

INTERNAL CONTROL GOVERNANCE AND AIS: UNDERSTANDING AND RESOLVING USER DILEMMAS

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Received: 17 July 2024

Accepted: 22 September 2024

ABSTRACT

This study aims to explore the dilemmas faced by users of Accounting Information Systems (AIS) in the context of internal control governance (ICG) within an organization. The study on user's dilemma in AIS and corporate governance internal control (CGIC) can help to understand how organization could un-anxiously unburden the hostile requirements. Thus, this will further give a balance understanding and a guide for establishing elastic and manageable internal control policies for AIS and its users. The systematic literature review (SLR) applies conventional principles after identifying and evaluating all the related data and information to include in this research study. These research study pragmatically derive and deployed the premise of existing literature to identify the concepts of user dilemmas in AIS. This was done by focusing on the key areas in AIS, ICG, IT governance (ITG), corporate governance (CG) and users' dilemmas in AIS. Through formulating research question and developing the approach, this research systematically and explicitly extracted the data gathered and those selected data then served as the primary filters for inclusion. The findings reveal that AIS users frequently encounter dilemmas in executing their roles and responsibilities, particularly ethical and process-related dilemmas, within the broader context of internal control governance. This study is important as it ventures into a very scanty research environment the like of user's dilemma in AIS and CG internal control. The entrance of this research, set a new domain to explore and research as there are few or limited work done in this research area.

Keywords: Accounting Information System (AIS), Corporate Governance, Internal Control & Users Dilemma

1.0 INTRODUCTION

The secret to a successful organization's financial forecast in today's dynamic environment is a balance of several elements in accounting information aspects. This accounting information aspect includes but not limited to CG policy, strategy, internal control policy on data security, and AIS tool. Corporate governance is the influential/ dominant factor that plans the control mechanism for deployment of AIS tools through many policies embedded in the IT of the organization. Corporate governance is in a constant state of stroll on how corporate governance policy could boost or facilitate users' effectiveness in performing their day-to-day task with leverage liveness to initiate, optimize limited time and resources hinged on accuracy of deployed data (Kasasbeh, 2017). These policies are not limited to how tasks are performed

but extend to different environment and circumstances in which these tasks are performed while upholding integrity of data & information security.

The complexity and ambiguity of governance or corporate governance revolves around the new mode in which organization incorporate or deploy their policies. This research follows in the trend of other emerging literature in examining the balance in organization internal control policy on data security. These policy serves as a hybrid characteristic derived from processes that blend with complex and challenging corporate governances' policy in organizations. Corporate governance is binary structure with policies, rules and practical processes use in pioneering the affairs of an organization (Tucci, 2021). In the same context, Internal controls governance are policies or practices used by an organization to guarantee that it meets its strategic goals, makes efficient use of its resources, and relies on accurate information when making management decisions.

Regardless of the environment and circumstance on which AIS and AIS users might operate in, financial reports and data extract from AIS are sacrosanct to accuracy, credibility, objectivity, and integrity (Ali et al.,2017). This mechanism and its functionality will pioneer a high level of trust in corporate governance by focusing on its fundamentals and principles as an organization. Nonetheless, for AIS users to fully harvest the proficiency of their office and daily task, there are sets of guidelines and rule in which they must operate in. Users operate within a secure environment known as internal control which is bind by rules and regulations of corporate governance policy implemented through the IT team. Thus, this research seeks to explore the internal control governance mechanism that cause dilemma to AIS users by identifying the factors that influence AIS user's dilemma in internal control governance in AIS within business organization. Similarly, to identify the mechanism in internal control governance obligatory for AIS users and to identify the dilemma in internal control governance that affect AIS user's performance.

However, the more complex the policies are, the more AIS users such as accountant, account manager, etc. are faced with complex and time-consuming approach for manoeuvring through the tough internal control mechanism in deploying their daily task (Tucci, 2021). AIS users are within the crossroad of indecision (dilemma) either to circumvent the process or abide by the rules. Thus, there is a need to explore more on the dilemma that AIS users face while using the AIS tool within the boundary and rules of corporate governance policy for data security. The tendency to subvert ethical standard of the profession or the stringent and tight internal control rules is the sole decision of the user. AIS user will often face this dilemma when completing a given task within a given period of time for organization with tight deadline for departmental reporting. AIS user may struggle in these circumstances when the corporate governance policy and internal control elements or policy meet at the crossroad of indecision where user is face with the choice either to undermine the process or to abide by the rule. AIS user decision or judgement, will largely depend on ensuring that all accounting activities can be handled effectively while upholding integrity that is in-line with our universal human right of choice and abiding by internal control governance and policies.

The structure of this research begins with a discussion of the literature on the concepts of internal control governance and Accounting Information Systems (AIS). This is followed by a detailed explanation of the methodology, a presentation and analysis of the findings, and concludes with a final summary and conclusion.

2.0 LITERATURE REVIEW

2.1 Corporate Governance

The word "governance" has undergone some changes in colloquial expressions because of its frequent use in so many languages. According to McGrath & Whitty (2015), the term

“governance” has many definitions, ranging from the specialized to the general. The term “governance” typically refers to a set of regulations under which many entities carry out various tasks to ensure the effective operation of various departments (McGrath & Whitty, 2015). Examining different definition of what is corporate government, the definition cited by Investopedia on their financial website, describes corporate governance as the classification of relationships, well-defined by structures and processes. In summary, corporate governance is a binding structure with policies, rules and practical processes use in pioneering the affairs of an organization which are refer to as organizing policy on which corporate governance derived its function as policy maker.

2.2 Corporate Governance Policy

Corporate governance policy provides a framework for an effective governance of IT to assist those at the highest level of organizations to understand and fulfil their legal, regulatory, and ethical obligations in respect of their organizations’ use of IT (ISO/IEC 38500:2008). Corporate governance policy serves to safeguard and boost the shareholders’ interests by setting strategic direction, appointing and monitoring management to achieve set goals. Policy is an essential element for the success of any business. When this key governance mechanism is missing, it can lead to ineffective or total failure of a business (Walker, 2009). According to Alie (2015), in terms of the guidelines, processes, roles, and responsibilities assigned during the decision-making process, the governance structure establishes the foundation for project management. The project governance keeps the project under control, enabling it to proceed smoothly and as planned (McGrath & Whitty 2015). Good corporate governance comprises a framework that are put in place to get the utmost value for all shareholders legally, ethically, and sustainably (Mrabure et al., 2020).

The role of governance in every organization is to plan policies and regulate action or inaction of every department for credible profitability. According to Tucci (2021), governance includes not just the institutions that control and run an organization, but also the procedures that hold the organization and its members accountable for their actions. Governance includes administration, compliance, risk management, and ethics. They predicate an effective company leadership and management on sound corporate governance (Tucci, 2021). The boards of directors are the primary authorities in charge of overseeing corporate governance. Shareholders are ultimately responsible for selecting directors and auditors, as well as establishing a successful governance framework (Lynn & Suraj 2019). Besides reporting on shareholder stewardship, the board defines strategic goals, providing leadership to accomplish those goals, managing the company’s administration, and managing the company’s finances. Corporate governance is mostly concerned with how a company’s board of directors decides on the general rules that will guide the company’s actions (Littlewood, 2020). By creating a systematic rules and policy in segregation of duties of each employee, it’s helped an organization to operate effectively and efficiently. Furthermore, corporate governance putting IT governance in place to align with organization goals which was designed to be a useful tool and to bridge the critical gap between technological issues, business risks, and control requirements.

2.3 IT Governance

ISO 38500 defines IT Governance as *“The system by which the current and future use of ICT is directed and controlled. It involves evaluating and directing the plans for the use of ICT to support the organization and monitoring this use to achieve plans. It includes the strategy and policies for using ICT within an organization.”* (Calder, 2019).

IT governance is a subset of corporate governance that consists of leadership and organizational structures and processes that ensure that an organization’s IT supports and enhances the organization’s strategies and goals. IT governance relies on the structure of relationships and processes to guide and control an organization to achieve organizational

goals through value creation while balancing the risks and rewards of IT and its processes (Sarah, 2019) Governance in general is a set of responsibilities and practices exercised by the Board and Senior Management to provide strategic direction that guaranteeing the achievement of goals and objectives. When organization goals and objectives are achieved, the board can ascertain appropriate risk management to ensure organization resources are used dutifully. The policy of governance vested on through IT governance with the overall objectives to understand the issues and the strategic importance of IT. In general, controls are the policies, procedures, practices, and organizational structures that are designed to provide reasonable assurance that business objectives will be achieved. By this, the organization is able to ensure that undesired events will be prevented, detected and corrected (Kirkpatrick, 2019).

2.4 Accounting Information System (AIS)

With the growing innovation and threat to information security in the cosmopolitan IT world, AIS is gaining an indisputable solid presence and dominance. These create vacuum that must be close for the current business practices to thrive for much faster decision-making process, as many organizations must manage their day-to-day receivables and payable cash flow (Trabulsi, 2018). According to Romney and Steinbart (2006), *“One basic function of an AIS is to provide information useful for decision making. In order to be useful, the information must be reliable, which means: (a) it provides an accurate, complete, and timely picture of the organization’s activities. (b) it is available when needed (c) The information and the system that produces it is protected from loss, compromise, and theft”*

Financial and economic challenges can be managed and controlled more effectively if AIS is incorporated into IT systems (Trabulsi, 2018). The development of a more resilient corporate culture in the face of ongoing environmental change will be aided by increasing AIS investment, educating employees, and improving product and internal process quality. Improved corporate performance reduced organizational and financial barriers; and increased access to capital markets are all results of innovation (Shazalina et al., 2015). AIS effectively detects, collects, saves, manages, and delivers accounting data as an integral component of corporate processes (Ndagijimana, 2016). The accounting component of an AIS enables businesses to send data and information to internal and external partners, as well as to administer procedures such as asset protection and individual actions. AIS is very important in making sure that an organization utilizes the capital provided by investor, to run a smooth business that generate profit and build confidence and support to attract more investors through utmost service delivery (Trabulsi, 2018). Businesses and government agencies are interested in AIS, but policy and governance challenges can be both a road map to success and a roadblock.

2.5 Accounting Information System Component

The sole purpose of this AIS system, which is illustrated in Figure 1 below, is to facilitate reporting and decision-making on the part of organization to investors, regulators, and other parties. When it comes to investing, buying, engaging business with contractors, and hiring employees, practically every facet of AIS has ethical repercussions. As a result, the information extracted from AIS for the purposes of decision-making is not independent from the corporate governance but rather interconnected with it. The mechanisms of “Control” that exist within an organization will be the primary focus of this study.

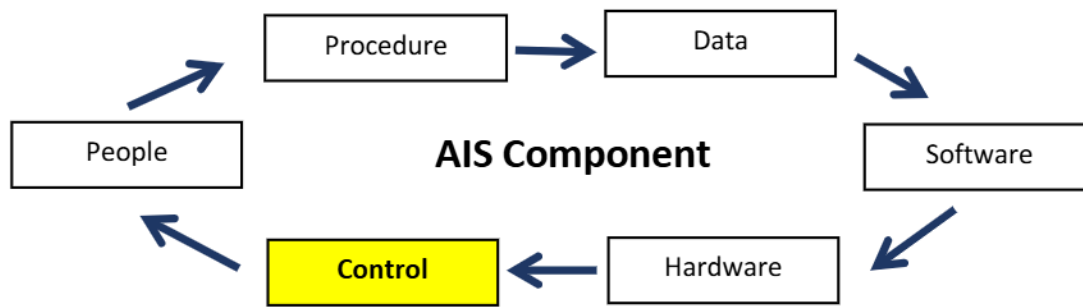


Fig. 1 AIS Primary Component (Source: *Introduction to Accounting Information Systems (AIS)* by Fontinelle (2021))

Control mechanisms that aid in the execution of management direction include rules and processes. They are accountable for a variety of responsibilities, such as job separation, asset security, operational performance evaluations, approvals, authorizations, verifications, and reconciliations (Ndagijimana, 2016). The aforementioned procedures should be followed by management and personnel to ensure internal control mechanism function as design with balance policy that has relatively flexibility to avoid time constraint (Trabulsi, 2018). In this situation, the corporation may stipulate that only one worker per shift is permitted to operate a cash drawer (Gordon, 2022). One person per cash drawer is the proper control action in this situation. An AIS must be set with internal controls to restrict computer access to authorized users, who may or may not be workers. In addition, it must prevent restricted-access users from illegally accessing files.

2.6 Internal Control in Accounting Information System

Internal control in accounting information systems (AIS) refers to the policies and procedures that are put in place to safeguard financial information and assets, prevent fraud, and ensure compliance with laws and regulations (Romney et al., 2021). These controls are designed to help organizations achieve their financial and operational goals by minimizing errors and mismanagement, and promoting efficiency and effectiveness.

Accounting information systems contribute to the improvement of a company's internal control structure. When it comes to developing internal control systems, the COSO framework is a good example. In the field of internal control, this framework is widely accepted as the gold standard, and it has been included in the policies and regulations that govern the practice of internal control in organization. The control environment, information communication, monitoring, risk assessment, and control actions are all elements of the COSO framework. According to Kirkpatrick (2019), the goal of the control environment is to make sure that all of the organization's processes meet the standards of the industry. This may aid the efficient functioning of the organization for profitable business profile. According to David, (2018), if a company can show that all of its business procedures adhere to industry standards, it may be able to reduce its legal exposure. Additionally, the control environment may improve a company's compliance with regulatory compliance criteria. Risk assessment and management, also known as enterprise risk management, assumes that risk is an inherent part of corporate operations (Li et al., 2020). However, these risks may sometimes result in undesirable results for a business. As a result, organizations typically adopt risk management strategies to help them identify risks and reduce or eliminate those deemed to be a threat to the organization's health (Kirkpatrick, 2019).

Risk management and control responsibilities are interdependent. Essentially, they are internal controls intended to guarantee that business processes are managed in a way that allows an organization to fulfil its business objectives without incurring extra risks (Li et al., 2020). Compliance with legal duties, ethical ideals, and established industry standards is ensured through the standardized management of internal and external communications

(David, 2018). Characteristically, firms in the private sector create privacy policies that dictate how customer data may be used. At least one internal auditor is tasked with verifying that workers adhere to authorized internal controls (Ann, 2019). Typically, an external auditor will assess the regulatory compliance of publicly traded companies and audit findings are regularly reported to the board of directors (Ann, 2019) to portray the transparency of internal control governance.

2.7 Users Dilemma

The root connotation of ethics is to understand how human behaviour affects the well-being of others within the organization (Ron & Rahul 2010). Nonetheless, user is face with two pragmatic dilemmas of choices. In many ways, both choices posed a tremendous stress for users while performing their daily task. This dilemma faced by users are dilemma associated with ethics of the profession and the process that users have to go through to undertake their daily task which are ethical dilemma and process dilemma. These dilemmas are complicated and laborious in nature as it deals with both internal control in AIS, internal control in IT and internal control in corporate governance policy. And also, time consuming in practical term for user who has to face all this complication with high expectation for work performance from the organization governing body 'corporate governance', board of directors' as-well-as shareholders, regulators and etc.

2.7.1 Ethical dilemma

Is the indecision of options where users is faced with the choice to choose either to perform their task within the bound of ethical judgment or human judgement. In the other hand, the stringent internal control governance thus place user within the confined of the AIS tool and IT governances that rule on CG policy (Iwejor, 2017). The crossroad of indecision where an ethical issue infringes on universal human rights. This concern refers to the organization's expectations about the deployment and utilization of AIS tools within a permissible time-frame by AIS users and other business professionals (Alles, 2020). It is significant to understand that, internal control governance is one of the major elements on which corporate governance policy is hinge upon for operational dependency. According to Tucci (2021) governance comprises policies that hold both the organization and its members accountable for their acts as well as the institutions that govern and manage an organization. Administration, compliance, risk management, and ethics are all parts of governance or CG incapsulate into these three cores; Governance, Risk management & Compliance (GRC).

2.7.2 Process dilemma

Every organization policy is centred on ensuring efficiency, security of information and ensure all data used in every work process is secured. By-passing certain internal control in an organization is tantamount to fraud and brings along penalty or punishment. Users with deadline in work schedule will be stressed out when he/she is faced with any glitch or breakdown of the internal control set-up. It is informative to know that internal control governance is the sole duty of IT governance in any organization. Certain work cannot be cried out in most case of server breakdown or glitch. Financial reporting in any organization depends largely on the data retrieve from the AIS and once there is a glitch within the timebound of this reporting users is faced with the dilemma in reporting any financial information outside the boundary of the AIS system as it stores and carries all historical data in order to generate financial reporting. Interaction of CG amongst AIS user is neither simple nor predictable as there are structural and operational challenges to deal with in their daily task (Ron & Rahul, 2010). In order to protect the assets of an organization within the purview of corporate governance policy, it is crucial to understand that internal control in AIS and internal control governance are all components of IT governance (Sarah, 2019). Thus, most complex governance polices creates complications for different hierarchy through the IT department to AIS users (Romney, 2006).

The diagram shown in figure 2 is the proposed framework that this research will adopt as it shows and demonstrate dilemma faced by AIS users in Internal control governance within an organization while using AIS tools. The deployment of complicated and tight internal control systems generates extra complications for AIS users which tremendously have impact on user performance and productivity. Vahideh (2013) argued that organizations face a number of trade-offs in mandating internal control, including for trade-offs between efficiency and flexibility, and trade-off between specialization and adaptability. This trade-off theory balances the need for strong controls with the need for flexibility and efficiency, as well as the factors that influence this trade-off.

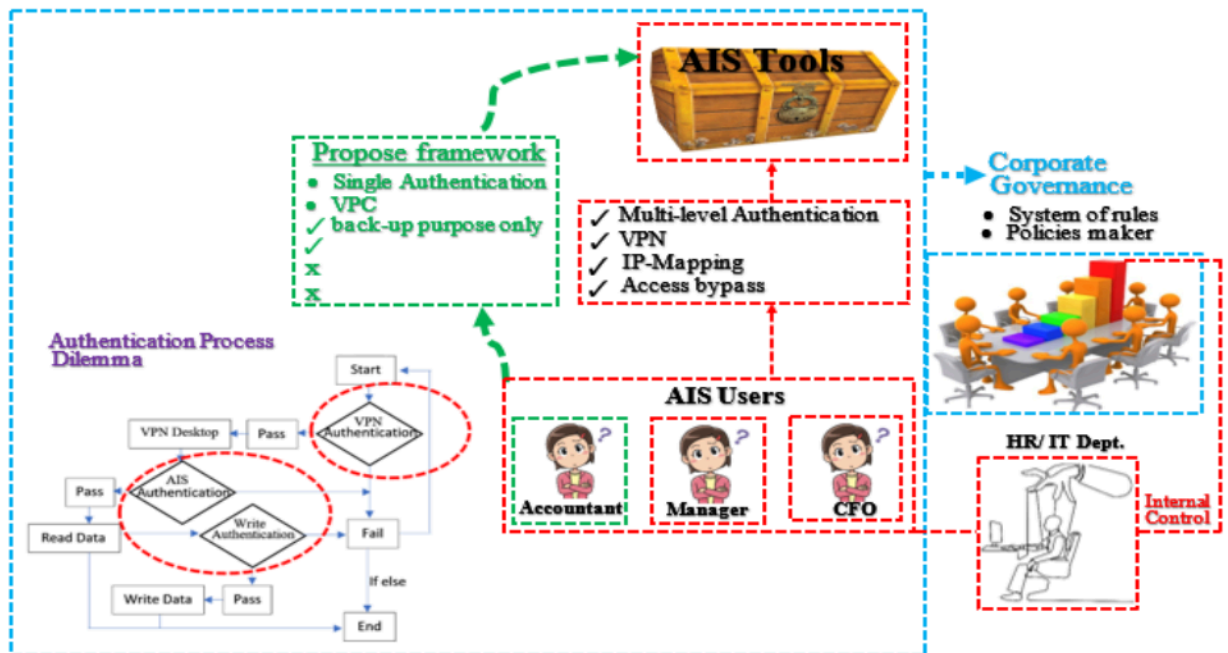


Fig. 2 Corporate Governance Internal Control Proposed Framework

3.0 METHODOLOGY

The systematic literature selection process formed the foundation of this research, ensuring that only high-quality and relevant sources were included for analysis. The systematic literature review (SLR) process for this research began with defining the key areas of focus. An extensive search across academic databases like Scopus, Web of Science, and Google Scholar was conducted using relevant keywords. The screening process involved an initial review of titles and abstracts, followed by a full-text analysis to ensure alignment with the research objectives. Data was then extracted based on authors, findings, methodologies, and theoretical frameworks, which were categorized by themes such as AIS, governance, and user dilemma. This step was critical to ensuring that the study incorporated a diverse range of perspectives and insights, drawing from various disciplines such as management, business, accounting, and information systems. In order to maintain the relevance and rigor of the literature review, specific criteria were established to guide the selection of sources. Table 1 represents the step-by-step process of conducting the systematic literature review for this research.

Table 1: Step-by-step process SLR

| SLR Step | Description |
|----------------------------------|--|
| 1. Define Focus Areas | Key areas include Accounting Information Systems (AIS), internal control governance, IT governance, corporate governance, and users' dilemmas. |
| 2. Establish Criteria | Inclusion: Peer-reviewed journals, authoritative books, studies within the last decade, and relevant to AIS and governance. Exclusion: Non-peer-reviewed or irrelevant studies. |
| 3. Search for Literature | Extensive searches conducted across databases such as Scopus, Web of Science, and Google Scholar using keywords related to AIS, governance, and users' dilemmas. |
| 4. Screening Process | Initial screening of titles and abstracts, followed by full-text analysis to ensure studies align with research objectives. |
| 5. Data Extraction | Data extracted based on authors, key findings, methodologies, and frameworks. Focus on themes like AIS, internal control governance, corporate governance, IT governance, and users' challenges. |
| 6. Analyse and Synthesize | Studies categorized by themes; findings compared to identify trends, gaps, and perspectives on AIS and governance-related issues. |

Upon identifying the key focus areas for this research, the subsequent steps involved establishing the inclusion and exclusion criteria, followed by a comprehensive literature search. Table 2 provides an overview of the established criteria and a summary of references related to users' dilemmas in internal control governance within Accounting Information Systems (AIS). The key areas of interest identified are discussed.

Accounting Information Systems (AIS)

The research prioritized literature that addressed both the theoretical foundations and practical applications of AIS, including studies on how AIS supports financial reporting, decision-making, and internal control processes. Key sources included journal articles such as *Australasian Accounting*, *Business and Finance Journal* and *Journal of International Review of Management and Marketing*.

Internal Control Governance

Sources related to internal control governance within AIS were carefully selected to explore the mechanisms and frameworks used to manage and monitor accounting systems. References such as Romney et al. (2021) and Li et al. (2020) were instrumental in providing insights into the challenges and solutions in governance structures.

Corporate Governance and IT Governance

The literature on corporate and IT governance, including works by McGrath & Whitty (2015), Walker (2009), and Calder (2019), contributed to understanding the broader governance issues that intersect with AIS. These studies, drawn from sources like the *International Journal of Managing Projects in Business* and *Handbook of TechTarget*,

provided context for how governance policies influence the implementation and operation of AIS.

Users' Dilemmas

Addressing the users' dilemmas required selecting literature that focused on the challenges faced by AIS users in ensuring effective internal control. Studies such as Ron and Rahul (2010) and Alles (2020) were pivotal in exploring the complexities users encounter, such as conflicts between operational efficiency and control requirements. This research employs a literature review as its primary methodology to explore the concept of users' dilemmas in internal control governance within Accounting Information Systems (AIS).

Table 2: Summary of references for user's dilemma on internal control governance in AIS

| Criteria | References | Sources |
|-----------------------------|--|--|
| Corporate Governance | McGrath & Whitty (2015), Kasasbeh (2017), Lynn (2019), Tucci (2021), OECD (2014) | International Journal of Managing Projects in Business, Journal of International Business Research Vol. 10, Magazine Article of Harvard Business Review, Handbook of TechTarget, Book of Risk Management and Corporate Governance. |
| Corporate Governance Policy | Walker (2009), Alie (2015), McGrath (2015), Mrabure et al.,(2020), Littlewood (2020), Tucci (2021) | Book of A review of corporate governance in UK banks and other financial industry entities, Paper of Project Management Institute, International Journal of Managing Projects in Business, Vol. 8, Journal of Beijing Law Review, Vol.20, International Encyclopaedia of Human Geography, 2 nd Edition, Handbook of TechTarget, Magazine Article of Harvard Business Review |
| IT Governance | Walker (2009), Calder (2019), Kirkpatrick (2019), Sarah (2019), Mahanti (2021) | Book of A review of corporate governance in UK banks and other financial industry entities, Book publication of IT governance Publishing ISO/IEC 38500: A pocket guide, second edition d oi ISBN13:9781787781696, Blog of Kirkpatrickprice.com, Article of IT Leadership, Journal of Data Governance and Compliance. |

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|---------------|--|---|
| AIS | Shazalina et al. (2015), Ndagijimana (2016), Ali et al. (2017), Trabulsi (2018), Marshall (2021) | Journal of Procedia Economics and Finance, Vol.31, Research paper of The Use Of Accounting Information System In Evaluating The Company , Australasian Accounting, Business and Finance Journal 11, Journal of International Review of Management and Marketing, Book of Accounting Information Systems, 15th Global Edition. |
| AIS Component | Ndagijimana (2016), Trabulsi (2018), Fontinelle (2021), Jason Gordon (2022), Tucci (2021), | Article of International Review of Management and Marketing, Articles of Professional Education, Article of The Business Professor, Handbook of TechTarget, Magazine Article of Harvard Business Review. |
| ICG in AIS | Romney et al., (2021), Li et al. (2020). Kirkpatrick (2019), Ann (2019), David (2018), | Journal of Accounting Literature, Vol. 42, Blog of Kirkpatrickprice.com, Book of Accounting Information System 15th ed, |
| Users Dilemma | Ron & Rahul (2010), Almasarwah (2015), Iwejor (2017), Alles (2020), Vahideh (2013) | International Journal of Digital. International Journal of Digital Accounting Research, Vol. 20. Journal of Business and Economics, Walden Dissertation and Doctoral Studies, Strategic Management Journal. |

4.0 FINDING

The findings, based on key areas identified in the literature, reveal that users of Accounting Information Systems (AIS) frequently encounter dilemmas in fulfilling their roles and responsibilities. This underscores the critical role of corporate governance in fostering positive outcomes that enhance organizational performance and productivity, aligning with the organization's goals. Tucci (2021) and the OECD (2014) suggest that corporate governance extends beyond administrative policies of governance, risk management, and compliance (GRC), as well as ethics, which hold both the organization and its members accountable.

It also encompasses the institutions that govern and manage the organization. However, interactions between corporate governance and AIS users are neither simple nor predictable, as structural and operational challenges create daily dilemmas (Ron & Rahul, 2010). The organization relies on GRC as the foundation upon which all employees must align their daily tasks, ensuring that these tasks contribute to the achievement of organizational goals. As discussed in the literature on the key areas of user's dilemma, there are two main dilemmas faced by the AIS users in dealing with their daily tasks that are the process dilemma and ethical dilemma.

4.1 The Process Dilemma

The process dilemmas faced by users of Accounting Information Systems (AIS) primarily involve technical and access-related challenges. Multi-level authentication requires users to provide unique identification for each process, which can complicate workflows. Additionally, VPN authentication is necessary for accessing AIS tools, adding another layer of complexity as users must rely on IT-generated credentials. Access issues also arise when a higher-ranking user takes control of the system, disrupting the workflow of the initial user. Conflicts between IP mapping on user laptops and the developer's accounting software can further impede progress. Moreover, firewalls, designed to enhance security, may block users from completing tasks if they detect access from an unfamiliar location or suspicious files, necessitating IT intervention and causing delays. Antivirus scans can slow down AIS tools, consuming valuable memory. Lastly, login limitations restrict users from accessing the system on multiple devices, particularly if their access configurations differ, leading to further inefficiencies. These dilemmas reflect the tension between maintaining security and ensuring smooth, efficient system operations.

4.2 The Ethical Dilemma

The ethical dilemmas faced by users of Accounting Information Systems (AIS) arise from several organizational challenges. First, users must navigate complex internal controls across AIS, IT systems, and corporate governance policies. Second, regulatory compliance poses a significant challenge, often leading to "compliance fatigue" due to the intricate and numerous regulations that require detailed reporting and procedural adherence. Third, AIS users must balance the need for robust controls with the necessity for operational flexibility and efficiency, as dictated by ethical codes of conduct. Access limitations based on organizational hierarchy and roles can restrict users from accessing essential data, potentially hindering their performance. Finally, during audits, if users are not granted appropriate access beforehand, their ability to retrieve and handle data may be impaired, resulting in inefficiencies and challenges during the audit process.

These ethical dilemmas highlight the tension between control, access, and efficiency within the organization's policies and regulatory frameworks. Table 3 represents the summary of the user's dilemma in internal control governance and AIS.

Table 3: The summary of user's dilemma on internal control governance in AIS.

| Process Dilemma | Description | Ethical Dilemma | Description |
|----------------------------|---|--|---|
| Multi-Level Authentication | AIS users require a unique identification access for each process while using AIS tools. | Organisation Policies | Users have to deals with both internal control in AIS, internal control in IT and internal control in corporate governance policy. |
| VPN Connection Activity | AIS users only able to access AIS tools via VPN authentication by using their unique identification access created by IT staff. | Rules and regulation of organisation and regulatory bodies | User may experience "compliance fatigue" as a result of numerous regulations being imposed, many of which have complex reporting and procedural requirements. |
| Access-By-Pass | While user using AIS tools, control is taken | Ethical codes of conduct | AIS users to balances the need for strong controls |

| | | | |
|--|---|--|--|
| | by other user with higher access. | | with the need for flexibility and efficiency |
| IP Mapping | IP mapping in user laptop is conflicting with IP mapping of developer accounting software. | Limitation to user's access based on ranking & roles | Access limitation will often be the case when the parameters has been set. If set if data that is lock from, he/she due to hierarchy and task deployment. |
| Firewall | Firewall limits access to computer systems of user once detects different location access point or any file on the computer. Thereby user can not complete the task as it will be referred to IT which cause delay. | Inability to retrieve in-hand data as posted in AIS during audit | During audit, a different user may deploy to handle task related to queries. If he/she is not allowed or granted access prior to the audit, the task becomes inefficient on the user & tax audit encompass random queries. |
| Antivirus scanning | AIS tools become slow as memory being used | | |
| Limited users to login at one given time | Limit user should user seek to use different laptop that isn't configured to his or her level and access | | |

5.0 CONCLUSION

For Accounting Information Systems (AIS) and corporate governance (CG) to coexist sustainably, their relationship must be mutually beneficial. This research upholds that AIS is crucial for governance due to its ability to trace information back to its source. This process not only helps in controlling the inequalities in different organization, but also leverage on the goes further helping control organizational inequalities. The study emphasizes the importance of identifying discrepancies that may arise after a company adopts AIS bookkeeping procedures according to corporate governance guidelines for internal control and data security. AIS enables accurate, credible, objective, and integrity-driven financial reporting, fostering an organizational culture of trust by adhering to corporate governance principles. Regardless of the operational environment, the accuracy and reliability of data extracted from AIS are vital for effective decision-making by management, investors, shareholders, and directors.

AIS and financial information systems provide valuable data for managers and stakeholders to make informed decisions. These systems collect, store, analyse, and report accounting and financial data within the organization and to external regulators. Executives utilize AIS data to execute plans, while managers rely on accurate information for sound decision-making. However, internal control governance issues can vary between companies, affecting AIS effectiveness. Without robust internal controls, AIS security breaches can occur, compromising data integrity. Ethical concerns arise due to the human element in AIS usage, highlighting the need for ethical behaviour at every stage of AIS deployment. Proper internal control and adherence to ethical standards ensure the reliability of AIS records, based on

historical data. This report underscores the importance of clear roles and responsibilities to enhance internal management efficiency and reduce unethical practices.

The methodology tolls the line of a systematic literature review by applying a conformist philosophy after identifying and evaluating all related data and information to include in this research. The findings reveal that AIS users constantly come across dilemmas in executing their roles and responsibilities, predominantly ethical and process-related dilemmas, within the broader context of internal control governance (ICG).

6.0 SIGNIFICANT AND FUTURE RESEARCH

The significant of this study is enormous as it ventures into a very scanty research environment the like of user's dilemma in AIS and CG internal control. The entrance of this research, set a new domain for researchers and academia to explore as there are few or limited work done in this research subdivisions and related topic. Thus, future study should answer the big question, can organization policy on internal control governance be devoid of users' dilemma? focus on the pros and cons of users' dilemma to an organization.

CO-AUTHORS CONTRIBUTION

As co-authors, we guided the student through the research and writing process, supervising the conceptualization, methodology, and systematic literature review (SLR), which focused on AIS, internal control governance (ICG), corporate governance (CG), and users' dilemmas in AIS. In addition, we provided feedback during the manuscript review, helping the student prepare the paper for publication.

ACKNOWLEDGEMENTS

The authors would like to express gratitude to the Faculty of Accountancy, Universiti Teknologi MARA (UiTM) Johor Campus Segamat for knowledge contribution and all respected participants willing to contribute to this research.

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