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How Technology Has Changed the Field of Accounting

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How Technology Has Changed the Field of Accounting

Abstract

The thesis aims to discuss how technology has changed the field of accounting. The research focuses on information from journal articles and research reports to discover the changes that technological advancements have brought to the accounting industry and profession. The customer Satisfaction Model is one of the researcher's theories in this thesis. The theoretical framework also consists of the Technology Acceptance Model as the other theory. The discussion emphasizes the technological advances in accounting and the shortcomings of technological advancements in accounting. Each type of business is affected differently by technology. Accounting, for example, must keep up with the rapid changes in technology, information, and software that are occurring right now.

Due to technological advancements, accountants must keep their skills up-to-date to properly use new tools such as computers and accounting software such as Excel and QuickBooks. Today's accounting industry relies on technology to provide more efficient services to its clients. The first abacus was designed for use in business to assist people in keeping track of their math. Many people attempted to build machines that could help accountants with math problems in the past, even though it was not known as technology. It was only a matter of time

before the calculator appeared. As accounting technology advanced, the accountant's job became more complex and time-consuming. It made no difference that the accountant was equipped with computers and calculators. The accountant was still required to record the company's transactions manually. Paper records, numbers, and handwritten statements demonstrate how financial data was previously found, measured, and communicated.

Introduction

Many technological changes in the accounting field have resulted in electronic media for accounting transactions. As a result, there has been a digital revolution in the way businesses, society, and culture operate. It is due to the rapid advancement and development of information technologies. Accounting is an information system, and as more people use information technology in their businesses, the way companies operate has changed. Accounting has been impacted as a result of this. Technology in accounting in the present day is applied through e-business, input and output processing, cloud computing, information technology, supply chain management systems, forensic accounting, and others (Quin 25). Digital resources and theoretical information must be used in accounting education at universities. Creating an interactive environment to keep students awake and preferring educational models that use information technology is essential, but not as much as they once were.

Accounting courses tailored to students' needs should be available as part of their education. They should also learn to make a difference using information and communication technologies. One example of a digital application that solves this problem is e-accounting. E-accounting is the concept that internet-based tools can assist businesses in running more efficiently, cheaply, and quickly than they could previously (Khatik 79). Employees, managers, customers, government agencies, business partners, and suppliers use the system concurrently.

They are continuously disseminating the most recent information. They require accountants who can apply this structure in the workplace due to their accounting education. As a result, the caliber of an organization's accounting education directly bears how well its employees perform at work. Accounting education must be restructured and new content added to produce graduates who can meet the needs of the modern world.

The technological revolution has occurred in business operations over the past few years. The change has affected various businesses in different sectors causing them to change their procedures (Cooper 20). Some sectors have been affected positively by the technology, while others experience the adverse effects of technology, causing businesses to change their operation. One of the accounting branches affected by the technological revolution involves the auditing field. An accounting entails the examination of the financial statements and reports for an organization by an independent firm (Cooper 26). The separation in ownership of companies and management has created the need for accountability in work. The shareholders need to understand the financial reports and the state of their business from time to time. In an organization, there are various stakeholders responsible for ensuring the operations of a business run effectively. The stakeholders are related in their roles and how they perform their duties with authority from their seniors.

Auditors focus on analyzing records, statements, finances, and the business's performance; auditing results in audit reports that are essential in making financial decisions in a company. Auditing provides banks with crucial information for decision-making when lending money to businesses (Cooper 28). Audit users require the audit reports to be reliable to make informed decisions. Banks require reliable financial statements of a company before deciding to lend money.

The other accounting field involves financial accounting—the section deals with the transactions and the preparations of the financial statements. The technological revolution contributes to intelligent analytics, where financial managers can depend on advanced systems when analyzing their calculations (Cooper 17). Innovative financial services have also been invented to help enhance the company's competitive advantage. The thesis aims to examine how digital technology is used in the accounting industry.

Problem Statement

Technology has both positive and negative effects on accounting, and this study will examine both. Due to technological advancements, accounting has become more efficient, less expensive, and easier to communicate. It has also resulted in job losses because machines have done most of the work. Technology has brought significant changes in accounting. The accounting profession has never been the same since the invention of technology and technological capabilities in the accountancy process. Technology brought the adoption and use of accounting software to record and store information about financial transactions.

The accounting software enables accountants to produce professional financial statements. The adoption and use of various technological capabilities in the accounting profession have transformed the accountancy profession at multiple stages. Technological advancement has revolutionized the accounting procedure from book-keeping, appraising financial data, preparing financial statements, and audited accounts.

The thesis explores the technological advancements and how they have changed accountancy and the accounting profession. Technology has affected how accountants perform various tasks, improving the efficacy of audited accounts. Technological advancement has brought both benefits and shortcomings; accountants can accomplish their work remotely due to

vast accounting software and technical capabilities. However, technology got some issues, mainly due to the storage of financial information on accounting on computers. Technology has improved every accountancy process, especially identifying, recording, measuring, categorizing, validating, summarizing, interpreting, and communicating financial information.

Purpose of the Study/Significance of the Research

The study demonstrates how technology has altered how the accounting industry conducts itself. Technology has brought significant changes into accounting, making it more complex and compelling. It will also look at technology's positive and negative effects on how the accounting industry operates. Technological advancements have brought benefits and shortcomings in the accounting industry and profession. The accounting profession has experienced improvements in performance, accuracy, and speed. However, security and software technical failures form part of the shortcomings of technology in the accountancy industry.

There will be a lot of discussion about efficiency, cost savings, communication, and how technology has evolved. Finally, the study will demonstrate how the rise of technology has and will continue to change accounting jobs using trends and data. Technology continues to grow, and so are its effect on accounting. Research is essential to the development of science and society. Society can use the study to understand the changes that technology has caused to doing things. Technological advancements have brought a new norm for accomplishing takes in the accounting profession.

The current study is essential to society because society produces individuals to take up different positions in the accountancy process. Accounting professionals can also benefit from the study because it gives the various issues that technology and technological advancement have caused in the accountancy profession. Accounting has changed tremendously, and professionals

must understand these changes and how they affect their job in analyzing financial statements. The study provides essential information that accounting professionals can use to perform better during technological advancements.

Literature Review

Introduction

The section explains the review of scholarly materials from other authors. The researcher depends on past study materials to explain how technology has changed the field of accounting. Various scholars explained technology and its relation to the accounting sector. The section consists of the theoretical part, which explains the multiple theories and concepts related to technology and accounting.

Theoretical Framework

Technology Acceptance Model

The Technology Acceptance Model (TAM) is one of the theories which can help in explaining the adoption of technology in the accounting sector. The theory shows people's acceptance of technology. TAM is an approach that describes how people admit and utilize technology systems (Eslami 118). The framework studies human factors that affect the acceptance of technology. Fred Davis and Richard Bagozzi developed the TAM theory in 1989. Davis proposed the theory when he was defending his doctoral thesis. TAM theory replaced the Theory of Reasoned Action (TRA), which focused on attitudes and intentions when assessing how individuals accept and use technology. TAM is specific to modeling users' perceptions of adopting and using new technology (Purmamasari 982). The information system theory focuses on using perception to assess the acceptance and adoption of a particular technology. Davis and

Bagozzi developed the TAM theory after organizations began introducing information systems in their operations. The theory provides a specific traditional approach to technology and users' perceptions of its acceptability.

Fred Davis proposed the TAM model in his dissertation, issued in 1989. Davis offered the TAM when the introduction of information systems rapidly increased among organizations (Eslami 120). The proposed theory focused on understanding why users reject or accept a technology. The purpose of the TAM theory involves measuring the adoption of a new technology based on user attitudes.

The theory emphasized explaining the dynamics of system adoption, use, and implementation dynamics for users and vendors. Since Davis proposed it, the model has become one of the most applied in information systems organizations. There has been intense research on user acceptance for several decades, especially for adopting and using technology. Researchers have developed several models that assess user acceptability. However, the TAM theory is the only model that assesses user acceptability of new technology, focusing on information systems (Purmamasari983). TAM provides a framework for further research on why users decide to accept or reject new technology and ways of improving acceptance.

The growing demand for the incorporation of information systems in enterprises in the 1970s prompted research to reduce the failure of technology adoption. Davis proposed the TAM model with two main goals that would help improve technology acceptance in organizations. One of the goals involves improving users' understanding of the procedure involved in technology acceptance. The TAM theory focused on enhancing people's knowledge of the theoretical insights associated with the technology's design and adoption (Eslami 121). The other goal involved providing a basic theoretical framework for testing technology acceptance. The

theoretical methodology is also essential in helping designers and implementers in system evaluation before development and implementation.

The key feature of the TAM theory is that it emphasizes user perception to assess the acceptability of new technology. The basic reasoning behind user perception of technology acceptability is essential in explaining the TAM theory (Purmamasari 984). The developer of technology may perceive the technology as user-friendly and practical. However, the user may not accept a new technology unless their perceptions align with its developer's. When users encounter new technology, several factors affect how and when they adopt and use technology. TAM has become one of the accepted theories in assessing factors influencing user acceptance of new technologies (Hilton 361).

The TAM theory provides a framework for assessing employees' behavior towards the use of technology. The model has concepts that the organization using technology like the accounting firms can use to evaluate whether the employees will accept their services (Scherer 14). Employees' beliefs about the use of technology are vital in explaining how and when they can obtain using the technology. Perceived usefulness, attitude, and ease of use are the main determinants of technology acceptability. Perceived usefulness implies that the employees are likely to accept the technology if they feel it will improve their performance in the company.

Perceived usefulness and ease of use of technology contribute to user attitude towards technology usage. A user is likely to approve a technology if it improves their performance and has easy operational steps. Attitude towards using a technology predicts the behavioral intention to use a given technology (Scherer 16). The behavioral intention to use indicates that a person plans to use a technology because it has benefits and is easy to operate. Behavioral intention implies that a person is willing to use a technology or engage in a given behavior. A person with

a behavioral sense to use technology has a greater possibility of engaging in actual use. The primary use involves an endpoint where users approve and use technology.

The theory assumes that when people develop an intention to act, they can perform without limitation. However, in the real world, there might be limitations to action. The assumption forms the primary argument for the TAM theory as it focuses on perception to explain how people decide to accept and use technology (Scherer 19). Users are free to act on whether to obtain and use technology, depending on their perceptions. The complexity of new technologies presents users with uncertainties about adopting new technology. Users depend on their perception to decide on technology's successful adoption and use. User intentions and attitudes are essential when assessing how to learn using a new technology before adopting it. However, after several trials, users form attitudes and intentions to use technology. Therefore, using technology may not be an immediate result of preferences or moods.

The TAM theory involves an information system model that describes how user perception affects the intention to adopt new technology. Technology characteristics play an essential role in modeling user intention to adopt and use a new system. The theory is helpful to organizations that wish to implement a new computer system. TAM outlines that when an organization decides to implement new technology in its operation, it requires understanding the factors that influence user intention to adopt and use the technology (Salloum 128445). The need to understand general issues and relate to computer acceptance is vital when implementing end-user technologies. TAM explains a range of users' behavior when encountering a new technology. The intention to approve and apply a new technology varies depending on the target user population.

The model also attempts to incorporate fundamental variables to explain technology acceptability. The theory includes perceived value, ease of operation, attitude, and the aim to use a new system. The factors interconnect to affect user behavioral intent to use a new system, involving the technology's actual use (Salloum 128447). The TAM theory is significant to information system managers because they encounter an essential issue during system adoption. Understanding the TAM framework is critical for handling challenges during system adoption. The TAM is vital in analyzing and improving the adoption of new technology.

Understanding the factors that affect user intention, desire, and decision to accept and use technology has become a vital area of research. TAM simplifies the concept of using technology adoption and use. The theory indicates that user intention to adopt a new technology involves the interplay of apparent efficacy and simplicity of operation. TAM has received several modifications, replications, and extensions to improve its effectiveness in explaining technology acceptance (Salloum 128450). A significant improvement involves extending TAM's framework by identifying extra contracts that influence technology adoption. Some independent contracts that influence user technology adoption involve social influence and perceived behavioral control.

Organizations that implement new information systems need to understand the underlying theoretical mechanism explaining advanced technological devices' use, approval, and utilization. The TAM has also received adjustments on precursors to its two elements; apparent efficacy and simplicity of operation. The TAM theory modifications have also focused on aspects that moderate the impact of perceived effectiveness and ease of use during technology adoption (Salloum 128445). Understanding the elements determining perceived apparent efficacy and simplicity of operation on user desire and willingness to accept and apply new

information systems has indicated significant implications on the TAM theory. The nature of end-users changes over time, and the environment constitutes significant challenges that influence their understanding of technology and its adoption.

The goal of TAM theory involves explaining the general aspects of a new technology that lead to specific factors that assess users' perception of the technology. The purpose of TAM theory consists in defining the available elements of a new technology that lead to particular characteristics that consider users' perceptions of the technology. The model identifies the mandatory adjustments technology requires to increase users' acceptability, adoption, and use. TAM assesses technology adoption by explaining the factors that influence how users reason before accepting a technology (Sagnier 993). The theory tested and ascertained two elements predicting the acceptability of an information system; apparent efficacy and simplicity of operation. The TAM theory is widely applicable in modeling users' perceptions before accepting and using a particular technology. TAM believes that behavioral intent determines the adoption and use. The attitude towards use determines behavioral intention when a person decides to use a system to enhance their job performance.

The concepts in the TAM theory involve the assumptions the model makes when modeling user acceptability. The acceptability of a new technology determines user interest and intention to use the system. The sound and intention to use new technology are two cognitive elements; apparent efficacy and simplicity of operation. The two factors are the TAM model's fundamental issues in assessing user willingness to admit and apply new information systems (Sagnier 995). Perceived usefulness is a significant concept in the TAM theory that explains technology acceptability. Perceived helpfulness involves the degree to which people trust that

applying a particular technology can enhance their performance. Uses perceive technology differently because they have other intentions for using a specific technology.

The perceived usefulness of new technology is significant in explaining how users decide to accept and use the technology. Users' understanding of perceived usefulness may imply the profit that new technology brings to their work performance. The gain could involve the efficacy of the technology in assisting the user to complete their job role. The experience users get from a new technology determines their behavioral intention to accept and use it in their operations. Users acknowledge and use a new system if they believe it can improve their performance at work (Sagnier 999). Perceived usefulness may imply the belief that a new system could boost the users' performance. The desire to use new technology is connected to the users' estimated gain in the long term. Perceived usefulness determines user behavior, attitude, and willingness to accept and use a technology because it improves autonomy in performing tasks. The TAM theory has received several modifications to improve its explanatory efficacy when assessing the user-perceived usefulness of new technology.

The TAM framework hypothesizes that perceived usefulness directly affects the user's behavioral intention to accept and use the technology under examination. Perceived usefulness affects user continuance intention to use new technology in their operation because it brings positive results in their performance. Technology with a more significant perceived benefit implies wide acceptability and increased adoption. Organizations decide to implement new technology due to its perceived usefulness (Taherdoost 961). Perceived usefulness explains whether users embrace new technology in their operations. A technology that lacks perceived usefulness is bound to fail because it may not attract user acceptance. A company may not overcome employee resistance to new technology if the system has low perceived benefits.

Perceived usefulness plays a vital role in technology adoption, primarily when users use the technology. The perceived usefulness of a new technology may suppress the usefulness of an old technology since users focus on the benefit they gain from using technology. Some user characteristics may moderate the perceived usefulness of a technology. Gender may influence the perceived usefulness of new technology; women may indicate greater perceived usefulness of technology than men. People accept and use new technology in an organization because they believe it can enhance job productivity and performance (Taherdoost 962). A system with high PU indicates the user strongly thinks that it positively affects job performance. Perceived usefulness is a vital concept in the TAM theory because it significantly connects to system productivity. PU enables a user to assess the efficacy, productivity, and overall advantages of adopting and using a particular technology.

Perceived ease of use involves another vital concept when explaining the TAM theory. PEU explains the extent to which using a new technology requires little effort. Researchers have adopted various explanations to indicate the perceived ease of using technology. Perceived ease of use relates to how easy a user can access and use a given technology (Taherdoost 966). The use of PEU is among the vital factors that help the TAM theory assess the acceptance of a new technology system. Davis explained that the user PEU involves the degree to which users feel that they will be free of effort if they use a given technology system.

Customer Satisfaction Model (CSM)

The customer satisfaction model is a fundamental theory when explaining how technology has changed the field of accounting. According to the idea, customer satisfaction involves perceiving their experience with something and expectations (Hendalianpour 193). The customer's happiness is the primary element in a customer satisfaction model. A customer

consists of any person to whom the company supplies its products at a specific price. Various factors can contribute to customer satisfaction. One of the factors involves customer understanding. Loyal customers need a company that understands nature (Kurdi 3561). For instance, they want to work with a company that cares about the customer's needs and values and thus is ready to go to the extent of satisfying them. Customers prefer firms that offer various choices to select to fulfill their needs. When items get met in different flavors and colors, this gives the customers the chance to choose from a variety, increasing their satisfaction (Hilton 361). However, the customer satisfaction model explains that too many choices can overwhelm the customers, reducing their satisfaction.

Customers have preferences that satisfy them with a company's product or services (Moradi 164). Firms that want to meet the customers' needs must be keen on their intentions to gain a competitive advantage. The customer satisfaction model explains some customer preferences involving delivery service, payment methods, and communication channels between the company and customers. The model describes how personification is essential for customer satisfaction (Moradi 164). CSM indicates that customers need individual attention to address their needs as individuals. The other factor influencing customer satisfaction involves the service. Services offered to depend on one company to the other. A company or product which meets the criteria for good service is the one that meets customer needs and expectations (Moradi 164). When a product offers good services to the customers, the term is as good and can influence their satisfaction.

The customer satisfaction model explains that there are various influences on customer satisfaction. The value proposition significantly influences customer satisfaction because it provides them with a hope of quality products or services to meet their needs. According to

Barua (446), value proposition involves the promise that a business makes to its customers concerning the product or service value that needs to get delivered. The value proposition forms part of the general marketing strategy for a company to reach its customers and convince them to purchase its products and services. Customers use value proposition to tell the clients the fundamental reason they need a specific product or service (Barua 448). Businesses communicate value propositions direct to customers through their products or on websites where the clients can access them easily. According to research, customers' perception of a product's value proposition can determine their satisfaction.

The model is essential because it reveals how customers get satisfied. It can also show the changes required for the customer to get satisfied. The customer satisfaction model shows the criteria which customers use for their satisfaction. When a product or service creates a solution for the customer, this means that the clients will get satisfied. A smile or laugh may also be another way for customers to show satisfaction with a product (Hendalianpour 194). Hendalianpour (194) explained that various elements determine customers' requirements and expectations. One of the elements involves word of mouth. Positive word of mouth leads to higher expectations than negative. When there is a high expectation caused by positive word of mouth, this contributes to increased customer satisfaction. During communication, the source does not affect the customers' satisfaction. However, the way the information gets passed from the informer to the customer can determine satisfaction.

According to the CSM, the other determinant of customer satisfaction involves personal needs. Customers have various requirements which vary from one customer to the other. When purchasing a product, they look for the ones which can meet their expectations by satisfying their

needs. Likewise, a customer may have various requirements which can be completed using a single service or product.

Customer expectations and needs can get determined by their past experiences. Customers' past experiences assess their needs, thus developing certain expectations towards the product or service. Hendalianpour explains that customers develop explicit and implicit expectations towards the goods or services. When the product meets the expectations by achieving their past experiences, the customers get satisfied. However, some products only meet the partial needs of the customers compared to experience; this may make the customers less satisfied hence shifting to the other brands or products when needed.

Behavioral Changes Enhancing Technology Acceptance

Technology keeps changing from one stage to another over a certain period. People's acceptance of technology is not intentional. According to research, control, normative and behavioral beliefs control a person's behavior; behavioral assumptions involve the feeling that a person perceives concerning possible consequences of a behavior. The control beliefs focus on elements that may make possible or hinder behavioral performance. Normative beliefs explain the expectation of other people. Behavioral thoughts may cause a person to favor or be unfavorable towards a particular behavior (Joo 49). Control beliefs determine perceived behavioral control, while normative beliefs can cause perceived pressure from societal norms; the strength of a user's intention to engage in a specific behavior results from the perceived control, good behavior, and personal standard.

The theory of planned behavior (TPB) can work well in explaining the behavioral changes in humans, which contribute to their acceptance of technology. The approach started as

the theory of reasoned action applicable in modeling a person's intention to practice a particular behavior at a specified place and time (Abbasi). The initial framework focused on explaining all behavior over which a person can exercise self-control. The vital aspect of the TPB framework is behavioral intent. The attitude is about the probability that the behavior produces an expected result, and the risk associated with the result influence a person's behavioral intentions (Joo 49). Organizations have used the TPB model to predict and explain many behaviors, especially when implementing new technology. The theory indicates that motivation and ability determine behavioral achievement. TPB outlines three types of beliefs; behavioral, normative, and control.

The basic argument of the TPB model is that a person evaluates the available information before making logical and reasoned decisions to engage in a specific behavior. TPB is widely applicable in understanding how user behavior can change when adopting new technology (Abbasi). The theory assumes that users plan behavior and, therefore, predict deliberate behavior. The intention to engage in conduct determines the performance of a behavior (Huang). The value that a person attaches to a particular behavior and the ease with which they can perform it influence how they achieve it. People commit a behavior better if they perceive it is within their control. The theory explains that the strength of a person's intention to engage in conduct influences the possibility of a person engaging in that behavior.

Empirical Review

Meskó (2) explained the introduction and evolution of artificial intelligence, which contributes to the development and design of various technological tools and services. Nowadays, people live in a world that looks like a wonder because of the technical changes. The birth of artificial intelligence can get traced to the bac1940s. The idea of AI began with a book published by an American writer, Isaac Asimov, and was called Runaround; the book's plot was

about a robot that could not injure human beings (Haenlein 7). The introduction of deep learning was the stage where technological changes began occurring.

Technology has brought unprecedented information-sharing abilities and mobility in accounting. Computerized accounting systems benefit accountants by tracking business financial performance without contacting the client. Therefore, organizations can focus on other value-added activities while accountants report economic progress. Schmitz (1) explains how blockchain technology is influencing the accounting industry. Blockchain technology affects how accountants store client financial information for analysis; accountants can use blockchain technology to store transaction records across several computers for verification. Blockchain technologies allow for automation and streamlining of book-keeping tasks associated with statutory reporting requirements.

Moll (8) explains how internet-associated technologies have changed the accounting industry. Cloud accounting is among the technologies that have brought changes by improving external and internal audit services. Cloud technology enables accountancy professionals to access real-time financial data from any device. Some cloud accounting software has add-ons that allow enhanced functionality in the accounting process. Internet-related technologies allow better planning and control and improve financial reporting.

The blockchain has inordinate potential to complement traditional accounting services by providing a low-cost and decentralized book-keeping process and automated financial evidence. Abdennadher (1) explains that technologies like blockchain have changed the accounting field to record transactions, store evidence, and provide a secured setting for steering business transactions. The computerized accounting results in blockchain and cryptocurrency, which automates accounting activities.

Smith (240) explains that incorporating technological tools in various aspects of the business, including decision-making, has significant implications for the accounting profession. Accounting professionals require continuous accounting because of the technology which affects how companies avail financial information. Customized reporting is evident in accounting due to technological advancements.

Research Gap

Considering there are few studies conducted on how technology has changed the field of accounting, this research will help cover the issue and explain different concepts on how technology changes accounting. Technological inventions brought various changes to the field of accounting. People no longer have to use manual methods when doing accounting operations because of the technological advancements in the area. Limited researchers have engaged in assessing the technological changes in the accounting field and how the sector has transformed over time because of technology. Therefore, this thesis uses past research materials to analyze the transformation in the accounting field because of technological innovation.

Methodology

Introduction

The research methodology is a vital part of any research as it outlines the strategy for gathering information and reaching the desired outcomes. The method enables research users to examine the reliability and validity of a study paper. A research paper can have a quantitative or qualitative methodology; most individuals have issues differentiating between quantitative and qualitative. Researchers use various techniques and procedures to discover, choose and explore data about a problem (Pandey). Specific research methodology frameworks govern the selection

of the appropriate methodological approach for research. The research design allows an experimenter to select the desired method of inquiry to solve a study issue. Various research designs help researchers choose the methodology to guide the data collection process. A method of investigation involves a systematic approach that a researcher can use when controlling experiments to get desired results for a particular problem. Most forms of inquiring are qualitative as they apply an interpretative approach. Sometimes it becomes challenging for researchers to differentiate between inquiry and methodology.

The study uses a systematic review to collect information and examine the problem to find insights into the issue. The systematic review entails summarizing data from various articles to gather adequate data for analysis. The method offers a high-quality study problem from existing sources. Researchers require selecting review sources that contain details helpful in answering the research question to draw factual findings (Pandey). The systematic review will be beneficial in obtaining specific, reliable, and adequate information about effective strategies to consider when outsourcing the handler function. A systematic review gathers all possible sources that have information related to a given research question. A systematic review allows an experimenter an organized method to summarize evidence from various sources while following an overall study plan. The basic steps in a systematic review involve framing the question, determining the relevant articles and searching for articles, evaluating their quality, and summarizing the findings to interpret them and answer the research question.

Research Design

The research design entails the overall strategy that a researcher selects when integrating various aspects of the study to address the research issue. The researcher encounters different problems that require good exploration to get the desired outcomes. Researchers select a research

design to utilize the appropriate approaches suitable for the study and set up their studies effectively in the future (Pandey). A study design enables an experimenter to decide on the proper methods for the study issue. The plan also determines the research methods and their usefulness in answering the study questions. A research design has characteristics that help obtain bias-free and reliable findings.

The issue of how technology has changed the field of accounting requires significant exploration as it is explanatory. Exploratory research involves a helpful approach when investigating a problem that lacks a clear explanation. The design varies as new information joins the queue. Some research problems can be confusing and require an exploratory approach to define precisely and get the appropriate solution (Pandey). In this study, the exploratory research design is the most appropriate design to employ and get the desired solution to the issue at hand. In exploratory research, the experimenter starts with a general idea and uses the method to identify problems, focusing on a future experiment. The experimental approach may not give conclusive information that allows an experimenter to experience a better understanding of the current problem. The experimental design intends to guide the researcher in undertaking a new problem; the researcher has little or no information about the issue.

Research Site

Data extraction in a research project based on a systematic review explains the helpful information drawn from the results and characteristics of publications considered in the systematic review process. The selection of valuable databases and search engines is imperative to remove authentic findings in the light of established questions and to concern the popularity of databases in the outsourcing domain in this research for data extraction purposes. Therefore,

some of the research sites used for collecting information involve Google scholar, semantic scholar, and Microsoft academic.

Table 1

Inclusion and Exclusion

Criteria	Inclusion	Exclusion
Timeframe	Articles published in the last five years are included (2016-2022) as these articles are likely to reflect the latest trends in outsourcing and aspects considered there.	Articles published before 2016 presenting information on the same subject are excluded from the systematic review.
Language	Articles published in the English language have been considered for a systematic review. This inclusion criterion helped scrutinize papers based on understandability quality for extracting meaningful information highlighting the considerations made when	Articles available in any language other than English, like Spanish, German, and French, are not considered a language that might create translation problems that can further misinterpret the real meaning of the information.

	outsourcing products or services.	
Type of Study	Articles or literature published in peer-reviewed journals	Literature not published in credible peer-reviewed journals or Grey literature
Geographic area	Articles cantered on any particular geographic location are included in the systematic review to remove any barrier to accessing critical information regarding the chosen topic.	No studies are excluded focussed on a geographic location.
Keywords: technological change, accounting, and innovations	Articles presenting information related to such keywords are reviewed and synthesized, fostering their performance.	Articles not containing any helpful information regarding the defined keywords have been excluded.

Data Collection

Data collection involves researchers' process to analyze data from parameters of interest in a study. Researchers collect data to answer reared research questions and evaluate outcomes; information gathering is different as different research fields require varied aspects of data. Researchers use various collection modes to gather information and solve a research problem. The data gathering techniques can be either primary or secondary, depending on the study

requirements and nature of a study problem (Barrow 1). The data gathering is essential in a systematic reviews methodology as it presents an inclusive summary of research from the selected sources. Data gathering in systematic review involves explaining practical concepts from review sources that meet the inclusion criteria.

The study's data collection involves gathering relevant information about how technology has changed the field of accounting (Barrow 1). The study will use a PRISMA model to select the articles for the systematic review. The model allows a researcher to choose items for reporting in systematic reviews of a study problem to improve data gathering. The researcher is responsible for determining the structure and shape of the model depending on the number of articles. A PRISMA model focuses on getting the relevant articles that a researcher can use to get information and answer a research question. Researchers use the PRISMA model to gather information whose findings are essential in answering a particular study issue.

Data Analysis

Data analysis involves evaluating the available findings to develop results that answer the research. The examination synthesizes findings using a methodological approach to extract vital aspects of the information and make a meaningful conclusion (Barrow 1). During the systematic review process, a researcher evaluates the quality of studies and applies a statistical meta-analysis of the study findings depending on their quality. The study used a qualitative data evaluation method to analyze the sources selected during the systematic review.

Experimenters use various approaches to combine and summarize information from the systematic review sources. The research will employ a meta-analysis method to appraise findings from the articles. The procedure is applicable in this research because it focuses on analyzing

information from articles that contain related information about a research question. Meta-analysis involves combining results from various research articles and assessing the findings to draw meaningful conclusions about a research issue (Pandey). The systematic review results in information from multiple pieces but does not establish statistical connections between the data. Results from a systematic review require meta-analysis for adequate interpretation of findings to allow the target audience to assess the strengths and weaknesses of the results. Meta-analysis is an essential data examination tool for appraising evidence for different research articles that contain information about a particular research problem.

Ethics

Ethics in research involves aspects that govern the use of information when conducting. Systematic reviews rarely have ethical issues because they do not involve human participants. The research applied different ethics to ensure that the data from the articles is valid and reliable. Information confidentiality is an ethical consideration in the study as it will disclose information from the resources to avoid confidentiality issues (Barrow 1). Researchers often share information from sources leading to loss of confidentiality and failing to adhere to research ethics. The research will also maintain originality by presenting all results and information in simple language. The study will not contain copied information which could lead to a loss of creativity. Copying information from other materials compromises data originality and quality of results in a study. Data originality ensures that research does not have plagiarism issues and meets data protection.

Results

According to the research gathered, it is evident that technological innovation has contributed to the transformations in the accounting field. Researchers explain how technology has contributed to the invention and development of various software uses in tax calculations. In the past, people made multiple errors in accounting because of manual analysis methods and outdated systems. However, the continued advancement in technology has reduced the chances of mistakes occurring, making tax accounting effective because of the use of tax software.

The period of Ups and Downs of AI began when people developed more interest in artificial intelligence. According to Soni (2201), companies and individuals began funding artificial intelligence research. Many researchers developed an interest in understanding the analogy of technology, bringing the connection between people and technology and how it is applicable in the accounting field. According to Guzman (71), there is a connection between humans and AI. The dependence of humans on artificial intelligence contributed to the birth of technology. Companies require improved skills from their employees, thus looking for a solution to make their work easier.

Artificial intelligence began simulating intelligent behavior and enhancing critical thinking among people (Faccia). People started using artificial intelligence to make intelligent machines. Some of the smart devices were used in accounting for computing and forensic accounting. The author explains that the medicine field benefited from artificial intelligence because scientists could research and make intelligent machines for patient diagnosis and critical thinking processes. Researchers argue that AI is a new technology that can solve various problems that people face in their lives (Soni 2203).

Technology has also contributed to the ease of operations; accountants are now focusing on using their mobile phones to access data. Chatbots are one of the technological advances during the period of artificial intelligence. AI chatbots can also get used in the banking sector. According to Jang, the chatbot has been a practical technology in the banking industry because it allows customers to manage their services effectively and swiftly. This helps the employees monitor the client's habits and anticipate their behaviors when offering services (Jang). Companies use chatbots to send customers and employees on different deadlines for various actions in the banking sector. For instance, when a customer wants to pay bills, the banks can use chatbots to set reminders and alerts concerning the payments when the deadline approaches. Research explains that many banks are changing their operations by allowing chatbots to send banking updates and show the credit score transformations to their stakeholders.

Discussion

E-Business, the Intranet, and the Extranet

Technological developments are rapidly changing the methods of organizations doing business. The fundamental actor of these changes, the internet, considerably has a gorgeous significance for doing business, specifically e-business, and precisely improving the productivity of economic and business activities (Özbozkurt 3). People use computers for mundane business tasks creating and storing data electronically. People who work in occupational accounting must be able to use computers effectively and efficiently to do their job due to changes in computer technology and how they affect the workplace. As a result, students in accounting education should be taught how to use computers effectively through effective teaching methods. People have gained confidence due to e-state applications, which have enabled businesses and accountants to utilize more technology, increasing technology in business and accounting. For a

long time, people in the Occupational Accounting field have relied heavily on technology because they require personal computers and access to the internet for work or personal reasons.

In contrast, because someone has a lot of experience with these technologies and has confidence in them does not mean they are using them correctly or effectively. Globalization's economic and social effects and the rapid pace of technological change necessitate a new approach to document and archive research. Organizations are compelled to conduct internal restructuring studies, but they must also consider international standards and how they can be applied (Saeed 36). As more people use technology, there is a greater need for electronic document management. Users can access documents in various ways, depending on their content. Understanding why people use or do not use information technology is critical because it can save money and improve service, leading to customer satisfaction. As information and communication technologies (ICTs) improve and become more affordable, they are increasingly used in government. The internet will be the primary means people will share and distribute information soon. People use three types of technology: the internet, intranet, and extranet. The term "Internet" refers to a collection of information resources worldwide. The internet is used by people worldwide, making it one of the most popular networks.

An intranet is a network of computers, LANs, and WANs that only the same company can access. They are all linked by TCP/IP. Many people believe that the internet will play a significant role in expanding global trade. It took some time for businesses with their websites to use intranet technology to promote their products and services. The intranet, which is digital media, is only accessible to the company's employees. It can be viewed as a network that connects an enterprise to its suppliers, customers, or other businesses with similar goals. It accomplishes this through the use of internet technologies. Acceptable internet components

include intranet and extranet. However, it is worth noting that these two technologies complement each other exceptionally well. Because of modern information technology, it is possible to enter data into an enterprise's database (database) from the start (desktop, laptop, palmtop, hand terminals, etc.). Many employees at the company now have access to accurate and up-to-date information that they can use to make informed decisions. There are numerous ways in which information technologies can be used to provide people with credible and complete information that meets their needs when they need it.

There are multiple reasons why electronic tax management applications are so popular today, both globally and in the United States. Globalization, advancements in information and communication technology, and a reduction in the cost of sharing information have all aided (Wang 457). In Turkey, the term "e-declaration" is gaining traction. E-tax payment (e-payment) has become a popular method of collecting tax money. So far, the e-tax regime or system in use has seen both electronic declarations and payments. As a result of these programs, tax and accounting software has become much more advanced. Businesses and government agencies with information management jobs must use computer technology and data to gain a competitive advantage. Because companies rely on computer technology for management information, they must now use integrated accounting information systems.

Artificial Intelligence and Robotics

Future digital technologies, such as artificial intelligence (AI) and robotics, will significantly impact how humans grow and change in the coming years. People believe that new technology and the era of artificial intelligence will dramatically impact the field of accounting and finance. Except for accounting and finance, this is true for all other aspects of business except two. AI-enabled solutions will benefit many people in the accounting and finance fields.

These solutions will help them save time and money and find and retain new employees and customers. Accenture Consulting discovered that using robots to do the same tasks repeatedly would benefit the financial services industry. Accounting firms and financial experts must use artificial intelligence more frequently to compete for business with other experts (Stancheva-Todorova 12). Since workers are responsible for their routes, AI outperforms humans in accounting. People cannot keep up with how quickly accounting firms deploy artificial intelligence to deal with massive data.

Accountants can benefit from artificial intelligence to work more quickly and efficiently. Human accountants would have more time to advise their clients if they could cut the time it takes to do their jobs by up to 80% or 90%. Accounting procedures will be improved because there will be a less human error due to artificial intelligence. According to Millennials, accounting firms that use artificial intelligence are better places to work and get help. Employers in this generation should have cutting-edge technology and innovation to support their employees' work preferences of flexible schedules and remote locations and assist them with tedious tasks that machines can do better. Because they are so reliant on technology, they will only do business with companies that can provide them with what they require.

Accounting firms that have invested in AI can provide automated data insights, but those who have not will be unable to keep up with AI's changes. Accounting tasks performed repeatedly, such as document processing and handling, can now be automated using Robotic Process Automation (RPA). Instead of doing these tasks, they can use the time they would have spent on them before RPA to do more strategic and consulting work. Intelligent automation (IA) is a more advanced robotic process automation that can do more than automate (RPA). IA can act like humans in various situations by using data from the past (Agrawal 35). It can, for

example, understand what customers are trying to say and adapt to what they are doing. RPA and IA can be applied in various ways in accounting. AI can now process documents faster than before using natural language processing and computer vision. It means that real-time financial updates are now possible. People who work in the business can be more proactive and change their plans if data indicates that things aren't going well. AI will benefit from procurement and purchasing, invoices, purchase orders, expense reports, accounts payable and receivable, and other internal accounting operations.

There are numerous internal, municipal, state, and federal rules that must be followed when working in accounting. An AI-enabled solution can assist with audits and ensure that things are done correctly by comparing documents to regulations and laws and flagging those that are not correct. For every rupee 70 lost due to fraud, a financial services company loses INR 220. It means that they lose billions of dollars each year. When an algorithm is created using machine learning, it can quickly sift through a large amount of data to look for signs of fraud or other unusual behavior that humans would miss.

Cloud Computing

Cloud computing refers to a range of software and computing services provided by (mainly) prominent vendors from their data centers, enabling businesses and consumers to use the services without purchasing their equipment and software and requiring less in-house expertise (Coyle 5). Cloud Computing Service providers offer different service models according to the customer's needs. The service models are called SaaS, PaaS, and IaaS (Huttunen 16)**.** Cloud computing and other new technologies have been welcomed in the accounting field because they make accountants' jobs easier. Traditional accounting requires accountants to spend a significant amount of time manually entering data.

On the other hand, cloud accounting makes simple tasks much more straightforward. On the other hand, cloud computing ensures greater accuracy and automates some functions for more efficient operations, allowing the accounting process to move more quickly. Cloud computing has simplified the storage and management of financial data. Customer data is more likely to be stolen when filing taxes or dealing with other sensitive company information. On the other hand, Accountants should be aware of the dangers posed by computer software, hardware, and communication channels. Accounting firms have a lot of sensitive information about their clients and businesses, making them more vulnerable to cyber attacks than other companies. Scheduled upgrades keep data secure and private in the cloud, where cloud computing can be used to store sensitive data (Abdalla 34). When a disaster occurs, data stored in the cloud is automatically backed up and can be restored quickly. Firewalls, data encryption, and two-factor authentication will assist in keeping accounting data secure.

Accountants are tethered to the office because their data, software, and accounts are stored on an office drive. Data stored in the cloud can be accessed instantly and from any location. Accountants can access cloud-based accounting data and other applications as long as they have devices that can connect to the internet. Accounting software "cloud-based" allows accountants to access records, reports, and receipts on any day or night. They can work from any location on the planet. Human error is minimal thanks to cloud computing's ability to automate most accounting tasks (Jędrzejka 140). Using journal templates, repeating invoices, and an accrual journal set to reserve itself makes it easier and more accurate to keep financial records accurate and efficient. A cloud accounting file displays and reconciles every transaction made through a bank account, which is beneficial to accountants because it ensures that no financial events are overlooked.

Further, as accountants, it is necessary to maintain contact with clients to ensure their needs are met. Accountants can collaborate with clients in the cloud from any location, device, and anytime. As a result, accountants can quickly locate any outstanding invoices or bills those suppliers and distributors have paid. Taxpayers can use this to ensure that all of their records are correct. Because accountants can easily change the amount of storage space, cloud computing allows them to only pay for what they use. Because of cloud computing, they can meet the demands of a growing business. Because the cloud is so adaptable, a company can easily transition to a more robust accounting system as it grows. It also allows you to create your accounting solution by incorporating add-ons and software options.

Forensic Accounting

Technologies such as OCR (optical character recognition) enable forensic accountants to search documents for keywords and sort documents by date ranges. AI technologies can analyze data faster than humans (Krishnan 12). Due to the rise of cloud computing and intelligent technology, combining forensic accounting technology with fraud detection is a significant accounting and management issue. Analytical technology knowledge and applications are essential in practical forensic accounting, anti-fraud programs, and fraud investigations.

Forensic accounting involves a great deal of complexity and hard work; it investigates fraud, bribery, and money laundering. Forensic accountants analyze these issues using financial records, transactions, and other information. In addition, forensic accountants investigate compensation disputes, trademark and patent infringement, and different types of fraud (Yang 25). Some large corporations and financial institutions hire these experts to assist them in solving or prosecuting financial crimes such as insider trading or bribery, which can be challenging to solve or prosecute on your own. Lawyers frequently call on forensic accountants to testify as

experts in court. Because of their diverse skills, forensic accountants are in high demand for positions in corporate departments such as internal audit, finance, compliance, and global investigation. Forensic accountants work for various companies, such as public accounting firms, large corporations, consulting firms, and government agencies. Financial institutions or government agencies may also employ them.

Technological Advances in Accounting

Accounting has transformed because it relied on customer information to help grow the field—the growth of technology-enabled the connection between accounting companies and customers. Artificial Intelligence (AI) is a computer science component and involves developing computers and programs that help complete various tasks. The research on artificial intelligence is interdisciplinary because it depends on higher knowledge from other sections like logic and mathematics. Artificial Intelligence comes with multiple areas like learning and perception to help with specific tasks like intellectual duties, diagnosis, and games (Cheng 339). Artificial intelligence contributed to the rise of chatbots that can get used in various workstations for multiple reasons; accounting organizations are among the leading users of chatbots in communication between the organization and clients and between employees themselves.

The act of training a computer to establish dialogues began in the 1950s. Alan Turing was the scientist behind this skill. In his book Computing Machinery and Intelligence, the scientist proposed a test involving a text message conversation program. The program consisted of a five-minute interrogator. It was difficult for people to notice if they talked to other human beings when using the machine. A chatbot uses the fundamental principle of the surrounding receiving questions in natural human language (Cheng 341). Therefore, this makes the chatbot work through a comment or a question that consists of a knowledge base, hence making it an answer.

Chatbot has proved to be an essential technological method used in accounting. Companies in accounting compete to meet customer expectations and thus develop new ways of understanding them. A chatbot involves individuals' services when using a chat interface. When using a chatbot, a person can use voice pr type information the way they communicate. According to research, a chatbot responds in a conversational style and can engage in various responses to the questions asked. Cheng (345) show multiple types of chatbots that users can apply during communication. The first type of chatbot operates using a set of provided guidelines. The chatbot can only respond when a command is made. However, the instruction should be specific to the chatbot. If the chatbot employee fails to provide the required order during communication, this type fails to respond to the requested information.

The other type of chatbot applies machine learning and AI in providing informed responses; this type offers various functions to the users. One of the primary characteristics of the chatbot using machine learning is that it can understand commands and languages. Therefore, a person does not have to use a specific control in this chatbot because it understands them and can respond to the right question despite the command made (Cheng 348). The other feature is that the chatbot can frequently learn from user interactions and can help predict customer needs in the future. When the chatbot applies the AI, it can chat in a usual manner in which two or more people may be cheating when sharing information.

Research shows that chatbots are armed with machine learning that can get linked to humans through their interaction and get increasingly agile as the exchange continues. Davies (101) shows that chatbots recognize using pattern matching to provide data for predefined acknowledgment. While some chatbots can be used in education, others are used in the

workplace for customer service (Davies 102). For instance, IT organizations depend on chatbots to communicate with customers on essential services and improve their operations.

Davies (106) argued that scientists have been predicting that people will be using artificial intelligence when communicating and answering questions in the past. The emergency of clinical decision support systems was the breakthrough of the use of AI in answering questions. The system is similar to the AI systems because it can ask questions concerning the patient's symptoms and make diagnosis decisions using Bayesian probabilities.

The invention of chatbots appeared as a replacement for software applications. For instance, when people ask the chatbots to book meetings and pay for tickets on a train, they prove effective; hence, they pose a risk to organizations' software applications (Xiao 2). Companies are turning to using AI chatbots because they are fast and make work easier. Simple tasks like responding to the customer's queries are left for the chatbots as employees focus on other complex tasks.

In an accounting organization, the employees work hand in hand with clients to understand their issues hence satisfying them. Therefore, the employees use chatbots to get customers' information which they can use during informed decision-making in the business. According to research, the bots can track the clients' email data or social media information and understand their behaviors. In turn, the accounting firm will use the collected data to evaluate the trends in customer behavior used during the product or service delivery.

Shortcomings of Technological Advancements in Accounting

Technological innovation has transformed the field of accounting in different ways. Many operations have improved because of the technical use in the accounting sector. However, despite the benefits of the technology, there are also its shortcomings in the accounting field. Technology changes rapidly hence making the systems outdated. Since the invention of artificial intelligence and its use in the accounting field, various technological transformations have made some systems obsolete (Jasim 52). The older accounting systems become less functional in the current workplace than the updated ones. Therefore, this makes it difficult to use them in the future. The outdating of the systems is one of the shortcomings of technology because as technology advances, new systems get developed, making it difficult to use the older ones. Research explains that technology comes with additional costs because of its difficulty in using older techniques in operations (Jasim 54). Accounting systems need frequent updates to ensure efficient and effective operation. The update comes with additional costs, which may affect the company's profitability because of the increase in updating expenses.

Accounting software businesses may suffer if they cannot access their data due to a power or computer outage. It can be challenging to get new information in and get old data back. Financial information may also be lost if backups are not performed correctly (Armenia 147). The data in an accounting system is only as good as the information it receives. If all data entered into accounting systems is not thoroughly checked, there is a chance that financial results will be incorrect. If an accounting system's final output or reports are only viewed a few times per year, it may be challenging to determine if the data is incorrect. Third, accounting software must have extra safeguards to keep data safe to avoid problems like fraud and embezzlement. The software makes it easier for people to alter data, making it easier for fraud to occur. Internal auditors are now being asked to look for incorrect data. People should also ensure that

accounting software has security measures to prevent them from having too much control over its features (Kwilinski 2). Finally, the risk of unemployment if accounting is entirely computerized and modernized due to technology.

To sum everything up, using technology has significantly transformed the field of accounting. For instance, computerized ledger sheets and accounting software have helped reduce financial data errors. Most programs include built-in tools for detecting errors and other issues with the way things are done. Accounting relies heavily on economic data, which helps ensure that it is accurate and true. Accounting software can also provide the security of confidential financial information (Appelbaum 15). Most applications do not allow access to financial data. Accounting systems on a computer network must have adequate security features to remain secure. However, technology also has its cons, like unemployment issues, computer outrage or power issues, and data loss if there is no proper backup. It is worth noting that the merits of technology are way better and more important in modern society.

System crash is also a shortcoming associated with technological advancement in accounting. A system crash occurs when a computer database, such as a software application or an operating system, stops functioning correctly (Yaacoub). A significant problem with technological advancement in an account is the possibility of a system crash. Sometimes a computerized accounting system might be flawed, and the accounting profession may not be aware of the flaws. The faulty system may cause significant issues when it finally crashes. A system crash results in data loss, interrupting the accounting activities as they cannot access the data they need.

Once accounting systems experience a crash, the accounting firms are exposed to various dangers, including increased client data leakages, resulting in loss of confidentiality, system

damages, and data loss at a highly needed time (Yaacoub). Accountants experience problems recovering lost financial information after a system crash. The recovery process can result in delays and inconveniences to customers. System crashes have been a significant problem in the accounting profession since advancements in technology.

Technological advancement in accounting results in security issues to the accounting information; computerized accounting systems are prone to security issues due to unauthorized attacks (Yaacoub). System attacks compromise the integrity of an accounting database system. Any cyber-attack on an accounting database compromises data integrity because it interferes with data available to the organization. Some system attackers often use virus attacks that exfiltrate data and compromise its access so that they can make the data publicly available if the accounting firm fails to pay a ransom. A virus attack on any accounting system comprises the data triad; confidentiality, accessibility, and integrity. The security of the accountancy data in a computerized program may affect the available security system. A poorly protected accounting database leaves chances for hackers and unauthorized personnel to access all the financial information in an automated accounting database. Malicious people may use the accounting information for unauthorized purposes, which affects the accounting profession's integrity.

Security issues are an increasing threat to the accounting profession due to advancing technology. Over time, security issue with accounting software has increased since the attackers have moved from targeting individual computers to targeting the database in the firm (Tan 312). Attacks on accounting systems are associated with technology; therefore, as technology increases, the security threat increases. There has been increased use of computerized accounting in the accounting profession through increased internet connectivity and cloud-based

infrastructures. Although the increased internet connectivity increases the availability of information in accounting, it has continuously increased the level of cyber-attacks.

Automation limitations are also a shortcoming of technological advancements in accounting. Technology allows accounts to automate accounting information and system by transferring data to several reports and procedures (Tan 312). The automation enables sending payments and sharing accounting information within an accounting firm. However, the automation may create problems if accountants enter data incorrectly. The errors are automatically transferred down the line in various reports and other items that the system generates. Technological advancement in accounting results in fraud activities; accounting computerized accounting fraud may occur when a person tampers with the accounting input. Software defects are among the issues that contribute to fraud in computerized accounting. Technology makes it easier for unauthorized users to alter financial information on accounting databases (Tan 313). The alteration results in fraudulent accounting reports, thus, compromising the accounting profession's integrity.

Fraud in computerized accounting has become an increasing threat to the accounting profession. When accounting systems experience fraud, client financial information is closed to fraudsters. A computerized accounting system affected by fraud may result in incorrect reporting of a company's financial health. Fraudsters attack accounting databases targeting to acquire sensitive financial information about companies for benefits. Computerized accounting fraud is a technological problem that many accounting professionals are experiencing due to technological advancements. Technological advancements have also resulted in the need for continuous training. Computerized accounting requires accounting software where accounting professionals store client financial information. The accounting software change requires accounting

professionals to undergo ongoing training to acquire new knowledge. Continuous training requires an accounting professional to take the time to learn how to use it—even experienced accounting professionals need to know how to use accounting software effectively. The learning curve can result in costly errors.

Conclusion

The paper explains how technology has changed the field of accounting. The invention of artificial intelligence contributed to the design and development of various systems which help accounting firms. However, people's behavioral change and the acceptance of the technology contributed to their adoption. Cloud Computing and customer service are some of the benefits of accounting technology. Despite the benefits associated with the technology in accounting, various challenges are also incurred. A significant problem with technological advancement in an account is the possibility of a system crash.

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