Accounting Information System

Institutional Affiliation

Date

**Introduction**

The 21st century ushered a dramatic technology change, unlike the previous centuries. It has led to the development of sophisticated technology that facilitates communication, information exchange, and data storage. With technological advancement, businesses began moving from analog to digital. For instance, most organizations started installing information systems to boost their efficiency and minimize cost operation. According to Bawaneh (2018), an information system is a formal process for collecting data, processing it into information, and disseminating it to various users. To bring efficiency and reduce errors in their accounting processes, the organizations intensively purchase and integrate the accounting information system (AIS). The purpose of the AIS involves collecting, storing, and process financial and accounting data and produce informational reports that the organization management and other parties may be interested in financial information for business decisions. Even though AIS can be a manual system, today, most accounting information systems are computer-based.

For an organization to fathom and use information, it must verify that it is accurate and material to its goal achievement. Financial information is extremely significant to every business enterprise. Ostensibly, it is the heart of every organization. An organization that ensures the quality and accuracy of the financial information is more likely to succeed than those that pay little attention to its accounting system and processes. Without any doubt, the management requires accounting information to make accurate decisions about the organization's future. On the same note, other parties, including investors and partners, are more interested in the company’s financial information to make decisions whether to invest or partner with the company or not. The accounting information system is vital for the companies to improve their accounting system efficiency, thus expediting the flow of information and the decision-making process.

**Role of Accounting Information Systems in Providing Accounting Information**

Since the millennium bug, the company boards have become increasingly wary about the organization's dependence on information technology. The corporate board's nervousness rotates around the denial of self-attacks, computer crashes, competitiveness pressures, and the need to ensure compliance with various government policies. To some point, the corporate boards view the organization's dependence on the technology as a threat to their success, and it predisposes them to numerous problems than purported benefits. Unfortunately, the organization board is putting little effort into understanding the application of IT in the organization. Moreover, they remain uncounseled when it comes to a matter of IT spending and strategy. Although the corporate information assets can account for over 50 percent of the total capital spending, the corporate boards tend to hold on to the default mode through applying explicit or tacit rules or policies that work best for other companies (Nolan & McFarlan 2005). Few boards tend to understand the full scope of their computer systems and the role that IT plays in shaping their organizational strategies. Indeed, the boards remain in the dark regarding information technology governance, unlike other corporate areas like accounting and audit, employment, etcetera. The corporate boards have a long distance to go as far as application and management of the IT systems in the organization is concerned.

In particular, the role of AIS plays an indomitable role in ensuring the smooth flow of the accounting information. It is a computer-based method to track down accounting activity in conjunction with technology. AIS gives accurate data to the managers before making any significant decisions that will either break or do their business (Nolan & McFarlan 2005). AIS allows both internal and external access to accurate and effective accounting information. First, the system is fed with accounting formulas that facilitate the accounting process. It makes it easy for the organizational management to access accurate accounting information on a timely basis. It, therefore, facilitates decision-making. Certainly, accounting information is critical for a company’s success. Accounting information plays a vital role in running a business because it allows the management to track income and expenditure, ensure statutory compliance, and provide investors, management, and government with quantitative financial information which can be applied in business decision-making. There are three financial statements that both internal and external stakeholders are more interested in. The first one is the income statement which provides an individual with information about the profit and loss. Another is balance sheet gives stakeholders a clear picture of the organization's financial position at a particular period (Huerta & Jensen, 2017).

The third one is the cash flow statement which bridges between an income statement and balance sheet and reports the cash generated and spent during a specific period. As mentioned earlier, accounting information allows the stakeholders to evaluate the performance of a business. AIS collects and stores data related to the business operations as well as the financial position of the organization or corporation. In other words, it allows the stakeholder to understand what is going on in the business financially. Secondly, it allows the management to ensure statutory compliance. Laws and regulations vary from one state to another, but proper accounting systems and processes allow the management to ensure statutory compliance when it comes to their business. The accounting function will ensure that liabilities like sales tax, income tax, VAT, pension, and others are appropriately addressed. Thirdly, it allows the management to create a budget and future projections about the organization. Budgeting and future projections are crucial when it comes to running the business and the achievement of its set goals (Huerta & Jensen, 2017). Budgeting offers valuable insights into the allocation of resources. With accurate and effective accounting information, the management plans where it will allocate resources to ultimate returns. The financial projection information is vital to external stakeholders like investors. It assists them in making decisions whether to invest in the organization or not.

**Modes of Information Technology**

Nolan & McFarlan (2005)in their offer valuable information about information technology and how the corporate board needs to understand the application of IT in the organization and its role in the organization's success. Nolan & McFarlan (2005) provides information to the board members on how to recognize their organization's position and evaluate whether they need to take a more aggressive stance. Moreover, they illustrate a scenario where the corporate board should be involved in the decisions relating to IT. They also provide a clear picture of how the IT governance committee should look like in terms of membership, charter, duties, and the agenda. Nolan & McFarlan (2005) offer recommendations on how the organization should develop its IT governance policies that consider an organization's strategic and operational needs and offer suggestions when the board needs to bring change. The corporate board cannot implement information technology in the organization without a clear plan on how IT aligns strategically with the organization's goals. The board must choose appropriate board governance, which will steer IT implementation in the organization and avoid unnecessary risks and improve its competitive position. The board needs to understand different modes of information technology and how they apply to a particular organization. Nolan & McFarlan (2005)illustrate that there are four different modes of information technology. The IT modes can be categorized into two major categories. The first category involves how the organization relies on uninterrupted, cost-effective, smooth operating, and secure operating technology systems. This strategy is often regarded as defensive IT. The second category involves how the organization relies on information technology for its competitive edge through a system that offers value-added products or services or even high responsiveness to the customers. This strategy is also referred to as offensive information technology.

**Strategic Mode (Offensive strategy)**

The strategic or offensive mode is one of the modes that the organization tends to leverage. Innovation in some companies is synonymous with a competitive game. The companies utilizing this mode view the new technology as a way of approaching the market and improving their techniques of conducting their daily operations. In this mode, the organization requires more reliability, just like factory mode firms. However, firms in this category aggressively pursue process and service opportunities, competitive advantages, and cost reductions (Nolan & McFarlan 2005). Firms utilizing offensive mode set substantive expenditure to enable them to conduct their operations in the industry and aggressively pursue service and process opportunities, reduce the cost of operations, and boost their competitive edge. Most companies prefer not to adopt this mode, but they are obliviously forced into it by some circumstances like competitive pressures. For instance, a company like Boeing dominated the commercial airline manufacturing industry, but it was overtaken by airbus.

Now the company is leveraging on the new technology to boost its competitiveness and reduce costs. It now understands that its future rests on marketing, successful design, and ushering in a new commercial plane. The company is embarking on an ambitious technology project in the hope that it will regain its market share in the commercial airline manufacturing industry. In 2008, Boeing began equipping its 787 plane models with a new lightweight carbon composite skin. Moreover, the company has established a new complex manufacturing system that simultaneously coordinates thousands of computers and integrates the supply chain that comprises numerous partners across the globe. The suppliers are required to send their components via the Boeing site in Everett, Washington, where 787 planes are assembled in days, thus lowering the costs, and ensuring fast delivery. The company management ensures that 787 pieces are perfectly aligned, making the organization both operationally and strategically dependent on information technology (Nolan, & McFarlan 2005). In this mode, the board-level IT governance is critical in the strategic mode. The company at this level requires a fully established IT oversight committee with at least one member who is an expert in the IT field.

**Systems Approach Quality Accounting Information Systems**

A system approach is one of the old concepts, and it assumes that one can only understand a complex unit if he or she breaks it down into simple units. It is a general procedure that is applied in administering system projects. The systems approach can be applied to improve the quality of the accounting information system (Faccia, Mosteanu, Fahed, & Capitanio, 2019, August). The system approach can be in AIS to achieve their goal. To improve the quality of accounting information systems, the organization needs to follow a series of steps outlined below. The first step involves stating the objectives of AIS to improve their quality. The organization needs to express the objective of improving the quality of AIS. In this case, the organization requires to clearly illustrate the expected output of the AIS. For instance, it expedites the accounting process or minimizing accounting errors. The second step involves creating different plans to improve the quality of AIS. The organization management needs to develop different plans designed for improving the quality of AIS and select one plan that aligns with the organization's goal. For instance, the organization needs to select new technology or software that improves the company’s AIS. The third step involves analyzing the system. Here, the team requires to analyze, create and evaluate various solutions that help in improving AIS quality (Ambalangodage, 2019). The fourth step is system design which involves fine-tuning the chosen solution. For instance, the team may evaluate fine details about the chosen software and how it applies in the current AIS. Another step is system implementation which finally followed system evaluation.

**Internal Controls Focus on the Preventive, Detective, and Corrective Approaches to Accounting Information and Accounting Information Systems**

Internal control is the procedures, methods, or technical safeguards implemented in the organization to prevent problems and protect the assets of the organization. Internal controls are critical in ensuring the security and privacy of the accounting information and AIS. Ideally, there are three main types of internal controls, including preventive, corrective, and detective internal controls. The AIS is subject to threats that might unfavorably impact the organization and affect assets loss. From unintended innocent but costly mistakes to fraudulent manipulation, risks in the organizations are present every day. Therefore, internal controls can help to minimize or avoid a loss to the organization.

**Detective Internal Controls**

Detective internal controls are those controls that are applied after the occurrence of the discretionary event. It allows the organization to evaluate why existing control systems in AIS failed and allowed the unintended event to occur. For instance, the organization, the organization may implement an internal audit after the leakage of its accounting information to unintended parties.

Preventive internal controls comprise processes and methods put in place to avert negative events from occurring. For instance, the organization may give few individuals to gain access to the accounting information system, including CIO, CFO, and financial controller. Also, it may limit the access of the accounting department offices by an unauthorized person.

The corrective internal controls are typically put in place after the internal detective controls discover a problem. For instance, the company installs anti-virus software.

**Risk Management- Contingency Plans**

Risk management entails strategies and measures employed by an organization to manage risks and control all activities to minimize the negative implications of the risk on its earnings and capital. Businesses encounter numerous risks in their operations. Therefore, organizations need to come up with a plan to minimize the effect of risk on their operations and strategic objectives. It is a framework used by a company in identifying, assessing, controlling, and preparing for any hazard, danger, or disaster that they are likely to interfere with its operation and objectives. The company needs to backup up its data to either remote sites or cloud computing applications to facilitate data recovery. Also, the organization requires to recovery team that will facilitate system recovery.

**Compliance With the Sarbanes-Oxley Act of 2002**

Sarbanes Oxley Act is a US act established in 2002 with the intent of curbing financial and audit irregularities in US public companies. Congress established this act with aim of protecting the employees, stakeholders, and public from accounting errors and fraudulent financial practices by the organization management. AIS plays a critical role in ensuring the company remains compliant with Sarbanes Oxley Act. It ensures facilitate transparency in the accounting process. It allows the individual parties in the organization to review the accounting information presented in the AIS. Also, it is well secured from external manipulation by unintended parties. Also, the organization needs to hire an independent and competent auditing company.

**Conclusion**

Andarwati, Nirwanto, & Darsono (2018) outline that the purpose of the AIS involves collecting, storing, and process financial and accounting data and produce informational reports that the organization management and other parties may be interested in financial information for business decisions. Even though AIS can be a manual system, today, most accounting information systems are computer-based. For the successful running of the business, the organization needs to provide reliable and timely information at all levels. Sterin (2020) illustrates that data is a prerequisite for the success of every business, and with insufficient information, the organization may experience hurdles.

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