instead of leading to effective communication (Expert #17).

Most of the interviewees believed that having the reports included in the board of directors package electronically and printing specific pages is not in conflict with each other, for example, a set of comparative charts can be reproduced because it is not possible at the same time. In virtual communication, he achieved this possibility and at the same time used the simultaneous explanation of those diagrams (Expert No. 6).

The information expert in the survey, while describing the software that his company provides to the members of the board, noted that in his opinion, information technology has the following advantages:

- Better informed decisions due to better access to information
- Access to more information in the discussion
- Tracking decisions and accessing past records on issues
- Accelerate the decision to eliminate waiting times for a meeting or sending information
- Information distribution efficiency

He further noted that this software allows you to categorize decisions by type (financial and non-financial). The intelligence expert also said that his competing software product stores report by type. This category supports the use of the types of notes used in the board of directors package and the development of the agenda.

2. Support subcommittees - use of subgroups

As mentioned earlier, many boards of directors have defined subcommittees. Under corporate governance law in some countries, these committees are subdivided into special subcommittees on auditing and remuneration. However, these standing committees are not the only sub-categories found in the management structures of the board. When specific or complex issues are presented to the board, setting up an "ad hoc" committee to look into the matter in more detail is usually for a subset of board members, often supported by executive members. This particular issue may involve strategic review, major investments, or other significant decisions at the board level.

Interviewees were asked to describe a time when the board worked well together. A common theme in the responses can be summarized by quoting Expert No. 7 below: "They ate or there was a fundamental issue that needed to be discussed with the board and it reflected the results to the board." This was one-third of the interviewees selected from among the board members.

Expert No. 10 believed that the interim groups would allow "if a problem is serious to be considered by three or four people." The people involved were usually a mix of executives and non-executives, sometimes joined by subject matter experts from within or outside the organization. Experts No. 3 and 16 described the ad hoc committees as ad hoc groups formed for a specific purpose and disbanded after the board agreed on a solution. In all cases, the interviewees considered the description of the creation of temporary groups to be related to the existence of a large and complex problem, which usually involves several actors and solutions.

Overall, respondents rated the establishment of temporary subcommittees for the board as positive. However, a negative example of the use of subcommittees by Expert No. 7 was cited. He was an example of the formation of an ad hoc committee to appoint an organization outside the organization to do some work and did not have the necessary efficiency. After reflection, he felt that this was due to the lack of "direct involvement" of the board because, although they had regular reports, there was no formal discussion between the board members and the interim committee.

3. Method of study - preparation for the board meeting

It seems that in the early stages of data collection, there is a difference between how male and female interviewees prepare for board meetings. In the second phase of the survey in this study, this case was further investigated and it was noted that the sample sizes are not large enough to generalize the results.

In general, the preparation process was different for each interviewee. Expert No. 15, for example, described his approach to the reports included in the board package as follows: "I think a little different. I'm normal because I read every report twice. I read all the reports twice, the first time I read each report more quickly, but the second time I review the content and pay more attention to details. "If I want to publish a report, it is an agenda report, and I usually make notes of the reports I read."

In contrast, Expert No. 10 stated: "Since the formation of the subcommittees of the board, the size of the board package has decreased. However, I read the reports included in the board package a little selectively. At the same time, I have to make sure that I have reviewed all the reports and the reason for their use and their purpose, but I may not literally read them word for word. "I choose things that I think I should question or challenge." "There may be reports that I feel I need to spend more time reading and reviewing again," he continued.

Regarding the readiness to attend the meeting of the board of directors, expert No. 22 stated: "If someone has not really read the reports included in the package of the board of directors, it is better to acknowledge this in the meeting, otherwise he will express his views. "It shows that he has not read the reports." In this regard, expert No. 18 noted that he took the time to read the reports included in the package of the board of directors. Similarly, Expert No. 17 stated, "You need to plan to read the reports, you need to know when these reports will reach you, and you may not be able to plan to read them all because of time constraints. "Do not review the reports. In this case, you have not considered your ethical duty to the organization and the aspect of fairness." During the second phase of the interviews, Expert No. 18 strongly emphasized the gender distinction in how the board members were prepared. In addition, Expert No. 32 had intuitively sensed this fact. In contrast, experts

No. 4 and 30 both interviewees stated that the gender of the board members did not have a significant effect on how they were prepared.

Expert No. 1, who was a professor and researcher at the same time as an experienced person in this field and was surveyed in a pilot survey, in connection with the details of the concept of "irritant syndrome" as a potential explanation of gender differences in how Member preparation, discussed. "Irritant Syndrome" is a condition in which a person does not believe that he or she deserves credit for his or her success and attributes his or her success, for example, to luck rather than personal intelligence and abilities [22]. In general, people suffering from this syndrome are afraid that they will be considered inappropriate for their role, and in this case, they will be known as a swindler or swindler [24]. This syndrome is more common in women and undermines their self-confidence [27]. One of the methods used in connection with patients with this syndrome to overcome feelings of anxiety and low self-esteem is: "Advice to try harder and work harder and plan better to prepare yourself" [29].

4. Leadership style - role perception - guidance

Expert No. 22 stated: "One of his main roles as the Chairman of the Board of Directors is to establish a close, effective and reliable working relationship with the CEO of the company as the Executive Director and a member of the Board of Directors. Therefore, in the shadow of this role, He feels that he can share his concerns with me and talk to me about the company's problems and issues. "His mind wanders, even if it is not for exchange, and only to talk to me so that I can be informed."

Expert No. 26 stated that: "A significant part of his role should be given to the CEO." Expert No. 27 had a similar point of view, stating: "The role of guidance and coaching of the CEO can be accepted in the case of the chairman of the board." The role of guidance and guidance of the board of directors in relation to the CEO was emphasized by all interviewees who participated in the survey, who held one of the responsibilities of the board of directors or CEO.

Expert No. 27, based on his previous experiences, pointed out that the relationship between the CEO and the Chairman of the Board was not of the desired quality. He explained: "Eventually the chairman of the board was completely isolated and the board was weakened and I think the result was a completely inefficient situation for us. "We usually asked the chairman to resign and pave the way for a new chairman who could do a good job."

Expert No. 4, during the second phase of the survey, emphasized the guiding role of the board of directors as the main aspect of the relationship between the board and the CEO, saying: "It was never a surprise to us that if either the board or the CEO "They were trying to come up with something out of the ordinary, and they knew it was going to happen." Given the perceived importance of the role of the board of directors in relation to the CEO, it is surprising that little scientific research has been done in this area.

5. Decision-making method

Voting in the meetings of the board of directors is divided into two categories It can be said that: 1) The decision is made in cases where there is no clear consensus or formal approval of the agreed decision. 2) It is usually a procedure and is often related to issues such as approval of minutes and approvals. The first case is very rare and in this regard, expert No. 9 stated: "Voting in the board of directors is not general and takes place occasionally. Usually in board meetings, voting is used when deciding on the issue. "There should be a dissenting opinion, in which case a vote is needed." "There was an issue of concern to the chairman of the board and he tried not to comment. He did not want to vote and we tried," he said, citing an example from his own experience. "Everything was in order, and the only vote we got was that the rest of us voted for him to get the company in order before a crisis arises."

As these two examples show, using voting as a decision-making tool is complex. In most interviews, the purpose of the voting was to use a participatory decision-making process through which all board members agreed on the outcome. However, sometimes voting is necessary and the goal is to reach a consensus or unanimity (Expert No. 13). In this regard, Expert No. 31 stated: "Honesty is the last resort, you want all the members of the board to consider an issue and reach a consensus, in which case you should challenge them in this regard."

6. Heart depends on the role - engagement

Expert No. 26 stated during the survey that depending on the role and enjoying this role is an important part of a board member's share in this supervisory pillar. "His former board of directors was largely made up of veterans and people who had been members of this supervisory body for eight years," he said in an empirical testimony. They were bored by the board and they felt that they were not really enjoying themselves, so during the recent meetings, the board members did not participate in decision-making and like-minded as before, so their presence was almost like "It's boring and so they need to change."

Expert No. 31 adds in this regard: "The cold-heartedness of the board members can return to the dynamism of the group and playing a role in this field. Because if the board has a chairman who only says I do not want what others say The situation will be frustrating and heartbreaking, so people will be in a desperate mood and will not enjoy playing a role on the board. "They will not enjoy the role. If the board is in a way where the

members do not respect etiquette and respect, which I think is very important in the board, no one will enjoy being on the board.”

In addition, Expert No. 31 states that enjoyment is related to understanding the role, and if you understand the role correctly, you will do the preparation activities to make the process an enjoyable experience. Participation in board processes is associated with the need to feel important and involved in value creation by the individual [30]. In this regard, Virtanen [32], during a study showed that women enjoy being on the board because of the opportunity to exercise power, compared to managers.

5 Discussion and Conclusion

This article tries to show that information transparency can affect corporate governance practices and explain the interaction of governance mechanisms. The main purpose of this study is to investigate the nature of the relationship between corporate governance and transparency of financial information on the one hand and the interaction of corporate governance mechanisms on the other. Due to the lack of theoretical foundations and sufficient research on the relationship between information and corporate governance, the main question in this research is: How to interact between risk and the complexity of the board as one of the main pillars of corporate governance in the organization and information? It is assumed that corporate governance affects the transparency of financial information and transparent financial information, in particular, can change the company’s management practices. This research has been done based on the field research method and is one of the few studies that has explained the complexity of the board’s interaction as a pillar of corporate governance with information based on field theory.

Interviews and observations confirmed the growing trend of using technology in board meetings. This result is consistent with the “gray literature”. Items such as business publications and cases where there is a wide-ranging discussion about the use and value of technology in the boardroom, especially in terms of costs [18, 34]. However, a review of the research literature shows that relatively little scientific research has been done on how technology affects board members and its role in improving corporate governance. Abraham [1] claims that information technology enables and supports corporate governance processes. He showed that information technology can strengthen four aspects of decision making, which are: 1) collection, 2) storage, 3) manipulation and 4) information transfer. In addition, Carver [6] concludes that given the complex information needs of a corporate governance system, information technology can provide effective support.

The use of formal subcommittees in academic and non-academic literature is well-documented [8]. Many regulations or bylaws recommend or authorize the use of designated subcommittees [10]. In addition, Frewer [12] stated that the use of subcommittees facilitates the “optimal use of time and expertise” of board members. In a study, Hillman et al. [15] found that subcommittees in the board structure create information asymmetries among board members. This is evident in the interviews by referring to the ad hoc committee’s obligation to have a clear structure and boundaries for responsibilities, as well as agreement on reporting processes. In summary, the use of ad hoc committees seems to be a significant and common tool in the day-to-day management of board processes. They provide a way to improve the effectiveness of the boarding process. Respondents highlighted three main aspects regarding the effective use of temporary groups, which are:

- This issue should be high and time-consuming and make the standard boredom of the board meeting out of practical boredom.
- This issue should be about complex issues to study the issue and identify different solutions.

The Interim Committee should have a clear description of its responsibilities, decision-making powers, and reporting process.

Zou et al. [35] based on the findings of their research stated that: “The relationship between the board of directors and the CEO in the form of playing a guiding role is vital.” The people who took part in the survey stated that there should be an intimate relationship between the chairman of the board and the CEO. Respect, understanding the mutual roles and boundaries of the two roles, and understanding each other’s work style have a positive effect on the effectiveness of the board. However, Cadbury [5] concluded in a study that this relationship is vital but should not be completely exceptional and distinct from the relationship with other board members. It is important that all parties work well in their roles. Orna [26] in his study of the open and secret ballots in the board of directors conducted research and concluded that in public voting, that is, where managers see how others vote? Directors are likely to vote by a majority, even if their information leads to another vote from another member. Likewise, voting

may not provide an effective decision-making tool. However, some of the board management software discussed in the technical meetings facilitates the voting platform based on the possibility for members to make timely decisions before leaving the board meetings. Additional data sets provide clarity for many key topics for interviewees. Interviews and follow-up sessions provided a more accurate understanding of the impact of the six key areas on their understanding and approach to their role. Thus, at this stage: "All categories of concepts discussed in explaining the theory are well developed in terms of characteristics, dimensions, and variations. Gathering and further analyzing information does not create anything new in conceptualization, although it always does. Changes can be detected in the restrictive review process" [25]. Survey data identified some of the key topics for interviewees. However, the interviewing experts find themselves in a complex environment with internal and external pressures on how to perform their tasks.

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