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THE IMPORTANCE OF ACCOUNTING INFORMATION IN MANAGEMENT DECISION MAKING PROCESS

MASTER'S THESIS

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ABBREVIATION

AIS **:** The Importance of Accounting Information

ROI **:** Management Decision Making Process

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ABSTRACT

Mohammed, M.M. (2024). *The importance of accounting information in management decision making process* (Unpublished master thesis). Sakarya University

Financial data plays an essential role in the field of accounting, serving as a cornerstone for financial record-keeping and reporting systems. Accounting is integral to the strategic decision-making processes of businesses, providing a structured method for recording and reporting financial transactions involving individuals, businesses, governments, and other stakeholders. This information constitutes a fundamental component of the broader economic information system, designed to meet the diverse needs of various user groups. These groups include managers, employees, suppliers, customers, financial creditors, government institutions, media representatives, and the general public. Among these users, investors, such as shareholders, are often regarded as the primary beneficiaries of accounting information due to their reliance on it for evaluating business performance and making investment decisions. Accounting information is generated by specialized units within organizations or by independent entities such as certified freelance accountants. These professionals play an active role in ensuring the accuracy and reliability of this information. Studies have shown that 46% to 50% of economic information is derived from accounting, underscoring its indispensable role in economic decision-making processes. This highlights the necessity of accurate and timely accounting data for making informed strategic and operational decisions across various sectors. This study seeks to examine the practical importance of accounting information in administrative decision-making processes. Field research was conducted on firms operating in Erbil, Duhok, Sulaymaniyah, Bardarash and Aqra. Surveys were designed to gather insights into how financial reports influence managerial decisions, with responses analyzed using the statistical software SPSS. The research participants included 153 individuals employed in government institutions and public organizations. These participants, who were selected using the stratified random sampling method, received the surveys via email. The survey was directed at company managers, unit managers, and accountants, who were asked to share their views on the role of financial reports in decision-making processes. The results of the descriptive analysis revealed that a significant majority of participants (91.5%) emphasized the necessity of financial reports for effective decision-making. Additionally, 92.2% of respondents highlighted that accounting information should be considered a strategic asset for organizations. Furthermore, 74.5% of participants expressed a high degree of trust in regularly prepared monthly financial reports, indicating their confidence in the credibility of these documents. The findings of the study demonstrate that accurate and timely accounting information has a profound impact on decision-making processes. Specifically, 87.6% of participants acknowledged the importance of accounting data in managerial decision-making. Moreover, a high correlation was observed between the perceived importance of accounting information and its role in facilitating effective decisions, thereby supporting the primary hypothesis of the study. Regression analysis further reinforced the significant influence of accounting data on business decision-making processes, emphasizing its value as a critical tool for guiding management practices. In conclusion, the study underscores the pivotal role of accounting information in enhancing decision-making within enterprises. The results reveal a strong relationship between the effective utilization of accounting data and its impact on management decisions. Businesses are encouraged to develop specific strategies aimed at increasing the value of accounting information and optimizing their decision-making processes. Future research should delve deeper into the influence of accounting information on management practices across diverse institutional contexts. Such studies would provide organizations with valuable insights to enhance their competitive advantage and achieve their strategic objectives. By emphasizing the critical importance of accounting data in managerial practices, this research contributes to a better understanding of its role as a strategic asset in the modern economic landscape.

Keywords: Accounting Information, Decision-Making, Financial Reporting.

ÖZET

Mohammed, M.M. (2024). *Yönetim karar alma sürecinde muhasebe bilgilerinin önemi* (Yayımlanmamış yüksek lisans tezi). Sakarya Üniversitesi.

Finansal veriler, finansal kayıt tutma ve raporlama sistemlerinin temel yapı taşı olarak muhasebe alanında kritik bir rol oynamaktadır. Muhasebe, işletmelerin stratejik karar alma süreçlerinin vazgeçilmez bir parçasıdır ve bireyler, işletmeler, hükümetler ile diğer paydaşlar arasındaki finansal işlemleri kaydetmek ve raporlamak için yapılandırılmış bir yöntem sunar. Bu bilgiler, ekonomik bilgi sisteminin önemli bir parçasını oluşturur ve çeşitli kullanıcı gruplarının gereksinimlerini karşılamak üzere tasarlanmıştır. Bu kullanıcılar arasında yöneticiler, çalışanlar, tedarikçiler, müşteriler, finansal alacaklılar, hükümet kurumları, medya temsilcileri ve genel halk yer alırken, yatırımcılar (örneğin hissedarlar) genellikle muhasebe bilgilerinin birincil yararlanıcıları olarak kabul edilir. Yatırımcılar, iş performansını değerlendirmek ve yatırım kararları almak için muhasebe bilgilerine büyük ölçüde güvenirler. Muhasebe bilgileri, kuruluşlar bünyesindeki uzmanlaşmış birimler ya da bağımsız olarak faaliyet gösteren sertifikalı muhasebeciler tarafından üretilir. Bu profesyoneller, muhasebe verilerinin doğruluğunu ve güvenilirliğini sağlamak adına önemli bir sorumluluk üstlenirler. Araştırmalar, ekonomik bilgilerin %46 ila %50'sinin muhasebe kaynaklı olduğunu ortaya koyarak, muhasebenin ekonomik karar alma süreçlerindeki vazgeçilmez rolünü gözler önüne sermektedir. Bu durum, çeşitli sektörlerde doğru ve zamanında sağlanan muhasebe bilgilerinin bilinçli stratejik ve operasyonel kararlar almak için neden kritik bir öneme sahip olduğunu vurgulamaktadır. Bu çalışmanın amacı, muhasebe bilgilerinin idari karar alma süreçlerindeki pratik önemini ortaya koymaktır. Araştırma, Erbil, Duhok, Süleymaniye, Bardarash ve Aqra gibi bölgelerde faaliyet gösteren şirketler üzerinde gerçekleştirilmiştir. Anket yöntemiyle toplanan veriler, finansal raporların yönetim kararlarını nasıl etkilediğini anlamaya yönelik içgörüler elde etmek amacıyla istatistiksel analiz yazılımı SPSS kullanılarak değerlendirilmiştir. Araştırmaya, devlet kurumları ve kamu kuruluşlarında çalışan toplam 153 kişi katılmıştır. Katılımcılar, tabakalı rastgele örnekleme yöntemi kullanılarak seçilmiş ve anketler e-posta yoluyla kendilerine ulaştırılmıştır. Anketler, şirket yöneticileri, birim yöneticileri ve muhasebecilere yöneltilmiş olup, finansal raporların karar alma süreçlerindeki rolüne ilişkin görüşlerini paylaşmalarını sağlamıştır. Betimsel analiz sonuçlarına göre, katılımcıların %91,5'i etkili karar alma için finansal raporların gerekliliğini vurgulamış, %92,2'si ise muhasebe bilgilerinin stratejik bir varlık olarak değerlendirilmesi gerektiğini belirtmiştir. Ayrıca, katılımcıların %74,5'i düzenli olarak hazırlanan aylık finansal raporlara güvendiklerini ifade etmiştir. Çalışmanın bulguları, doğru ve zamanında sağlanan muhasebe bilgilerinin karar alma süreçlerini büyük ölçüde etkilediğini göstermektedir. Katılımcıların %87,6'sı muhasebe verilerinin yönetimsel karar almadaki önemini kabul etmiştir. Muhasebe bilgilerinin algılanan önemi ile etkili karar alma süreçlerini kolaylaştırmadaki rolü arasında yüksek bir korelasyon tespit edilmiştir. Regresyon analizi, muhasebe bilgilerinin işletmelerin karar alma süreçleri üzerindeki önemli etkisini pekiştirmiştir. Sonuç olarak, muhasebe bilgilerinin işletmelerin karar alma süreçlerini iyileştirmedeki temel rolü bir kez daha ortaya konmuştur. Araştırma bulguları, muhasebe verilerinin etkili kullanımı ile yönetim kararları üzerindeki etkisi arasında güçlü bir ilişki olduğunu göstermektedir. İşletmeler, bu bilgilerin değerini artırmak ve karar alma süreçlerini optimize etmek için özel stratejiler geliştirmelidir. Gelecekte yapılacak çalışmalar, muhasebe bilgilerinin yönetim uygulamalarındaki rolünü farklı kurumsal bağlamlarda daha derinlemesine inceleyerek bu alandaki bilgi birikimini zenginleştirebilir. Bu tür çalışmalar, işletmelere rekabet avantajlarını artırmaları ve stratejik hedeflerine ulaşmaları için değerli içgörüler sunacaktır.

Anahtar Kelimeler: Muhasebe Bilgileri, Karar Alma, Finansal Raporlama.

INTRODUCTION

Accounting information plays a crucial role in the decision-making process of organizations, providing management with relevant data and insights necessary for making informed choices, efficient resource allocation, and evaluating financial performance. This essay aims to emphasize the significance of accounting information in management decision-making, exploring its dimensions and how it facilitates decision-making. Additionally, it will discuss the impact of accounting information on strategic, operational, and financial decisions (Atkinson et al., 2019). Accurate and timely accounting information forms the foundation for effective decision-making. It provides managers with a comprehensive understanding of the organization's financial health, enabling them to make sound judgments. Financial statements, such as the balance sheet, income statement, and cash flow statement, present crucial information regarding the company's financial position, profitability, and cash flows, respectively. These statements adhere to accounting principles and standards, ensuring consistency and reliability (Horngren et al., 2017).

Accounting information is essential for strategic decision-making, which involves long-term planning and establishing organizational goals. Through the analysis of financial statements, managers can assess profitability, liquidity, and solvency. Identifying trends, patterns, and areas for improvement allows them to formulate effective strategies. For instance, if financial statements reveal declining profitability, management can implement cost reduction measures or explore new markets to enhance company performance. Accounting information has a significant impact on operational decision-making because it provides insights into day-to-day financial activities. This aids managers in decisions related to production, inventory management, pricing, and cost control. Cost accounting data, for example, helps determine the most cost-effective production methods, establish optimal pricing strategies, and identify areas for cost reduction without compromising quality (Lanen et al., 2018).

Accounting information helps managers make financial decisions by evaluating investment opportunities, assessing financial risks, and selecting suitable financing options. Financial ratios derived from accounting data, such as return on investment (ROI), debt-to-equity ratio, and liquidity ratio, provide valuable insights into financial performance, facilitating the evaluation of investment project viability. Additionally, accounting information aids in cash flow forecasting, estimating future financial needs, and effectively managing working capital. Robust accounting information systems (AIS) are essential for harnessing accounting information in the decision-making process. AIS integrates accounting principles and technology to capture, process, and disseminate financial information efficiently. By automating routine accounting tasks, these systems enable real-time access to accurate data, generating reports and analyses that support decision-making. AIS enhances the accuracy, reliability, and timeliness of accounting information, empowering managers to make well-informed decisions (Drury, 2018).

Accounting information is a vital component of the management decision-making process, providing accurate, reliable, and timely data that enables managers to make informed choices and improve overall organizational performance. Whether in strategic, operational, or financial decision-making, accounting information offers valuable insights into financial health, profitability, and efficiency. Leveraging accounting information effectively allows organizations to assess risks, identify opportunities, allocate resources efficiently, and formulate sound strategies. Recognizing the importance of accounting information and investing in robust accounting information systems are critical for organizations to thrive in today's dynamic business landscape (Garrison et al., 2021).

Purpose of the Research

The objectives of the study are as follows;

1. To find out whether there has been an issue with the generation and utilization of financial information required for managerial decision making.

2. To find out the degree to which accounting material produced by accounting divisions aided in decision making.

3. To find out the degree to which bookkeeping information has successfully done the fundamental duties of cost reduction, appropriate resource distribution, and output development.

Importance of Research

This study will help maximize the beneficial impact of bookkeeping statistics on an organization's decision-making process. This improves revenue and guarantees the organization's ongoing survival as a business body. It will assist in the optimum distribution of limited resources across multiple uses, increasing output and, eventually, improving living standards. It will look at how the organization's or company's financial information management has improved and how it can be improved further. In fact, all stakeholders involved, including owners, workers, financiers, debtors, and the government, will benefit significantly. This study will also serve as a reference for pupils interested in conducting comparable research.

Research Question

1. How does the availability and quality of accounting information influence strategic decision-making among managers in companies in the Erbil, Duhok, and Sulaymani, Bardarash and Aqra?
2. What role does management accounting play in enhancing the effectiveness of operational decisions within companies in the Erbil, Duhok, and Sulaymani, Bardarash and Aqra?
3. What are the key challenges faced by managers in the Erbil, Duhok, and Sulaymani, Bardarash and Aqra in utilizing accounting information for effective decision-making, and how can these challenges be addressed?

Research Hypotheses

1. The availability and quality of accounting information have a significant positive impact on the effectiveness of strategic decision-making among managers in companies in the Erbil, Duhok, and Sulaymani, Bardarash and Aqra.

2. The use of management accounting practices significantly contributes to the effectiveness of operational decisions within telecommunications companies in the Erbil, Duhok, and Sulaymani, Bardarash and Aqra.

3. The key challenges faced by managers in the Erbil, Duhok, and Sulaymani, Bardarash and Aqra in utilising accounting information for effective decision-making can be addressed through targeted interventions.

Scope of the Study

The scope of the study on the importance of accounting information in the management decision-making process is to analyze how accounting information supports effective decision-making in organizations. It will investigate the types of accounting information used in decision-making, approaches to decision-making, and the impact of accounting information on organizational performance. The study will be conducted through a literature review, case studies, and interviews with professionals. The findings will contribute to the existing knowledge on the role of accounting information in decision-making and provide insights on how organizations can use accounting information to improve their decision-making and performance.

Sources of data

The data was obtained from primary and secondary sources, as follows:

1- Primary data: The primary sources were gathered by constructing a questionnaire as the primary research instrument, and then unpacking and analyzing the questionnaire using the statistical software SPSS.

2- Secondary data: The data came from representative secondary sources, Arabic and Arabic reference books and references, papers and prior research connected to the topic of the study, and pertinent websites on the Internet.

Limitations of the Study

There are several limitations to the study on the importance of accounting information in management decision-making process. Some of these limitations include:

1. Generalizability: The study may focus on a specific industry or region, which may limit the generalizability of the findings to other industries or regions.

2. Self-reporting bias: The study may rely on self-reported data from participants, which may be subject to biases and inaccuracies.

3. Small sample size: The study may have a small sample size, which may limit the generalizability of the findings to a larger population.

4. Limited access to data: The study may face limitations in accessing data due to data privacy concerns or proprietary information.

5. Lack of control over variables: The study may not have control over all the variables that may impact decision-making in organizations, which may limit the ability to draw definitive conclusions.

6. Time constraints: The study may face time constraints, which may limit the depth and breadth of the research.

It is important to acknowledge these limitations when interpreting the findings of the study and to consider them when applying the results to other contexts or settings.

Statement of the Problem

The significance of accounting information in the process of making management decisions is a crucial subject, especially in the Erbil, Duhok, and Sulaymani, Bardarash and Aqra, where firms are working towards improving their operational efficiency and competitiveness. Both theoretical and empirical evidence highlight the crucial role of accounting information in facilitating well-informed and strategic decision-making, which ultimately leads to organizational success. Effective use of accounting data may be a crucial factor for organizations to maintain a competitive advantage and sustainability in an area undergoing fast economic growth and altering market dynamics. Theoretical approaches emphasize that accounting information plays a fundamental role in management decision-making by providing a dependable foundation for analyzing historical performance, predicting future trends, and assessing prospective risks and opportunities. Lack of precise and prompt accounting data might impede managers' ability to make well-informed choices, resulting in poor results that may inhibit the attainment of strategic objectives. Furthermore, the research indicates that incorporating accounting information into decision-making may improve openness, accountability, and overall organizational governance. These factors are crucial for building confidence among stakeholders and guaranteeing long-term economic success. Edward's 1976 studies provide more evidence to support the importance of this study. They demonstrate the practical consequences of accounting information in different managerial situations. For example, research from comparable areas and industries suggests that organizations that successfully use accounting information are in a more advantageous position to manage economic uncertainty, optimize the allocation of resources, and enhance their financial performance. Nevertheless, while the significance of accounting information is acknowledged, there is a lack of research on its precise influence on decision-making processes in the Erbil, Duhok, and Sulaymani, Bardarash and Aqra. This research seeks to address this knowledge gap by investigating the impact of accounting information on management decision-making in this distinctive economic context. The findings of this study will provide significant insights that will assist local firms in improving their decision-making processes and attaining long-term development.

CHAPTER 1. DEFINING CONCEPTS

1.1. Accounting and Accounting Information

Accounting, usually referred to as bookkeeping, primarily deals with the collection and analysis of both financial and non-financial information pertaining to economic entities such as firms and organizations. Accounting, also known as the "business language," is the systematic procedure of documenting and conveying financial data about an organization's activities to various stakeholders, such as shareholders, creditors, managers, and government entities. Accountants are professionals that specialize in the practice of maintaining financial records and preparing financial statements. Accounting and financial reporting are often used synonymously, however, they have clear differences (Needles et al, 2013).

The beginnings of accounting may be traced back to ancient cultures. Evidence exists for early forms of bookkeeping in ancient Iran, as well as early auditing systems developed by the ancient Egyptians and Babylonians. These findings strongly suggest that accounting originated in ancient Mesopotamia and is closely linked to the development of written language, numbers, and money. During the reign of Emperor Augustus, the Roman government had comprehensive financial data. (Mmaduabuchi et al., 2016).

Financial accounting, management accounting, tax accounting, and cost accounting are among the several subspecialties included by the broader field of accounting. Financial accounting primarily focusses on producing financial statements and reports, which are intended for external audiences such as investors, authorities, and suppliers. Management accounting is a specialized branch of accounting that focuses on gathering, analyzing, and presenting data for internal use in an organization. Accounting is the systematic recording and tracking of financial transactions, often using the double-entry technique. This approach enables the preparation of financial statements and reports. An accounting information system serves the objective of streamlining bookkeeping and related activities. The citation is from Privets et al. (2012).

Businesses use accounting information systems (AIS) to collect, store, manage, process, retrieve, and disclose their financial data for the advantage of CPAs, advisers, business analysts, managers, CFOs, auditors, regulators, and tax authorities. Proficient accountants work closely with AIS to ensure the security and privacy of private financial data while also ensuring its accessibility to authorized individuals. (Ladda, 2014).

Accounting information is the ultimate outcome of the accounting process. It is obtained by analyzing economic data via established methods and instruments to uncover the financial position and performance of an organization. Accounting information is essential for making economic decisions due to its correctness, reliability, and comprehensiveness, which enable management to maximize its use. (Ibukun-Falayi, 2021). Accounting data may be considered a widely consumed commodity due to its extensive use in decision-making processes. The Fourth Directive of the European Economic Community (present EU) states that the objective of accounting for an entity is to provide concise reports that accurately depict the assets, financial position, and performance of the company (Floştoiu, 2019). This aim must be achieved in order to satisfy the information requirements of users.

1.1.1. Accounting Information System Definition

Businesses use accounting information systems (AIS) to systematically document, arrange, handle, retrieve, and present financial data for the benefit of auditors, advisors, managers, CFOs, tax authorities, and certified public accountants. This information is sourced from Grande et al. (2011).

An accounting information system (AIS) collects, archives, and analyses financial and accounting data to facilitate decision-making. Accounting information systems are computerized methodologies that use data storage and retrieval technology to oversee and track financial transactions. Investors, creditors, and tax officials have public access to the financial records, however the management team has exclusive access. Accounting information systems may be advantageous for many accounting duties and processes, including auditing, financial accounting migration, managerial/management accounting, and tax preparation. The accounting and financial reporting AIS modules are widely used. The reference is from Gelinas et al. (2017).

To facilitate informed decision-making for accountants and administrators, several tools and systems have been created and grouped together as a "accounting information system" (AIS). It is of utmost importance in the functioning of financial departments worldwide. The systems largely include software and may be integrated into an organization's IT initiatives. (Esmeray, 2016). Accounting information systems play a crucial role in facilitating the efficient flow of data in matters related to taxes, filing, and investigations. Both large and small organizations may get advantages from software-based solutions as they provide enhanced financial supervision and a more economical substitute for in-house bookkeeping. The reference is from Apostolou et al. (2014).

It is a financial database designed to facilitate the monitoring and recording of monetary transactions and events. This database is intended for use by accountants, CFOs, auditors, and other finance professionals to aid in decision-making processes. Regarding accounting, pricing, and financial records such as the P&L and Balance Sheet, an AIS may serve primarily as a rudimentary logbook. (Poston and Grabski, 2000). An accounting information system may be used to monitor a company's financial and operational processes. An accounting information system consists of six primary components: individuals, procedures, guidelines, information, technology, and regulations. Subsequent to this statement, there will be elaborate explanations provided for each individual component. (Soudani, 2012).

1.1.2. Uses of Accounting Information Systems (AIS)

The main purposes of financial information systems are to generate and distribute information to those who may use it, as well as to assist in their decision-making processes. A multitude of consumers of accounting data depend on this information to make well-informed decisions. An AIS represents many components of the accounting procedures. An AIS typically contains data about to sales, expenses, customers, staff, and taxes. However, the specific information included may vary according on the nature and size of the firm. The gathered information encompasses several types of data, such as sales orders, analysis reports, purchase requests, bills, chequebooks, stock records, wages, ledgers, trial balances, and financial statements. (Hall, 2010).

Ensuring the reliable and safe storage of data in a database is crucial for any financial information system. Query language is often used to design the database structure, facilitating tabular representation and data manipulation. An AIS offers a wide range of data entering and editing areas. Furthermore, there are usually measures in place to defend financial information systems from viruses, hackers, and other harmful entities. With the increasing use of computerized data storage by enterprises, the issue of cyber security has become a pressing one. (Sori, 2009). The wide range of reports that may be produced by an accounting information system is evidence of its adaptable data manipulation capabilities. An AIS generates many records including accounts outstanding ageing records, amortization plans for fixed assets, and sample amounts for financial reporting. It is also feasible to replicate shop counts, tax calculations, and customer information. Nonetheless, the Accounting Information System (AIS) does not include documents like letters, memos, and presentations that are unrelated to the accounting or financial reporting aspects of a corporation. The reference is from (Salehi et al, 2010).

1.1.3. Benefits of Accounting Information Systems (AIS)

The intricacies and tedious processes involved in handling business deals have led to the widespread adoption of automated accounting information systems (AIS) by modern businesses. For the benefit of CPAs, advisors, business analysts, managers, CFOs, audits, regulators, and tax authorities, businesses implement Accounting Information Systems (AIS) to centralize and standardize the organization's financial data.

The following are some of the most important gains from implementing an accounting information system:

A. Automation

When using an AIS, no info needs to be entered by hand. With just a single or double-click, the system will have all the information it needs to prepare the data and produce insightful results. This facilitates the upkeep of electronic diary books, which eliminate the need for paper records in the storage and retrieval of company data. Modern AIS are also cleverly programmed to do calculations that would be tedious to do by hand. (Al-Hiyari et al, 2013).

B. Accuracy

The common mistakes in manual accounting such as posting of a transaction twice in the journal and calculation errors are addressed. Therefore, reports generated in the system is more reliable than in manual accounting.

C. Data Security

Bookkeeping systems offer a safe and secure place to store financial data, as opposed to the chance of bodily loss or thievery that comes with handwritten bookkeeping. This greatly reduces the possibility of data being accessed by an unauthorized party. The system interface also provides users with access to easily accessible data at any moment. Users of a cloud-based bookkeeping system can access their financial information from anywhere, be it a work journey or a well-deserved holiday (Mami and Olui, 2013).

D. Speed

There is no delay in generating reports for management use as long as all transactions have been entered into the system. Hence, real-time reports are possible unlike in manual accounting.

E. Cost-effective

Adopting an AIS helps standardize the company's procedures, which in turn decreases the amount of time employees spend on menial duties like preparing reports. Since most of the processes in producing reports are managed by the system, the time spent on report preparation by financial experts like CPAs, bookkeepers, and even SME company owners is drastically decreased. Every company has made great strides toward adopting bookkeeping information systems. In today's dynamic business climate, a benefit goes to the firm that best exploits the potential of AIS. However, there are a wide variety of bookkeeping software options out there. It would be foolish to pay for a subscription to a service without first carefully weighing the elements that are most important to the business. Here is the information the business requires to make an informed decision about a bookkeeping system.

F. Functionality

The needs of a firm should be easily met by an AIS system. Companies in various sectors have distinct transaction and reporting needs, but any good accounting system should be flexible enough to meet those needs. (Trigo et al, 2016).

G. User-Friendly

The system's user UI and controls should be intuitive and straightforward to learn. Users are typically given with instruction, but an effective AIS should be made to allow for fast comprehension from users of varying groups.

H. Scalability

When deciding on a bookkeeping system for your business, it's important to think ahead to the possibility that you'll need updates or additional goods and services from the supplier down the road. This is done so that you know the system supplier will be able to accommodate your expanding business.

İ. Expansion Capabilities

Companies with worldwide expansion plans or existing international trade relationships can benefit from a system that serves multiple languages, currencies, and industry standards. Because of this feature's flexibility, companies with international divisions can simply swap between languages when reporting back to headquarters. Also, businesses that engage in international trade can comply with J-SOX, IFRS, and US GAAP while keeping their regional record data consistent. (Alles et al, 2008).

J. Cloud-Ready

A cloud-ready bookkeeping system will be useful in facilitating a smooth transition from in-office to remote work arrangements in light of recent technical developments and the ongoing epidemic. You can still keep tabs on your finances while away on a work journey or holiday.

K. Integrable with Other System

Companies in rapid expansion would benefit greatly from a bookkeeping system that is easily compatible with other platforms. Your company could suffer in the long run if this isn't taken into consideration. Since you will be unable to accommodate the expansion of your company without investing in a new system, your operations will be disrupted and your money will be wasted. (Petratos and Faccia, 2019).

1.1.4. Characteristics of Accounting Information

The accuracy and usefulness of bookkeeping data depends on its depiction of the economic processes and events it describes. These characteristics are bolstered by the comparability and speed of the bookkeeping data, as well as the requirement that the data be provable and easily understood. In addition, the sections of OMFP 1802/2014's Accounting laws on the individual annual financial statements and combined annual financial statements stipulate that applicability and precise depiction are the primary qualitative qualities.

A. Relevance:

When information sticks out, highlighting significant and necessary aspects that users take into consideration during the decision-making process, it is pertinent. It's useful for verifying previous findings and deducing lessons for the future, so you can make more informed choices. By supplying users with a collection of pertinent data useful in formulating the entity's plans and strategies and projecting future outcomes, financial-accounting information demonstrates its prognostic value. Predictive value in the financial sector requires certainty in data. Predictive financial data are used by users to create forecasts, but they do not constitute forecasts in and of themselves. Information in the finance sector has both forecast and confirmatory value, and the two are inextricably linked. Thus, forecasts for the future and confirmation/information about prophecies made in the past rely on bookkeeping data. Users can use the comparative findings to make adjustments and enhancements to the analyzed processes. The substance criterion, referring to the character or quantity, or both, of the components to which the information pertains, is another factor in the significance of the information. (Handayani, 2011).

B. Exact Representation:

To accurately portray economic processes and events, one must show them in their entirety, without bias, and without any inaccuracies. Providing enough detail so that the reader can grasp the event being explained is the hallmark of a thorough exposition. Accounting data must be free from any forms of manipulation that could give rise to prejudice if it is to meet the impartiality requirement. To put it another way, "tampering with" bookkeeping data to get a desired response from users is strictly prohibited. An accurate and complete depiction of the occurrences, as well as a carefully chosen and correctly implemented method, guarantees the reliability of the stated data. The presence of the following qualitative characteristics—comparability, verifiability, chance, and intelligibility—further enhances the value of the pertinent and accurately depicted information. (Stickney et al, 2010).

a). Financial statements are more helpful when they may be compared to comparable statements from previous periods or dates, or to similar statements from other businesses, or to similar statements from the same company.

b) The data is more likely to be accurate and representative of the economic phenomena that they claim to reflect if it can be verified. The knowledge is verifiable if and only if it accurately portrays the world.

c) An opportunity is an opportunity for decision-makers to have access to information that will allow them to make judgements quickly. Data that is more than a few years old is usually not very helpful.

d). Since it is important for users to comprehend the information's substance, intelligence is a byproduct. According to Negescu (2004), the following characteristics also define high-quality accounting information:

• **Pertinence** - the information provides solutions in a given situation;

• **Timeliness** – the information presents recent events;

• **Accessibility** – the information is made variable depending on staff training, means of communication, storage means, etc.;

• **Reliability** – the information provides a real representation of an event / object;

• **Age** - is represented by the time passed since the information is collected until the decisions taken on the basis of the information have been implemented.

• **Speed** – the time it takes the information to travel from the issuer to the receiver;

•Frequency - represents the rhythm of information, according to the number of information of the same type in a time unit.

1.1.5. Users of Accounting Information

Many different types of people use the financial data produced by the bookkeeping process, and their reasons for doing so are just as diverse. Internal users, exterior users, and government agencies are the three main audiences for financial reports. (which is a specific form of an external user). Accounting data is utilized and displayed differently by various stakeholder groups.

1.1.5.1. Internal Users

Users within an organization are typically its proprietors and upper management who have a hand in both tactical and strategic decision making. They decide things like whether to hire, purchase, or replace machinery, as well as whether to continue using and fixing outdated machinery. They also determine what goods and services to manufacture and in what quantities. They are concerned with production expenses because they determine the selling price (Ladda, 2014).

A. Owners, Shareholders, Partners, and Proprietors

The consumer of bookkeeping data is the engine that keeps businesses running. They have the concepts and the money to make things run smoothly in terms of business, expansion, development, diversity, etc. Greater traffic, revenue, payout sharing, financial metrics, company growth/expansion, profits potential, etc., are all high on priority lists. Annual results, including Profit and Account and Balance Sheet and other ad hoc accounts, are a source of contention for the internal Users subcategory.

B. Management

Management (the board of directors), Middle Management (the company's executives), and Lower Management can all benefit from the information provided by the company's books. (Supervisory Staff). The information is helpful for completing policy statements at the highest management level, carrying out policy execution at the intermediate management level, and carrying out supervision duties at the lowest management level. Management is a crucial end-user of financial data. (Hall, 2011).

C. Employees

To ensure the long-term health and expansion of a company, open communication and friendly ties between management and staff are essential. When workers are extremely satisfied, dedicated, and driven, management and the business can have a healthy workplace partnership. (Syahputra, 2022).

1.1.5.2. External Users

Users outside of an organization's management structure who have an interest in that institution's financial data are known as "external users." There is an audience outside of the company that benefits from bookkeeping data in one way or another. For both internal and exterior stakeholders, financial accounting is the process of creating the company's financial statements. Information on who uses financial statements (clients, speculators, creditors/suppliers, government organizations, academics, and outsiders) (Florin-Constantin, 2013).

A. Creditors

Credit is extended by vendors to buyers on the understanding that they will be paid in full by the buyer within a certain period of time. Trade credit is a word used to describe this type of financing. As a result, they have to evaluate the client's ability to pay in the near future. A company's short-term viability or cash can be determined with the aid of financial records. Short-term trade credit policies can be shaped by debtors using financial information. (Saeidi et al, 2015).

B. Prospective Investors

The prospective investor may include, besides individuals, banks, and insurance/finance/mortgage companies. The vital guiding factors behind any investment decision taken by a potential investor that is involved in user of accounting information:

- Safety of funds invested.
- Recurring returns in the form of dividends.
- Possible capital gain.

C. Government Agencies

Governmental entities such as the IRS, the Company Law Board, the Registrar of Companies, the Securities and Exchange Board of India, the Ministry of Commerce, etc. require access to the aforementioned financial data. (Ponisciakova et al, 2015).

D. Customers

The interest of a customer or normal citizen lies in knowing the factors like monitoring mechanisms prevailing in the company. It regards production, selling, and other expenses, which affect the market price of the finished goods.

E. Researchers

Analysis and interpretation of financial statements of a company by researchers may lead to some unexpected. It also gives surprising results and innovative ideas, which different entities may use differently (Smirat, 2013).

F. Foreigners

Foreigners are interested in a company’s accounting data because of their exposure in joint ventures, foreign direct investments, etc. Further, there is an increasing number of merger and acquisition cases of Indian Companies with Multi-National Companies.

G. Others

Others who care about a company's success and development include entrepreneurs, trade groups, financial markets, media outlets, political parties, and so on. The effect on the business's fiscal and societal climate is also studied. (Dima, 2013)

1.1.6. Computerized Accounting Information Systems

Information systems have been digitized alongside the advancements in technology. Due to advancements in this technology, conventional accounting methods have given way to electronic ones. First appearing in the early 1950s with the introduction of commercial computers, the transformation in information systems is far from over (Dalci and TANI, 2004). Personal computers, which are smaller, faster, and cheaper than mainframes, have largely displaced these massive machines. As a consequence, most businesses have moved from using human accountants to financial information systems. Computers have made it possible for businesses to collect, analyze, keep, and send data. In contrast to older, more labor-intensive systems, modern online platforms use automated computer systems for data gathering and processing. (Grabski and Marsh, 1994). Processing data in manual bookkeeping information systems is time consuming and mistake prone. Companies can now efficiently gather, analyze, and recover data thanks to technological advancements. Computerized data processing also reduces the possibility of human mistake. In this instance, the following describes the duties of automated AIS that were described for human AIS above:

a. **Data input function:** When using a handwritten AIS system, information is recorded alongside its original source papers, then entered into notebooks and eventually accounting accounts. However, in automated AIS systems, once data are collected they must be transformed into a format that can be viewed by computers. Most modern AIS systems use automated source data collection mechanisms to record information as it is generated. Bar code readers in shops, for instance, can keep track of purchases by reading product IDs and recording that information. Not only can information be downloaded into a computer, but it can also be found in preexisting databases. Data about things can be found in a computer. Information is kept in relation to entities. (Li and Li, 2000).

b. Data processing: Data are analyzed after collection and computer entry. Data management is the most prevalent type of data handling. Updating recorded information is a part of data management. When a deal is made, for instance, the relevant details are recorded in a database. In response, the machine promptly revises the AR and revenue ledgers. When a document needs to be changed in a computer system, the main key is used. (Irani et al, 2001).

c. Information output: Information output is generated to fulfill user requirements after data are input into the machine and analyzed. Documents, reports, and answers to questions all constitute different modes of information presentation. Invoices and other documents are examples of records that can be found within a business. Printers can be used to reproduce these papers. They can also be saved as digital files in the archives' computer systems. Both internal and exterior audiences receive reports. Financial records, for instance, need to be drafted to accommodate the requirements of third-party consumers like debtors. Furthermore, computers can be set up to instantly present financial data in the necessary manner, such as spreadsheets. Companies can now send financial records to customers via computerized means, thanks to modern communication networks. The lack of paperwork and the resulting savings are obvious benefits. Reports can be made to suit the requirements of internal users, such as supervisors, in addition to those made for exterior customers. The requirements of the consumers may go beyond what can be provided in papers and monthly reports. When issues emerge out of the blue, administrators can access the system and run the necessary queries. Input from the person is used to determine what data is needed, and the machine then goes about collecting that data. The person then collects the data and examines it. (Kim et al, 1993).

1.2. Decision Making

Choosing the best course of action involves identifying the issue at hand, researching potential remedies, and making a conscious decision based on the collected data. This can be done intuitively, logically, or as a hybrid of the two. Using your hunches to decide between options is the essence of intuition. A rational procedure, on the other hand, relies on empirical evidence to arrive at conclusions. It's fine to rely on your gut when making important choices, but it works best when the decision is simple, has a high personal stake, or can be made swiftly. A more rigorous, methodical strategy that includes both perception and rational thinking is usually necessary when making more complicated decisions. It's important to think things through thoroughly and not act on impulse, especially when making business choices. (Albert, 2006).

Making a decision is similar to finding an optimum or at least adequate answer to an issue. Therefore, it's a procedure that can be more or less logical or nonsensical, depending on whether the information and ideas upon which it is founded are made known or kept hidden. When making a difficult choice, people often rely on their tacit information to help fill in the blanks. The decision-making process typically incorporates both implicit and formal forms of information. (Buchanan, 2006).

Decision making is described as the process of evaluating alternatives and selecting the best fit for a given circumstance. Making the correct choice at the right moment is essential to the success of any company, which is why decision making is often called the "backbone" of management. Choosing one course of action over another is the essence of decision making. Every day, people make a wide variety of important choices. When businesses make good decisions, they benefit, while when they make bad ones, they lose money. Therefore, the method by which a corporation makes its decisions is the most important procedure there is. Making a decision entails picking one course of action out of several options. decision-making procedure, which included the following steps: reacting to environmental circumstances, identifying alternative actions, and choosing one to accomplish a goal. (Chandra, 2010).

It takes mental effort, time, material means, and life knowledge to make a decision. The thinking process is crucial to this. The decisions made by leaders and managers are crucial to the success of their organizations. Each layer of management makes decisions that affect the whole to guarantee success. As part of the management process, every company needs to make sound decisions at some point. The company's decision will help illuminate the path forward. Management typically makes choices subject to internal and exterior natural limitations. (Thomas, 2008).

Uncertainty and risk are hallmarks of complicated, chaotic, and unforeseen issues, all of which are hallmarks of strategic management. The managerial decision-making process has evolved over time in response to the increasing intricacy of managerial issues and to the contributions of academics and industry professionals to the field of management studies. Managers in a complicated and unpredictable world need decision-making tools to help them make quicker choices and alter their minds just as quickly. A board's success or failure is largely dependent on the caliber and quickness of its decision-making. (Said Elbanna, 2006)

A decision is a deliberate choice made between two or more options with the intention of furthering the achievement of some larger corporate or management aim. The decision-making process is an ongoing and critical part of running any enterprise. Choices are made to ensure the continuity of all operations and the smooth running of the company. (Oriana, 2014).

Each tier of administration is responsible for making decisions that further the company's mission. In addition, these choices are a part of the fundamental functional principles that every business should have in place to maximize its potential for development and marketability in terms of the goods and services it provides Gillingham, 2003).

One definition of decision-making is "the mental operation by which one chooses, from among competing alternatives, a belief or a course of action." It could be reasonable or unreasonable. The decision-maker's own set of ideas about their own values, tastes, and views form the basis of their thinking process. A definitive conclusion is reached in every decision-making process, and that decision may or may not result in subsequent action. (Kreitner, 2007).

Organizational decision making is central to its operations. One definition of decision-making states, "Decision-making is the process of deciding between alternative courses of action in order to solve a problem. Decision making, as defined by Kreitner (1966), entails sifting through available options in order to select one that is best suited to the circumstances. So far as R. According to C. Davis, "management is a decision-making process," wherein one chooses a single action from a number of possible ones. The second component of administration is planning, which will come after decision-making. Organization, direction, coordination, control, and motivation are just some of the many things that come next after planning.

Decision making is described as the process of evaluating alternatives and selecting the best fit for a given circumstance. Making the correct choice at the right moment is essential to the success of any company, which is why decision making is often called the "backbone" of management. Choosing one course of action over another is the essence of decision making. Making a decision entails picking one course of action out of a set of options according to some set of parameters. A choice is a plan of action picked out of several possibilities with an eye toward achieving a specific goal, as stated by George R. Terry. Massie A decision is the process of deciding what course of action to take in a particular circumstance. A choice is an action taken after considering various options. ――D.E. Mc. Farland (Obi, 2016)

1.2.1. Characteristics of Decision Making

a. Rational-thinking

Sound management choices can be reached through the application of rational thought processes. It entails thinking things through logically and rationally to determine the best course of action. In order to think clearly, it is necessary to establish a set of aims.

b. Process

The act of deciding is often seen as impersonal and clinical. However, picking the most reasonable alternative is only part of the equation. Many variables, some of which are deliberate and some of which are not, impact our choices. Emotions, personal ideals, and views are all factors in the choices we make.

c. Selective

Managerial decision making is characterized by selectivity. To decide means to select the most advantageous alternative. What gets chosen depends on a number of variables, such as how well defined the parameters are and how much weight is given to each (Obi, 2014).

d. Purposive

Decisions made using a strategic strategy are those that are founded on the needs and priorities of the person or group involved. Decisions made using this method take into consideration not only the potential outcomes but also the values and preferences of those involved.

e. Positive

Management decision-making is a living ability that applies to everything from determining what to consume for lunch to picking a career path. Decisions can be made in a variety of ways, but they all share certain features that increase the likelihood of a favorable result. (Steinburner, 1974).

f. Commitment

Having dedication is vital if you want to make good choices. This necessitates a determination to stick with the choice even when things get challenging. Being able to justify your choice in the face of criticism is also essential.

g. Evaluation

Good judgment relies heavily on evaluation. This entails thinking about and analyzing every potential course of action. When weighing your choices, try to maintain as much objectivity as possible and take a holistic view of the circumstance.

1.2.2. Type of Decisions

a. Programmed and Non-programmed Decisions

The character of choices made by a computer program is typically repetitious. You can whip one up in no time at all. Purchase orders, approval of leaves of absence, pay increases, resolution of routine conflicts, etc. When managers encounter problems of this mundane nature, they typically stick to the tried and true methods. In contrast, choices that are not predetermined by a computer algorithm are not regular. They involve out-of-the-ordinary circumstances for which there are no tried-and-true procedures. This includes, but is not limited to, difficulties in dealing with a severe workplace relations problem, a decrease in market share, an increase in rivalry, issues with a key partner, and rising levels of public animosity towards the organization. (Oriana and Elena, 2014).

b. Operational and Strategic Decisions

Decisions that are operational or practical focus on the here and now. The main goal is to increase productivity in regular business activities. Better working circumstances include things like better oversight, more efficient use of current resources, more regular apparatus repair, and so on. Expanding into new markets, introducing new products, relocating production, forming partnerships with other businesses, etc. are all examples of smart business decisions. The repercussions of these choices will be felt throughout the company.

c. Organizational and Personal Decisions

Organizational choices are those made by managers in their official capacities as managers in regards to matters concerning the company. Managers make choices like implementing a new reward system, reassigning workers, restructuring departments, etc. with the end goal of accomplishing specific tasks. Managers, however, also make choices that are more of an individual character. However, their influence may spread beyond them and effect the whole company. The manager's resignation, for instance, may have serious consequences for the company despite its personal character. (Sanjeev, 2013).

d. Individual and Group Decisions

It is usual practice for some managerial choices to be made at the person level while others are made at the group level. When dealing with an issue of a regular character, individuals are expected to make choices on their own, while more significant, organization-wide decisions are best made by consensus. These days, most decisions are made in groups rather than individually, as this facilitates greater collaboration among those who will be responsible for carrying it out. (Thomas, 2008).

1.2.3. Steps of Decision Making Process

Making decisions is a crucial yet fundamental managerial skill that everyone should possess. Also, it may vary from one individual to the next. It's crucial to make choices that are grounded in thorough consideration of a wide range of factors, and to do so quickly. Therefore, it is not something to put off or rush.

Step 1: Identify the problem

Decisions are taken at this stage to implement solutions to issues. Therefore, managers must first diagnose the issue before making any decisions. The issue is any change from the norm. Organizational operations are checked against environmental standards by managers who look both inward and outward. There's an issue if it doesn't. If a company's annual sales goal is 10,000 units but it only sells 7,000 units, management knows there's an issue. The issue has been tracked down to the marketing team. In order to correctly spot the issue, managers rely on their own best judgment, creativity, and expertise.

Step 2: Diagnose the problem

Managers investigate the origin of an issue by amassing all available data and evidence. In order to solve an issue, it must first be diagnosed so that its causes, scope, intensity, and point of inception can be determined. Managers zero in on the root of the issue and compartmentalize it within the problem-solving domain of the business. In the aforementioned scenario, managers investigate potential causes of weak sales. The product may be of bad quality, have insufficient advertising, or a rival may offer a superior alternative. Once the root cause of the issue has been identified, a diagnosis can be made. (Vassilis and Spyros, 1998).

Step 3: Establish objectives

When managers make decisions, they hopefully arrive at a desired outcome, or objective. Setting goals is the same as making a decision to fix the issue. The choice is being made with the resolve in mind. If managers determine that ineffective salesmanship is to blame for low numbers, then raising those figures becomes an overarching goal.

Step 4: Collect information

Managers gather data from both their organization and the outside world to help them come up with solutions to problems. Solution-generation requires information as sources. Quantitative and emotional data are equally useful. For appropriate action to be done at the appropriate moment, it must be trustworthy, complete, and prompt.

Step 5: Evaluation of alternatives

Finding several solutions to a problem is what we mean when we talk about alternatives. Managers come up with a plethora of ideas in order to choose the most original, practical, and effective one.

In order to come up with new ideas, A.F. Osborn lays forth four principles:

(a) When brainstorming potential solutions, do not criticize ideas: All suggestions should be met with a favorable response from managers. Limiting the number of possibilities may be achieved by criticism throughout the stage of producing solutions.

(b) Unrestricted: Any and all potential solutions, no matter how far-fetched they may seem, must be considered. While they may not hold much weight on their own, they might be invaluable when included into a larger choice.

(c) Provide as many suggestions as you can: When addressing an issue, managers should solicit as many suggestions as feasible.

(d) Take preexisting concepts and make them better: To get the optimal answer, it is helpful to combine all the suggestions.

Step 6: Consider potential options

We assess the merits and demerits of each option by comparing them side by side. Assuming they contribute to the completion of the task, they are valuable. In order to assess how each option affects the issue at hand, we compare them using generally accepted criteria. The following are some of the quantitative and qualitative factors that are considered while assessing potential choices: Hassein (2012).

(a) Inexpensiveness: Alternatives must not to be expensive. It may be difficult for the business to afford to fire the current salesperson and recruit new ones in order to improve their sales abilities. You should stay away from such kinds of options.

(b) Assets: The organization's resource structure should be compatible with the alternative. In terms of the organization's resources, rules, and technology infrastructure, they need to be doable.

(c) Tolerance: Both the decision-makers and the impacted parties should find the alternatives to be tolerable. It would be best to abandon this option if managers' desire to boost sales via increased advertising expenditure is met with resistance from the finance department.

(d) Reversible: If alternative actions can be taken back, then the choice may be considered reversible. Given the substantial time, energy, and capital invested in purchasing property and constructing a facility, it would be very difficult, if not impossible, to turn back the clock on the choice to boost sales by raising advertising costs if everyone in the company disagreed with it. One crucial consideration when weighing options is whether or not the choice may be reversed.

Step 7: Select the alternative

Managers choose which options are best suited to accomplishing the goal after screening them against generally recognized criteria and eliminating those that aren't possible. Here are several ways to choose an alternative:

(a) Past experiences shape the present and the future. In order to choose the best course of action for the current circumstance, managers look back at previous activities, identify their successes and failures, and then evaluate them in light of the future environment.

(b) Experimentation: Conducting experiments to test out different options and choose the best one is another way to get experience. Due to the high initial investment required to execute each potential solution to the decision-making problem, this approach is prohibitively expensive. Consequently, it is not feasible to test every conceivable option. Furthermore, this approach could work for the time being. The chosen strategy need to be able to accommodate both the current and future needs.

(c) Doing research and analysis: This helps in finding the best option by searching for and analysing how future factors will affect current problems, using mathematical models. When weighed against the time and resources needed for testing and experience, this strategy is both more appropriate and more economical.

Step 8: Implement the alternative

The selected alternative should be accepted and implemented by the organizational members. Implementation must be planned. Those who will be affected by implementation should participate in the implementation process to make it effective and fruitful. Implementation of the alternative should ensure the following: (Emma, 2016).

(a) The selected alternative should be communicated to everyone in the organization.

(b) Changes in the organization structure because of implementation should be communicated to everyone in the organization.

(c) Authority and responsibility for implementation should be specifically assigned.

(d) Resources should be allocated to departments for carrying out the decisions.

(e) Budgets, schedules, procedures and controls should be established to ensure effective implementation.

(f) A committed workforce should be promoted. Unless everyone is committed to the decision, the desired outcome will not be achieved.

Step 9: Monitor the implementations:

It is important to keep an eye on the execution process to gauge how well it is received within the organization. Progress reports should be used on a frequent basis to determine whether or not the option is successful in achieving the goal for which it was chosen. If not, supervisors should make adjustments as needed during execution. It could necessitate starting the decision-making process over from the beginning. If so, that option will serve as the foundation for subsequent choices.

1.2.4. Decision Making Styles

a. Psychological

It's been found that people who make decisions based on their psychology are more likely to come up with novel and interesting solutions because they give more weight to their intuition. However, this mode of operation often results in hasty, ill-considered choices.

b. Cognitive

The thinking approach is widely recognized as one of the best ways to make decisions. Here, you'll use your head rather than your heart to make choices. If you're going for a logical approach, think about every angle before making a call. This may result in a delay in making a decision, but it increases the likelihood that the final option will be the best one. (Fred, 2010).

c. Normative

In project management, a normative choice is one that is made in accordance with predetermined guidelines. This method of decision-making is frequently employed when both time and consequences are limited.

1.2.5. Techniques of Decision Making

a. SWOT Analysis

The Strengths, Weaknesses, Opportunities, and Threats (SWOT) study is a common managerial tool. The process entails weighing the merits, drawbacks, prospects, and dangers of a proposed course of action. Individuals can make smart decisions by considering all of these options.

b. Marginal Analysis

The term "marginal analysis" describes a common method. It entails considering the potential expenses and gains of each alternative and selecting the one that will generate the most value.

- **Strengths**

With marginal analysis, you have to consider more than just the instant results of your decisions. Thinking about how your choices will impact other parts of your life can help you make wiser choices. (Andrienko et al, 2007).

- **Weaknesses**

It's a lengthy process. Considering all the potential unintended consequences and upsides can be time-consuming if you need to make a choice fast. Sometimes, it's easy to get stuck in a rut of analytical paralysis. It occurs when people spend so much time weighing the pros and cons of a situation that they end up paralyzed and unable to make a choice.

- **Opportunities**

If you don't use marginal analysis, you might lose out on chances. Because considering ramifications furthers your capacity for creative problem solving.

You might not instantly contemplate the environmental effects of operating a new vehicle, for instance. However, if you factor in all the hidden expenses and rewards of auto ownership, you might conclude that going green with a hybrid or electronic vehicle is the best option. (Papadakis et al, 1998).

- **Threats**

Marginal analysis ignores any potential ripple effects of a choice and instead focuses on the smallest possible shifts that will result from it. This is because the research ignores the proportional magnitude of changes in favor of focusing solely on exact values, which can lead to erroneous conclusions.

c. Pareto Analysis

By focusing on the 20% of variables that have the greatest impact, decision-makers can benefit from Pareto analysis. The method, developed and popularized by Italian economist Vilfredo Pareto, operates on the 80/20 rule.

- **Strengths**

It requires little in the way of instruction to implement because of how straightforward it is to grasp and employ. Decision-makers place more trust in the results of a Pareto Analysis because it is an impartial technique that uses facts rather than biased opinion. Because of its adaptability, the study can be used for a broad variety of issues and settings. (Nilsson and Dalkmann, 2001).

- **Weaknesses**

It focuses solely on the connection between causes and effects, ignoring any other potential elements. Some reasons may be more significant than others, and it may be challenging to identify all of them. There is a risk that Pareto analysis' mathematical principles will not always hold true.

- **Opportunities**

It can help you zero in on the best opportunities. Aids in prioritizing possibilities for more efficient resource allocation. Additionally, it can assist you in monitoring your development over time and adjusting your approach accordingly.

- **Threats**

Make sure the information you're using is correct and indicative of the community as a whole. There is a possibility that Pareto analysis favors severe results. The study does not take into consideration every variable that could affect the outcome. (Burton et al, 2020).

D. Decision Matrix

Last but not least, the choice matrix is a useful instrument for contrasting multiple alternatives graphically. By employing these methods, people can be sure they are choosing wisely and producing desirable results.

- **Strengths**

You have to give serious thought to every possible solution and evaluate them according to your standards. It can help you make rational choices rather than rash ones based on impulse. Can help keep you from becoming emotionally invested in one particular choice by compelling you to investigate all of your alternatives. It can help you explain your thought process clearly and concisely.

- **Weaknesses**

A problem arises when the parameters used to assess the choices are biased, as this can cause different individuals to draw different inferences from the same set of facts. Inaccurate or insufficient research could also result if not all choices were known at the time the decision matrix was made. It is not always feasible to use decision matrices because they take a long time to make and require a large quantity of data. (Duan et al, 2019).

- **Opportunities**

The ability to make better decisions by organizing and ranking options.

  - Ability to see the possible outcomes of each option.
  - The ability to compare options side-by-side.
  - Ability to quickly identify the best option.

- **Threats**

It may take some time and the involvement of many people to complete the process of making a matrix. A decision matrix can only provide reliable outputs with correct input data; otherwise, the outputs would be deceiving. It is possible to become overconfident in the outcomes while using decision matrices because of the illusion of accuracy they provide.

1.2.6. Difficulties in Decision Making Process

The managerial decision-making process can be challenging for any person or group. Decision making in software project management can be challenging for many reasons, including hazy goals, insufficient data, and personal biases. The following are five of the most frequently encountered challenges that can be encountered when making a choice (Kulcsár et al, 2020):

a. Avoiding Discomfort

It's tough to figure out what to do if you don't have well-defined goals. This is a common issue whenever a company must adapt to novel circumstances.

b. Consultation Ambiguity

If you don't have all the facts, it's hard to weigh your choices and understand the repercussions of your decisions. This can cause people to act on their intuition or with insufficient information.

c. Blind Spot

It can be challenging for people or organizations to make impartial decisions when they have strong emotional ties to the problem at hand. This can cause people to make choices based on their own preferences rather than what is in the best interest of the business as a whole (Rossier et al., 2022).

d. Indecisive

Group dynamics arise when numerous managers are engaged in the same decision-making process. Difficulty in deciding can be caused by a number of factors, including disputes over goals, divergent views on the best course of action, and battles for power.

e. Group-Thinking

There are instances when you need to make a call on the fly, without much time for reflection. This can cause people to make snap judgments that aren't always the best option. (Xu, 2023).

1.2.7. Models of Decision-Making

Decision makers' perceptions and actions in a given context are modeled. Managers typically follow one of two decision-making frameworks. This includes:

a. Decision-makers in the rational/normative paradigm are thought to be "economic men," as that term is used in the traditional theory of management. He acts solely out of a pursuit of material gain and personal gain. He makes choices based solely on the bottom line and gives little thought to how they might affect other people's lives. Decision-makers are assumed to be flawless information assimilation machines in this paradigm. They are able to collect all relevant data about the issue at hand, come up with a comprehensive list of solutions, accurately predict the outcomes of those solutions, prioritize those solutions, and ultimately select the most optimal one. They use a well-thought-out method for decision-making and always pick the best option.

The model has flaws in that real-world decision making deviates from what is expected by logical models. These examples serve as standards and guidelines. They merely outline the ideal state of affairs, the steps that should be taken by decision-makers, and the standards that should be adhered to at all times. They fail to provide a detailed account of how decision-makers operate under various conditions. (This is explained in the non-rational models). They only ever talk about the greatest things. However, the greatest is rarely attained in actual reality. (Marshall,1975).

b. Descriptive in character, non-rational models are more common in administrative contexts. Instead of describing the ideal, they explain the optimal solution for the current situation. They hold that internal and exterior structural variables limit managers' ability to make optimal choices. Managers are limited in their decision-making abilities due to imperfect information collection, analysis, and processing. Extreme logic is unusual. Rarely does one succeed. The finest choices possible under the conditions are made based on the information that can be gathered and processed by decision-makers. They suffice without being overly demanding on managers' time or energy. They are simple to grasp and apply. They are made with the limitations of the knowledge at hand and the cognitive abilities of the administrators making the decisions. These choices aren't the best ones to make. These are all excellent choices. The "principle of bounded rationality" describes the idea of decision-making within the bounds or constraints of managers' capacity to gather the necessary information for decision-making and to effectively analyze it. Herber Simon is credited with developing this idea. Because it is descriptive and stochastic rather than fixed, this paradigm is more in line with the way people actually make choices in the real world. Instead of exhausting all possible options before settling on the most gratifying one, decision-makers make do with the best information they can get their hands on, applying value assessment and instincts in the process. This paradigm does not depict a decision-making environment that is optimal. Instead, it depicts the actual state of affairs from which choices must be made. The decision maker is not an economist, but rather an administrator who balances objective considerations with the subjective beliefs of his team. His decision-making process is adaptable and can shift as needed. When faced with a choice between a logical but impractical option, managers will choose the former. (George and Stephen, 2000).

1.2.8. The Importance of Accounting Information in Decision Making

"The mere enumeration of evaluation criteria for the quality of financial information is of great utility for standard setters, practitioners and authors specialized in accountancy, business executives and external users of synthetic documents," writes Romania's most illustrious author (Feleagă, 2005). Accounting data is there "to provide the basic data needed by different users to take fundamental decisions," as stated by prominent American scientists (Needles et al, 2000). "The information provided by accounting represent the basis on which decision-making process rely both inside and outside the company." This statement lends credence to this objective. Distinguished US economists hold the belief that "accounting systems are based on economic events and operations which occurred in an enterprise and process all data contained in these operations to transform them into information useful to managers and other users, such as sales representatives or production department managers" (Needles et al., 2000). (Horngren et al., 2006). It is impossible to manage a financial transaction without first collecting, sorting, summarizing, and analyzing relevant data. In a 2006 study, Horngren et al.

A well-founded decision-making process is essential for producing high-quality results. There is a decision-making process involved in every choice we make every day, no matter how big or little. In this setting, the effectiveness of any economic system is dependent on the swiftness and quality of judgements made to eradicate the underlying causes. Information collecting, future costs and benefits consideration, option or action selection, and assessment of outcomes are all part of the decision making process, as stated by experts Ch. Horngren, M. Datar, and M. Foster.

Renowned economists R. Anthony and J. Reece differentiate decisions in two categories:

- Short term decisions;
- Long term decisions – elaboration of investment reports.

As Spătărelu & Petec, (2016) put it, "Since it is conceivable to halt the activity without reaching the correct analysis, it is prudent to restrict the alternatives considered during the selection process;" focus on more than just numerical numbers; recognise the magnitude of the mistake in the event of a failure; No matter what, you need to make a choice since doing nothing might be worse; above all, decide in advance.

CHAPTER 2. METHODOLOGY and FINDINGS

2.1. Methodology

2.1.1. Sample

The study sample consisted of 153 individuals from government agencies and public companies throughout the three governorates of Erbil, Duhok, and Sulaymani, as well as Bardarash and Aqra. The sample was chosen by a rigorous survey approach, guaranteeing the inclusion of all relevant participants and the representation of the whole study population. The participants mostly included corporate managers, unit managers, and accountants, all of whom have a direct role in management decision-making processes. The objective of this selection was to get insights from people who are integral to the use of accounting information inside their organisations.

2.1.2. Data Collection Process

A standardised questionnaire was sent to the 153 selected participants via email as part of the data collection approach. In order to accurately represent current practices and attitudes regarding the use of accounting information in decision-making, we conducted data collection within a predetermined period. We developed the questionnaire, which included 21 enquiries, after conducting a thorough review of the accounting literature. Subsequently, enhanced the questionnaire with the assistance of academic authorities. The data was collected using a five-point Likert scale, which enabled respondents to designate varying degrees of agreement or significance. Furthermore, a number of enquiries necessitated binary responses. further processed the collected data to eradicate any absent or inconsistent responses, thereby guaranteeing the accuracy and reliability of the information. The final dataset was analysed using the descriptive analytical method of the Statistical Package for the Social Sciences (SPSS).

2.1.3. Scales

In this study, a survey was employed as the primary data collection method. Surveys are among the most commonly used tools for gathering data, typically distributed to participants via mail, email, or online platforms. The effectiveness of the survey was enhanced by ensuring that the questions were both relevant to the study's objectives and easy to understand.

The survey was designed to assess the importance of accounting information in the decision-making process from multiple perspectives. It consisted of 21 carefully crafted questions. The scale used in the survey was adapted from Butterfield (2016). Each question was evaluated using a five-point Likert scale, ranging from "strongly agree" to "strongly disagree," allowing participants to express their opinions comprehensively.

A detailed summary of the survey questions and response options is provided in the scales appended to the study. This approach aimed to systematically and quantitatively capture participants' perspectives on the role of accounting information in decision-making processes.

2.1.4. Demographic Questions

Demographic enquiries were also implemented in the survey to determine the participants' background characteristics. The enquiries encompassed areas such as gender, educational background, years of experience, employment position, and age. The demographic information was indispensable for contextualising the data and understanding the potential influence of a variety of demographic characteristics on the perceptions of the importance of accounting information in decision-making for individuals. The appendix contains the precise demographic enquiries that were posed for simple access.

2.1.5. Research Hypothesis

Accounting information systems (AIS) are indispensable for modern financial management, as they furnish critical data to both internal and external constituents. These systems have evolved from manual accounting procedures to sophisticated computerized platforms capable of managing vast amounts of financial data with increased precision, speed, and security. The foundational significance of AIS in enhancing the efficacy of organisational decision-making processes forms the basis of the study hypothesis. Since ancient civilisations employed fundamental accounting methods, accounting has played a critical role in economic transactions throughout history. The discipline has evolved into numerous branches, including financial accounting, management accounting, tax accounting, and cost accounting, each of which concentrates on specific aspects of financial reporting and analysis. By automating procedures, minimizing human errors, and providing current information for decision-making, the introduction of AIS has completely revolutionised these specific areas of study. AIS's ability to generate, analyse, and disseminate financial data to a variety of stakeholders, including management, investors, creditors, and regulatory organisations, underscores its efficacy. These technologies not only ensure the precision and completeness of financial data but also enhance its importance by providing immediate and practical insights. In the current fast-paced business environment, the implementation of AIS has become a critical component for organizations that aspire to maintain a competitive edge.

The objective of the study is to examine the impact of AIS on organizational performance, with a particular emphasis on decision-making efficacy, financial precision, and overall corporate prosperity. Organisations that have successfully implemented an Accounting Information System (AIS) are expected to demonstrate superior financial management skills, which will lead to improved decision-making outcomes and enhanced performance indicators. This hypothesis is predicated on this assumption.

Research Hypothesis

The hypothesis for this research is as follows:

Hypothesis 1: Managers in companies in the Erbil, Duhok, and Sulaymani, Bardarash, and Aqra regions report that the quality and availability of accounting information significantly enhance the effectiveness of strategic decision-making.

Hypothesis 2: The efficacy of operational decisions within telecommunications companies in the Erbil, Duhok, and Sulaymani, Bardarash, and Aqra regions is significantly influenced by the implementation of management accounting practices.

Hypothesis 3: Targeted interventions can be implemented to address the primary obstacles encountered by managers in the Erbil, Duhok, and Sulaymani, Bardarash, and Aqra regions in utilising accounting information for effective decision-making.

This hypothesis will be tested through empirical analysis, focusing on key performance indicators and comparative studies across different organizations.

2.1.6. Data Analysis

Through the ready statistical program (SPSS), the forms were distributed, downloaded and analyzed using the descriptive analytical approach

2.2. Finding

In order to confirm that the study's hypothetical model is legitimate, this part will show and analyze the data obtained from the replies of the study's sample members using statistics such as percentages, arithmetic means, and standard deviations. As a result, the following parts make up this chapter:

1: Description of the study population and its sample

2: Description of the study variables within accounting companies in Dohuk

3: Test hypotheses

2.2.1. Description of the Study Population, Respondents, and Their Sample

The study's sample, rationale for selection, restrictions, and participants will all be detailed in this publication. A stratified random approach was used to choose the study sample. Accounting firms in Dohuk were given the survey forms mentioned in Appendix (1). The researcher followed the study's instructions when they sent out questionnaires to participants; the total number of surveys sent out was 153 (distributed electronically to businesses), as indicated in Table (1).

Table 1

Distributing Questionnaire Forms to Accounting Companies

N	Companies	Percentage of total valid forms (Mean±SD)		Percentage
		Distributed	Received and valid	
1.	Dohuk	25	25	16.23± 0.101
2.	Aqra	25	25	16.23±0.101
3.	Emadi	25	25	16.23±0.101
4.	Sheikhan	25	25	16.23±0.101
5.	Zakho	30	30	19.48±0.208
6.	Bardarsh	23	23	15.6±1.05
	Total	153	153	%100

2.2.2. Description and Diagnosis of the Study Variables

This research includes describing the study variables and diagnosing them through analyzing the data related to them. Frequency distributions, percentages, arithmetic and standard deviations were used for each question of the questionnaire. To achieve this, it was divided into three sections according to the study variables, as follows:

- **Section One**

Table 2

Analysis of the Importance of Accounting Information in Management Decision-Making: Survey Results from the Erbil, Duhok, Sulaymani, Bardarash, and Aqra.

NO	Question	Mean ± SD		
		Valid	S	%
1	Does the business require reports containing financial information in the business?	Yes	140	91.5± 0.012
		No	13	8.5± 0.104
2	Does your organization view information as a strategic asset?	Yes	141	92.2±0.130
		No	12	7.8±0.020
3	Do you receive the necessary management accounting reports on performance relative to established objectives	Yes	140	91.5±0.023
		No	13	8.5±0.21
4	Is the information provided in sufficient detail and on-time to enable carrying out decision-making efficiently	Yes	134	87.6±0.053
		No	19	12.4 ±0.12
5	How often do you use reports containing financial information in the business in general	Quarterly	11	7.2±1.31
		Monthly	114	74.5±0.821
		Semi-Annually	5	3.3±0.002
		Annually	23	15±0.165
6	Are there problems in the generation and use of accounting information needed to make management decisions	Yes	19	12.4±1.08
		No	134	87.6±0.21
7	The extent to which the accounting information created by the accounts department contributes to the decision-making process	Yes	140	91.5±0.189
		No	13	8.5±0.021
8	Planning goals and objectives	Very Important	121	79.1±0.76
		Somewhat important	26	17±0.024
		Not very important	5	3.3±0.0023
		Not at all important	1	0.7±0.001
9	Directing and controlling the performance	Very Important	25	16.3±1.02
		Somewhat important	115	75.2±0.809
		Not very important	12	7.8±0.201
		Not at all important	1	0.7±0.002
10	Team distribution according to the organization’s objectives	Very Important	36	23.5±0.801
		Somewhat important	80	52.3±0.902
		Not very important	34	22.2±0.230
		Not at all important	3	2±0.001
11	Assessing the organization competitive position	Very Important	36	23.5±0.1034
		Somewhat important	73	47.7±0.56
		Not very important	37	23.2±0.023
		Not at all important	7	4.6±0.004
12	Team distribution according to the organization’s objectives	Very Important	39	25.5±0.109
		Somewhat important	81	52.9±1.04

		Not very important	29	19.0±0.031
		Not at all important	4	2.6±0.004
13	Accurate use of financial information available within the organization	We put nearly all of the information that is of real value to good use	126	82.4±1.09
		We probably leverage about half to our valuable information	26	17.0±0.184
		Vast quantities of information go untapped	1	0.7±0.001

Table (2) number 1 in the first question shows that the majority of the research sample, to whom the questionnaire was distributed, strongly agreed with the first question. The agreement rate was (91±0.012%). However, a small percentage of the sample disagreed about the importance of financial reports for decision making, with a rate of (8.5±0.104%). The descriptive analysis of the second question regarding the perception of accounting companies towards globalization as a strategic asset revealed that a significant proportion of these companies utilize this information to inform their strategic decision-making processes within their business operations. This is a significant evidence that accounting information is not only a financial occurrence, but rather a crucial source for decision-making. Currently, the primary focus is on addressing the significant challenges that accountants encounter in supplying the essential information needed for decision-making at different levels. The level of agreement on this matter is approximately (92.2% ± 0.130), while the percentage of those who do not view it as important is around (7.8% ± 0.020).

The findings in table (2) regarding the third question demonstrate that accounting financial reports hold significant value for accounting firms in relation to the objectives they aim to accomplish. This is evident from the high level of agreement among the participants in the study, with a percentage of (91.5± 0.023), indicating that these reports serve as the foundation for establishing goals within these accounting companies in terms of... Having attained their desired outcome, the proportion of disagreement among them was (8.5±0.21).

The findings in Table 2, question four, demonstrate that the majority of the research participants agreed that receiving information within the specified time frame has a significant and efficient impact on decision-making effectiveness. The timing of acquiring accounting data has a significant impact on the quality of decision-making.

The research sample showed a high level of agreement (87.6±0.053%) on this matter, while the study sample demonstrated a lower level of disagreement (12.4±0.12%).

The statistical analysis findings for the fifth question reveal the frequency of dependence on financial reports among the sampled firms in the research. The data shown in Table (2) indicates that most of the organizations included in the study rely on financial and accounting reports for their operations. These reports are classified on a monthly basis and are regularly updated. Regularly, on a monthly basis, (74.5±0.821%)of the companies relied on periodic reports, while a portion of them used annual reports as part of their operational procedures to ensure financial stability, accounting for 15.0±0.165%. A small percentage of companies opted for semi-annual reports. Every year, with a precision of (3.3±0.002). Regular use of financial facts enables managers to make well-informed choices.

Upon analyzing Table (2), it was discovered that question 6 pertains to the level of challenges associated with creating or using accounting information inside administrative departments. The study sample revealed that there are no issues associated with that axis. Instead, it demonstrated that the mechanism is exceptionally seamless and effortless, which encourages a consistent reliance on accounting information. In terms of administrative work and decision-making, the proportion of individuals who did not endorse the presence of issues was (87.6±0.21%). A small number of individuals, around (12.4±1.08), expressed concerns about potential issues that may arise from depending on this information. This highlights the significance of accounting information in guiding administrative decision-making.

The statistical analysis results presented in Table (2), question 7, demonstrate the impact of accounting information in the decision-making process within the accounts department. The majority of the study sample agreed that accounting information plays a significant role in making administrative decisions, with an agreement percentage of (91.5±0.189). However, a small percentage held a different opinion, indicating a lack of agreement on the importance of accounting information, with a percentage of (8.5±0.021). This discrepancy might be attributed to variations in the accounting work milieu.

- **Section two: Analysis of the data of the second part of the questionnaire**

The analysis results presented in Table (2) for question 8 reveal that the research sample members highly emphasized the significance of planning in their respective job roles. A majority of the sample members acknowledged the importance of planning, highlighting that one of the objectives of planning is to provide clarity and guidance on tasks to be accomplished within short timeframes. The level of consensus on this subject was (79.1% ± 0.76) among the study sample, whereas among persons who were indifferent to this question, it was just (0.7% ± 0.001). This highlights the need of strategic planning in accounting tasks to achieve objectives while minimizing potential hazards.

Table (2) question 9 reveals that there was a variation in the study sample's response to this question. Specifically, (75.2± 0.809) percent of the sample agreed with the importance of monitoring performance within the accounting activity, which is crucial for successful planning in the workplace. However, a small percentage of the sample expressed indifference towards this matter. The study sample members, comprising around (0.7 ± 0.002) of the total, emphasized the significance of this question. This highlights the crucial role that performance assessment plays in the success of planning, as it depends on established standards.

The findings from Table (2) question 10 revealed divergent viewpoints. The majority of the research sample concurred that the work team plays a significant role in the success of planning in accounting companies, with an agreement rate of (52.3±0.902%). However, a subset of participants leaned towards a different perspective. Given that the success of planning is not influenced by planning within work teams (22.2±0.230%), there is a group that disregarded the significance of this matter (23.6±0.801%). This disparity is a result of the substantial magnitude of these corporations. Large corporations prioritize work teams to a significant extent, in contrast to smaller organizations.

Question 11: The research sample indicated that making timely and accurate decisions may necessitate the use of accounting data for effective administrative decision-making in business organizations. The percentage of agreement on this question within the research sample was 47.2% with a margin of error of ±0.56%. Conversely, the proportion of those who did not consider this topic to be important was (4.6±0.004), indicating a negligible number. This highlights the significance of accurately choosing accounting information and its impact on competitive performance.

According to Table 2, question 12, the development of long-term plans and strategies is considered somewhat important, as indicated by the majority of sample members (52.9±1.04%). Strategic planning is the process of determining the necessary organizational efforts, which was deemed highly important by 25.5±0.109% of the sample members. A few sample members indicated that it is not important. Long-term planning extends beyond seven years and aims to optimize decision-making by considering various possibilities.

The findings of the descriptive analysis shown in Table (2), question 13, revealed that the research sample exhibited variability in their use of accounting information within their respective workplace. The first statement, which pertains to the use of financial information inside the organization, was deemed the most precise by the sample members. The vast majority of valuable information was effectively used, accounting for around 83.4± 1.09% of the total. Additionally, the term "use of information" was applied to almost half of the material. The information value reached a significant level of (17 ±0.184%) and (0.7±0.001%), indicating a substantial quantity of untapped knowledge. This suggests that most sample members use valuable information while making administrative decisions.

- **Section three: Third field data analysis: financial reports**

Table 3

Third Field Data Analysis: Financial Reports

N	Valid	Strongly Agree		Agree		Neither Agree Nor Disagree		Disagree		Strongly Disagree	
		S	%	s	%	s	%	s	%	s	%
1.	The information contained in the reports is adequate	110	71.9±1.02	30	19.6±0.081	10	6.5±0.018	3	2.0±0.001	-	-
2.	The reports clear and illustrate	20	13.1±0.012	106	69.3±0.42	26	17.0±0.03	1	0.70±0.002	-	-
3.	The reports are easily comprehensible	25	16.3±0.821	66	43.1±0.23	60	39.2±0.30	2	1.30±0.01	-	-
4.	The required information is readily available	20	13.1±0.601	75	49.0±0.35	50	32.7±0.28	4	2.6±0.001	4	2.6±0.76
5.	The information received is up-to-date	21	13.7±0.254	69	45.1±0.33	60	39.2±0.03	2	1.3±0.02	1	0.7±0.001
6.	I rely on accuracy of the reports	14	9.2±0.023	86	56.2±0.81	48	31.4±0.022	5	3.3±0.01	-	-
7.	I am pleased with the present management accounting reports	18	11.8±0.532	73	47.7±0.40	60	39.2±0.18	1	0.7±0.001	1	0.7±0.001
8.	It is probable that I will act on the information in the reports	18	11.8±0.532	75	49.0±0.44	54	35.3±0.23	6	3.9±0.44	-	-

The results of the statistical analysis of questions about accounting reports (Mean±SD, as shown in Table (3) indicated the following:

1. A significant proportion of the sample participants, around 71.9±1.02%, agreed with this question, while just 2.0±0.001% disagreed. Among the 153 individuals, they unanimously agreed that the information included in the reports is both adequate and suitable for making the correct decision. Consequently, reports should provide enough information to facilitate managerial decision-making, necessitating the collection and evaluation of data and information from many sources, including qualitative and quantitative data, in order to comprehend the situation at hand.
2. The study sample showed a moderate level of agreement regarding the second question, indicating that a significant number of sample members (69.3±0.42) believe that the financial reports they receive are clear. This clarity is perceived to be helpful in their decision-making process. There was a significant level of disagreement (0.70±0.002) with a high level of accuracy. This highlights the significance of these accounting reports to them.
3. The table findings reveal that the majority of the sample affirmed that comprehending financial reports is of great and basic significance, based on their responses to the third question. The overall acceptance rate for comprehensibility of the reports was 43.2±0.23%, while the neutrality rate was 39.2±0.30%. These figures suggest that the recipients recognize the significance of this information and are open to acquiring accounting knowledge to enhance their decision-making abilities.
4. Table (3) revealed that 49±0.35% of the research sample agreed that obtaining financial reports is suitable. The remaining respondents, approximately 2.6±0.001%, expressed a range of opinions from neutrality to disagreement, believing that financial reports are easily accessible.
5. The respondents in the research sample expressed a strong desire to update the accounting information they receive in order to make informed administrative decisions. The agreement rate on this question was 45.1±0.33%, while the neutrality rate was 39.2±0.03%, indicating a lack of importance placed on the question.

6. Table (3) indicated that the research sample reached a consensus (56.2 ±0.81%) on the sixth question regarding the precision of accounting reports and their significance in managerial decision-making. The researcher also noted that the degree of error reduction relies on the quality of these reports, and emphasizes the importance of accuracy in order to ensure valuable information. And beneficial. While a few of the individuals in the sample were unbiased, it is crucial to prioritize the excellence and precision of the reports in order to get the optimal outcome.
7. Table (3) indicates that 47.7 ±0.40% of the sample agree on the significance of financial accounting reports, specifically performance reports, that consider the performance of the whole organization, from the first employee in each department to the last employee. These studies are used to create crucial choices about the company's future. Abandon your pursuit. Individuals that do commendable tasks are duly compensated, and several types of reports exist to support this notion, including demand information reports, competition analysis reports, internal reports, and external reports. The percentage of disagreement on this topic was (0.7±0.001) and the number of neutrals was 39.2%, which is a substantial proportion. In comparison to acceptance.
8. Table (3) showed that the study sample had different responses to this question. The agreement percentage was 49 ±0.44%, while the neutral percentage was 35.3±0.23%. The disagreement percentage was 3.9±0.44%. The table shown above illustrates the degree to which individuals in the sample are willing to dispose of reports depending on the information they contain.

2.2.3. Test Hypothesis

Here we aim to test the study hypotheses to identify correlations and effects between the main and sub-variables. The hypotheses will be verified through the use of a number of statistical methods and tools that were chosen to conduct analysis on the study variables.

1 : Analysis of correlation relationships.

2: Analysis of impact relations.

3: analysis of variance.

Correlation Analysis, Internal Consistencies, and Descriptive Statistics

Table 4

Correlation Analysis, Internal Consistencies, and Descriptive StatisticsFindings

Varibales	Mean	SD	α	1	2
1. Importance of accounting information	3.15	0.40	.71	-	
2.Management decision making process	3.85	0.40	.73	.36***	-

Note: The importance of accounting information was measured on a 4-point Likert-type scale, while the management decision-making process was measured on a 5-point Likert-type scale. Cronbach's α (α) represents the internal consistency reliability values. SD = Standard Deviation; ***$p < .001$, **$p < .01$, *$p < .05$.

Table 4 presents the correlation analysis of the basic variables included in the study. According to the findings, a statistically significant and positive relationship was obtained between the importance of accounting information and the management decision process. In other words, accounting information has a very significant effect on the decision-making process. The effect size or r correlation coefficient of 0.36 is statistically significant at $p = .000$.

In addition, both scales used in the study are reliable. Since accounting information importance is measured with a 4-point Likert scale, an average value of 3.15 is considered high. The management decision-making process is measured with a 5-point Likert scale, and the average value of 3.85 is not low. The standard deviations related to the scales are low.

2.2.3.1. Regression Anaalysis

Table 5

The Impact of the Importance of Accounting Information On Decision-Making at the Overall Level of the Study Sample

Varibales	Management decision making process		
1. Importance of accounting information	**β**	t	R^2
2. Importance of accounting information	36	4.737***	0.12

Note. R^2 represents adjusted R^2***$p < .001$, **$p < .01$, *$p < .05$.

Regression analysis shows that accounting information predicts 12 percent of the variation in managerial decision-making in accounting in the current study sample. In other words, accounting knowledge positively affects the accounting decision-making process.

3. Analyzing the influence relationships between the importance of information and decision making through a study of a sample (accounting companies)

Table (5) shows that the most influential relationship between the importance of accounting information and decision-making was between Duhok Company and a specific percentage (81%), and indicates that Duhok Company is interested in accounting information among competitors in the accounting sector, followed by Sheikhan Office as the second competitor and a percentage (73%), and this was through the level of significance (P value) (0.05).

Figure 1

Relationship Between the Importance of Accounting Information and Decision-Making

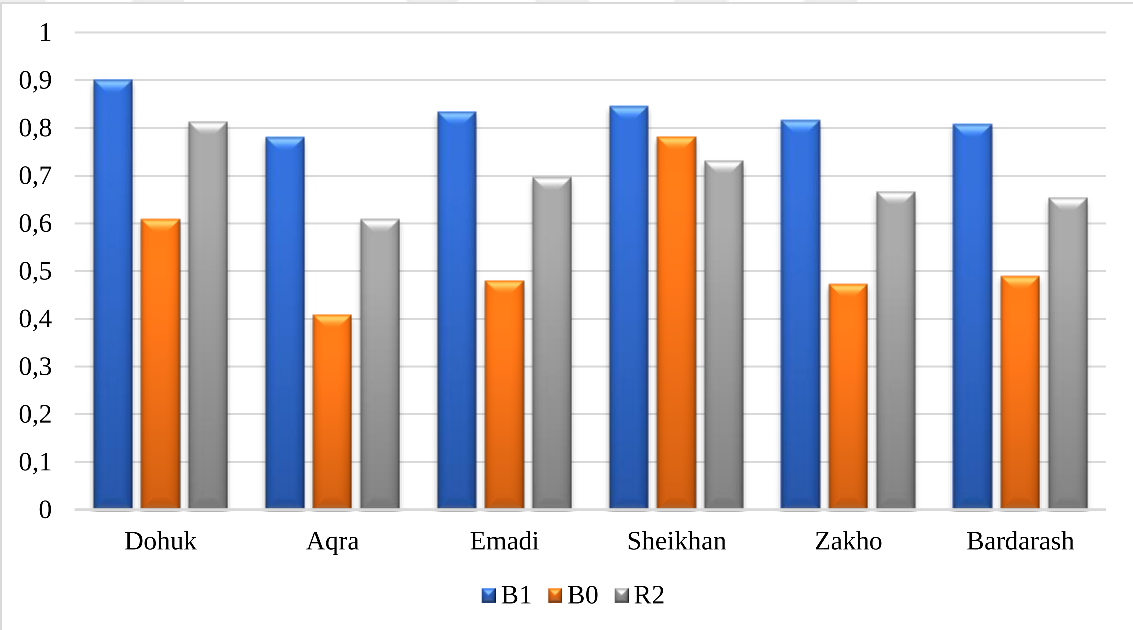


Table 6

It Indicates the Influential Relationship Between the Importance of Accounting Information and Decision-Making at the Level of the Research Sample Companies

	the sample	importance of accounting information		R^2	(F)	
		B1	B0		Calculated	
decision-making	Dohuk	0.901±0.012	0.609±0.013	0.813±0.020	12.377±0.12	3.84
	Aqra	0.780±0.02	0.408±0.15	0.609±0.017	13.146±0.26	
	Emadi	0.834±0.08	0.480±0.35	0.697±0.016	13.370±0.27	
	Sheikhan	0.845±0.022	0.781±0.13	0.731±0.026	15.141±0.46	
	Zakho	0.816±0.021	0.473±0.33	0.666±0.025	8.328±0.07	
	Bardarsh	0.808±0.017	0.489±0.032	0.654±0.022	4.340±0.0012	

2.2.3.2. Variance

This axis deals with the choice of the variance hypothesis and the extent of variance between the accounting companies of the study in making decisions depending on the availability of accounting information. The variance hypothesis will be answered, which states that the sample's variance in making its decisions depends on the importance of accounting information:

Table (6) shows that the substance of the variance hypothesis is the accounting sample's variation in decision-making according to the accounting relevance of information. The estimated value of F (15.141), which is a Significant value at the level (0.05), indicates that there is a clear variation in the research sample favouring decision-making, and this is supported by the importance of the model.

Table 7

In Decision-Making Depending on the Importance of Accounting Information

S. O. V.	S. S.	D. F.	M. S.	F	Sig.
B. G	28.916	35	0.826	16.639	0.000
W. G.	7.150	117	0.050		
Total	36.067	152			

*P ≤ 0.05 N = 153

Accordingly, Duncan's test was conducted to determine the degree of variation between the samples. And then the Duhok office, where the arithmetic average was (4.0917), and this is an indication that both companies are declining in their ability to make decisions according to the available accounting information. Finally, Bardarash Accounting Company came in with a arithmetic average of (4.3627).

Table 8

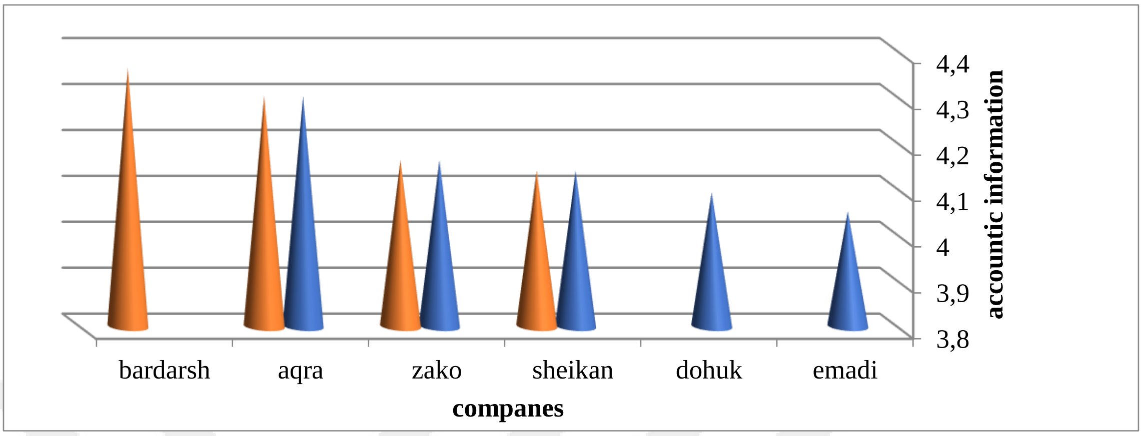
Accounting companies Differ According to the Importance of Accounting Information

Companies	N	Subset for alpha = 0.05	
		1	2
Emadi	28	4.0506±0.014	
Dohuk	30	4.0917±0.015	
Sheikan	30	4.1389±0.013	4.1389±0.016
Zako	35	4.1619±0.014	4.1619±0.014
Aqra	30	4.3014±0.003	4.3014±0.13
Bardarsh	0		4.3627±0.204
Sig.		0.051	0.075±0.014

Means for groups in homogeneous subsets are displayed.

Figure 2

Accounting Information



DISCUSSION

Based on the statistical analysis of the sample members, the most significant findings of the study are as follows:

1- The overwhelming majority of respondents to the survey concur that accounting data is essential for administrative decision-making and that it facilitates the formulation of rational decisions.

2. More than eighty-seven percent of the respondents who completed the survey reported that they encountered no challenges in the creation and utilisation of accounting data.

3. The results indicate that the majority of administrative procedures incorporate accounting information, with the most significant components being long-term strategic planning and goal-setting.

4- A substantial number of respondents indicated that the safety of decisions may be enhanced by the accounting data that administrators employ to make decisions.

5. A statistical analysis verified that the input to administrative decision-making is essential for the improvement and rationalisation of decision-making, as well as the assurance of its efficacy, in a significant 91.5% of the cases. conclusions derived from financial records

Several significant outcomes were uncovered by the study's findings. The first thing to notice is that the people who participated in the research were aware of accounting information and decision-making. However, their viewpoints on these topics differed greatly, which is another evidence of the fact that there are distinct variances among them. There was a positive and statistically significant relationship between accounting information's significance and administrative decision-making, according to the data (correlation coefficient =0.36, p=0.01). This result lends credence to the idea that the research sample as a whole exhibits a positive association. There were also positive and direct relationships between the study's dimensions and the micro-level research variables. With a F value of 208.838 and a R^2 value of 0.540, the regression study suggested that accounting information strongly effects decision-making, indicating a positive moral effect of accounting information on decision-making. The significance of accounting information in micro-level decision-making was shown by the remarkable 81% association between the relevance of accounting data and choices taken by Dohuk Company. Last but not least, a F value of 16.639, which is significant at the 0.05 level, confirms that decision-making processes change depending on the relevance of accounting information, indicating that administrative choices differ dependent on the significance of accounting information. (H1): To what extent do the present variables of the study's sample members vary from one another? Accounting information and decision-making were seen from different angles by the sample members, confirming the hypothesis. In terms of the study's whole sample, there is a positive and statistically significant relationship between the weight given to accounting data and administrative decision-making (H2). A strong correlation ($r=0.36$, $p<0.01$) lends credence to the null hypothesis. (H3): Accounting information is significantly correlated with the relevance of micro-level administrative decision-making.

The statistical data demonstrated direct and positive associations, which substantiated the concept. Accounting information and administrative decision-making have a positive moral impact.

Managers are primarily responsible for the formulation and execution of decisions. The Explanatory Dictionary of the Romani Language (Trigo et al, 2016) defines the decision as "1. the decision made after examining a situation, 2. the solution adopted for a problem, 3. the choice between two or more solutions." The Romanian economists I. Ionaşcu, A. Tiberiu, and M. Stere define the process of making a choice as the "transformation of primary information by a decision-maker into actions within an organisation or part of the organisation" (Drury, 2018). The ability to collect, analyse, assess, and comprehend information is essential, as decisions dictate the course of action and success is determined by the successful completion of established objectives. The transformation and utilization of information are essential components of decision-making. It is universally acknowledged that there is a solution to every challenge. emphasized the importance of attaining objectives by employing the most cost-effective, efficient, and effective strategies, as well as personalizing assessments based on the data provided by the system.

The management's ability to make timely and high-quality decisions and to promptly address and resolve any issues that may arise are directly correlated with the efficiency and effectiveness of any economic system. The quality and efficacy of management decisions are determined by the decision-making process, which encompasses the steps undertaken to develop and support a decision. According to renowned researchers (Oriana and Elena, 2014), the decision-making process entails the collection of information, the consideration of prospective costs and benefits, the selection of an alternative, the subsequent action in accordance with that choice, and the assessment of the outcomes (Sanjeev, 2013). Consequently, it could be contended that the probability of making sound decisions is contingent upon the quality and quantity of information provided by the economic information system. The significance of accounting information is underscored by a variety of factors, such as its ability to accurately represent economic events and processes and its high level of certainty. Additionally, it is the source of the majority of information that is disseminated within an economy (Garrison et al., 2021). "The common view of the opinions of different authors and accounting bodies regarding the main objective of financial information is to be useful to different users in the decision-making process" (Ladda, 2014) reiterates the findings of Grande et al. (2011). Decision-makers depend on information to ascertain the optimal course of action throughout the decision-making process, as they establish the objectives. Information is indispensable for numerous reasons, as per Garrison et al. (2021). These encompass the following: - ensuring a firm's comprehensive interaction with its environment; - fostering stronger customer relationships; - remaining competitive in the current business environment; and - showcasing the ability to create and manage knowledge. The genuine objective of managers is to enhance the efficiency of their organizations. In order to accomplish this, they must devise strategies and growth plans, the efficacy of which is contingent upon the data they employ. Information is also essential for the detection and management of any hazards that may arise and have adverse effects on the achievement of the stated objectives (Trigo et al, 2016).

Conclusions and recommendations

The following are some suggestions for researchers regarding additional studies that complement the subject, as well as suggestions for an introduction and future goals for the management of the study sample in companies, all based on the findings from the study's theoretical and field components:

A- The study reached a number of conclusions that can be presented according to each variable separately, as follows:

a. Conclusions:

1. The theoretical review of available scientific sources revealed that the available information and its importance is one of the keys to success in making successful decisions and reaching goals before competitors reach and acquire those opportunities, and that companies should study this if they want to achieve success in making administrative decisions and working under it is based on a set of dimensions, including those dimensions adopted by the current study.

2. It was found that there is a difference in the opinions of the study sample members regarding describing the importance of accounting information and decision-making, so companies must take into account the opinions of the sample members about those dimensions and their importance in measurement.

3. The study sample agreed, through an accurate description of the information, that it adopts many fields to achieve efficiency and efficiency and create many advantages for the customer that are not found in other companies or institutions.

4. The same agreement clarifies the direction of the description of decision-making dimensions, that we must work to add some increases that increase the client's benefit and thus achieve value for accounting companies.

5. The results of the statistical analysis of the sample data indicated that there is a strong and significant correlation between the study variables at the aggregate level. Creating proactive growth to sustain its business

6. The results of the impact analysis at the micro-dimensional level indicated that the impact exists between both the importance of accounting information and decision-making.

7. The results of the analysis at the corporate level showed that in terms of the impact on the importance of accounting information, the Duhok office came in the lead among the offices that have mechanisms or strategies for obtaining information that led to creativity in decision-making, then it was followed by the Al-Sheikhan Accounting Office.

8. The results of the statistical analysis of variance, following the Duncan equation, showed that the accounting firms of the sample vary slightly depending on the offices themselves that rely on the information, which indicates that all offices focus equally on the decision-making variable to determine its importance.

9. The results of analyzing the Duncan equation to determine the variance regarding the importance of information towards the sample offices indicated that there was a noticeable and very clear variance in the value of the offices, as the Amadi office came in first place, unlike the offices that occupied first place. Other offices through its accounting center. This indicator can be accepted depending on the nature of the climate in which those offices live, which gives students marketing and makes them valuable among their corporate peers.

10. Our research led us to the conclusion that accounting data plays a significant role in aiding managers to make administrative choices at all stages of the administrative process, accounting.

11. The company's management values accounting information since it is the main component in operating a facility and evaluating its efficiency and effectiveness in carrying out its duties. The amount of accounting data needed to make administrative decisions determines the efficiency of administration. In the end, we ran the necessary statistical analyses, tested our hypotheses, retrieved and presented our results, and offered the necessary feedback and recommendations. That way, decision-makers might use accounting data to justify their choices.

Recommendation

Accounting information is crucial for administrative decision-making, according to the researcher's prior results from the field study and statistical analysis. Some suggestions may be made to enhance performance and effectiveness based on this information.

1- The goal of publicly traded companies is to provide better accounting information to its stakeholders by making it more accurate, easier to obtain, more relevant, and more quantitatively efficient. This will encourage managers to use the information when making decisions.

2- Increasing attention to accounting information that helps to create comparisons and future projections and establish strategic plans to enhance the level of work performance and to allow management to find problems and treat them .

3-We need to determine what kinds of data each administrative category needs, factor in the various users of this data and the complexity of their requests, and provide the data needed for decision-making models.

4-The need of using accounting data for administrative decision-making in guiding and managing performance.

5-Determining the optimal course of action for decision-making by incorporating more data into planning, decision-making, and the creation of future institution policies grounded on science and supported by data and other available options.

6-developing tools and procedures for the workplace by incorporating contemporary methodologies into decision-making, creating a state-of-the-art database, and advancing technologically.

7-Generating data that management and decision-makers need by using the best data analysis and processing techniques currently available.

8-The significance of educating decision-makers to handle environmental factors and contend with decision-making challenges.

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APPENDIX

App 1. *Original Form of High Context Scale*

Q1/ In which region are you personally based?

Q2/ Which of the following best describes yours current position in the organization?

Q3/ How many years have you been in the organization?

* Less than 2 years

* 2 - 5 years

* 6 - 9 years

* 10+ years

Q4/ Do you require reports containing financial information at work?

* Yes

* No

Q5/ Why not?

Q6/ How often in general you use reports containing financial information at work?

* Monthly * Quarterly * Semi-Annually * Annually

Q7/

	Very important	**Somewhat important**	**Not very important**	**Not at all important**
Planning goals and objectives	1	2	3	4
Directing and controlling the performance	1	2	3	4
Allocating the team towards the organization's goals	1	2	3	4
Assessing the organization competitive position	1	2	3	4
Developing longterm plans and strategies	1	2	3	4

Q8/ Which of the following statement most accurately describes how the available financial information is used within your organization

* We put nearly all of the information that is of real value to good use

* We probably leverage about half to our valuable information

* Vast quantities of information go untapped

Q9/ Does my organization view information as a strategic asset?

* Yes

* No

Q10/ Why not?

Q11/ Do you receive the necessary management accounting reports on performance relative to established objectives?

* Yes

* No

Q12/ Is the information provided in sufficient detail and on-time to enable carrying out decision-making efficiently?

* Yes

* No

Q13/

	Strongly Agree	**Agree**	**Neither Agree Nor Disagree**	**Disagree**	**Strongly Disagree**
The information contained in the reports is adequate					
The reports clear and illustrate					
The reports are easily comprehensible					
The required information is readily available					
The information received is up-to date					
I rely on accuracy of the reports					

I am pleased with the present management accounting reports
It is probable that I will act on the information in the reports
The information contained in the reports is adequate
The reports clear and illustrate
The reports are easily comprehensible
The required information is readily available
The information received is up-to date
I rely on accuracy of the reports
I am pleased with the present management accounting reports
It is probable that I will act on the information in the reports

Q14/ Do you receive the necessary management accounting reports on performance relative to established objectives?

* Yes

* No

Q15/ Is the information provided in sufficient detail and on-time to enable carrying out decision-making efficiently?

* Yes

* No

Q16/ Think about information you require for decision-making and the management accounting reports available to you. Do you miss something in these reports?

Q17/ What are typically perceived as challenges in your organization to extract value from the management accounting reports to inform decision? Select up to three.

- Access to the right information
- Information accuracy and reliability

- Timeliness the information to the right people within the organization
- Getting the information to the right people within the organization
- Quantity of information to identify what is essential
- Lack of analysis involved
- Lack of flexibility/ interactivity

Q18/ Other, what?

Q19/ What kind of management accounting reports could increase the use and support better informed decision-making?

Q20/ What opportunities do you see for your organization as the result of increased availability of information? Select up to three.

- Increasing profitability
- Information strategic direction
- Boosting productivity - utilization of resources
- Improving product / service quality
- Getting closer to customers
- Growing market share and processes
- Streamlining business processes
- Reducing staffing

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