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Abstract

Cryptocurrencies are popular alternatives to physical currency; therefore, it is important for users and investors to know how to properly account for them. The problem that is addressed throughout this study is how accountants should complete journal entries to document cryptocurrency transactions. The purpose of this qualitative research is to determine which strategies accountants will use to complete journal entries to record cryptocurrency transactions on financial statements to conform with standards. The Fraud Triangle framed this study. The research design for this study required conducting phone interviews with accountants to collect qualitative data to determine how to appropriately account for cryptocurrencies. Ten certified public accountants agreed to participate in this study. The participants all answered open-ended questions regarding their experiences with cryptocurrencies. The researcher collected the data using an audio recording device. Once all interviews were completed the recordings were then coded which allowed the researcher to develop themes so that the research questions could be answered. The results of this qualitative study produced two themes such as: (a) proper accounting of cryptocurrencies; and (b) regulations of cryptocurrencies. The implications from the results of the research include finding ways for cryptocurrencies to be regulated. Two recommendations for practice include (a) engage in continuing education programs; and (b) include cryptocurrencies as part of accounting coursework. Recommendations for future research were (a) focus on a broader group of accountants; (b) take research into larger accounting firms; and (c) discover a quantitative tool to measure a person's familiarity on the topic.

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Chapter 1: Introduction

Due to the financial crisis that occurred in 2008, public confidence in the monetary system was at an all-time low. In 2009, Nakamoto established a peer-to-peer electronic cash network system that would eliminate the need for a trusted third party. The network allowed people to transfer money without financial institutions controlling or supervising the transactions. This dissertation covers issues related to the accounting of cryptocurrencies. Cryptocurrencies are a growing trend and are increasing in popularity (Barlin, 2017). Due to the increase in demand, the issue of properly accounting for cryptocurrencies is at the forefront. According to Wang and Vergne (2017), “cryptocurrencies are digital tokens exchanged online using cryptographic hashing and digital signatures to verify transactions and avoid double-spending of the same token.” The value of cryptocurrencies has become so volatile recently, due in part, from the negative press that it has received regarding its treatment for tax purposes (Catania et al., 2018). The majority of people do not understand cryptocurrencies and believe they are a scam; while, others think it is a way to increase wealth.

With the use of cryptocurrencies on the rise, so is the issue of money laundering. These types of currencies play a significant role in the increase in money laundering online; since, they have attributes that perpetrators find appealing (Mabunda, 2018). Cryptocurrencies link crimes such as drugs, firearms, money laundering schemes, terrorism, and child abuse (Tziakouris, 2018). Cryptocurrencies have become a concern and have become a major focal point for criminals to purchase goods and services that are illegal (Doran, 2018).

The use of cryptocurrencies has created questions over traditional transactions. Currently, financial institutions function as the go-between for those who lend funds and those who borrow funds. Nevertheless, cryptocurrencies contain no third-party involvement, and the fees for the

transactions are minimal (Lo & Wang, 2014). There are no regulations in place at this time, and the only control that exists is with the user (Andrianto & Diputra, 2017). Users of cryptocurrency exchange goods and services for money on a separate monetary system; transactions remain undisclosed. The transactions are protected, quick, and occur from consumer to consumer instantly.

Statement of the Problem

The problem to be addressed in this qualitative study was to determine how accountants complete journal entries to document cryptocurrency transactions. It becomes essential to users and investors wishing to purchase them but also to accountants so that they can understand how they work. Ron and Shamir (2013) claimed that cryptocurrencies are utilized to smuggle illegal goods or fund terrorism, launder money, and evade taxes. The correct way to account for cryptocurrencies needs finding since transactions are occurring between buyers and organizations, as well as between companies (Raiborn & Sivitanides, 2015). It is essential to examine which influences affect the utilization of cryptocurrencies. Since cryptocurrencies are not straightforward, it is worthwhile to conduct research that focuses on its benefits. It might provide the groundwork for valuable resolutions for the accounting treatment of something that can be complicated. Cryptocurrencies have received apprehension due to its unknown and not being able to be undone or altered. They are also worrisome to those in the financial and regulatory field, since, there is no governmental body that regulates cryptocurrencies. This dissertation will give practical insight into the importance of the proper accounting treatment for cryptocurrencies. Existing literature has already tried to generate a business-related model of cryptocurrencies or examined the technical characteristics. This research will address the gap that exists in how accountants should be accounting for cryptocurrencies properly.

Purpose of the Study

The purpose of this study was to determine the strategies that accountants will use to complete journal entries to record cryptocurrency transactions on financial statements to conform with U.S. GAAP and International Financial Reporting Standards (www.IFRS.org). The use of a qualitative case study design collects and analyzes narrative data to support various cases. This approach will provide a better understanding of cryptocurrencies and give more insight into how they affect accounting statements. Typically, qualitative methods answer questions about the participant's insight, interpretation, and outlook (Hammarberg et al., 2016). This dissertation provides a discussion on the security of cryptocurrencies and what the future holds. People must understand cryptocurrencies and how they work because it is possible this could become the new currency. While there is speculation, it becomes crucial that people gain further knowledge of cryptocurrencies. People need to be able to trust a system that, at this time, does not have any oversight. While some like the idea, others are skeptical about it. This study's primary research design entailed gathering qualitative data to explore the importance of completing proper accounting entries that conform to standards from a random sample of accountants. Phone interviews were conducted with ten participants in the accounting field to carry out the study. The data from the interviews were analyzed to determine how proper accounting for cryptocurrencies would impact certain financial statements. There is a vast array of uncertainty regarding the accounting of cryptocurrencies, and there needs to be a conclusion drawn.

Conceptual Framework

The fraud triangle is the framework that is the foundation for this research. Cressey developed the fraud triangle in 1950 (Free, 2015). The three elements in the triangle are pressure, opportunity, and rationalization (Kramer, 2015). Abdullahi and Mansor (2015) claimed that

opportunity develops when there is a lack of controls or governance systems that enable someone to commit organizational fraud. Perceived pressure gives motivation for the act (Malgwi & Rakovski, 2009). Rationalization involves an individual's understanding of their behavior (Wall & Fogarty, 2016). Each of these conditions must be present for fraud (Mackevicius & Giriunas, 2013). Perceived pressure exists when clients want to hide transactions from their accountants, and the fraudster is then motivated to carry out unethical behavior (Abdullahi and Mansor, 2015). With the absence of accounting guidelines with cryptocurrencies, fraudsters can develop loopholes for money laundering and tax evasion. Even though the fraudster realizes what he is doing is wrong, they try to rationalize themselves to make it ok. With adequate guidelines for accountants, this would eliminate the opportunity for perpetrators to launder money or evade taxes (Kramer, 2015).

Nature of the Study

The methodology used for this study was qualitative; further understanding of the accounting of cryptocurrencies needs exploring. Examining the data assisted in drawing an adequate conclusion. For this particular study, conducting phone interviews would be best suited to gather the necessary data. The use of phone interviews in qualitative research is the best method to interact with the participants. It allows the researcher to gain a perspective of the participant and allows the researcher to ask further questions as the interview is being conducted (Oltmann, 2016). Quantitative research is interested in conclusions, generalities, projections, and cause-effect associations using empirical reasoning (Yilmaz, 2013). However, qualitative research is also involved in measures, framework, comprehension, interpretation, and knowledge using basic reasoning (Yilmaz, 2013). By the use of a qualitative approach, data were collected and analyzed, as well as, an explanation created at the same time. Using a qualitative approach

can help researchers capture the opinions and state of mind of those participating in the study; which, will help develop further understanding of the importance of people attributing their knowledge (Austin & Sutton, 2015). The use of case studies is best used in qualitative research to gain an extensive, complete, and detailed examination of a challenging issue (Harrison et al., 2017). Once the study was conducted, and all the relevant information was collected, an adequate explanation was given to account for cryptocurrencies properly. There are many people for and against cryptocurrencies; therefore, there needs to be some conclusion provided based on the evidence found.

Research Questions

The following are the research questions for this study:

RQ1. How do cryptocurrencies affect the accounting entries and financial statements?

RQ2. What strategies do accountants use to accurately represent cryptocurrency transactions in accounting records to prevent fraud, theft, and tax evasion?

Significance of the Study

Cryptocurrencies have become a popular trend over the last few years (Mabunda, 2018). Countries are trying to determine whether to accept cryptocurrencies as a form of currency. Those who put money into cryptocurrencies have become millionaires. Cryptocurrencies make it challenging to determine who sent the funds, and there is no involvement of a third party. The cost of the transaction is also less in comparison to other transactional costs. With this increasing trend in cryptocurrencies, it has become an important topic. A determination needs making as to how cryptocurrencies can affect the bottom-line. This discussion focuses on maintaining the accounting profession's integrity, exposing the opportunities for fraud and theft, and developing strategies for preventing the same. Since cryptocurrencies are not considered an authorized

payment method for goods and services, specific guidelines need establishing. (Slattery, 2014). Also, can they function as a currency going forward? It would also be beneficial to determine what influences the price of cryptocurrencies.

There are two conflicting perspectives when it comes to the topic of cryptocurrencies. The first perspective is that cryptocurrencies can work in practice and not in theory; while, the second perspective is that they provide a system that does not contain trusted parties (Bonneau et al., 2015). There has been little research on this topic; therefore, it would be beneficial to provide further research.

Definitions of Key Terms

Cryptocurrencies. Cryptocurrencies are utilized as a digital payment method in an appropriated network without a central authority (Chiu & Koeppel, 2017). It is a peer-to-peer exchange written in code (DeVries, 2016). Cryptocurrencies are digital tokens traded electronically (Wang & Vergne, 2017).

Generally accepted accounting principles (GAAP). GAAP is a set of accepted principles and standards that accountants must follow when preparing a company's financial statements (Investopedia, 2018).

Money laundering. Money laundering is the process of creating proceeds acquired illegally to look legitimate (Bryans, 2014). It conceals proceeds of criminal activities to complicate the connection between the initial illegal activity and the illicit funds (Mabunda, 2018).

Opportunity. Opportunity refers to the factors that permit the fraudster to carry out the fraud (Lokanan & Sharma, 2018).

Pressure. Pressure applies to something that occurs personally to someone who commits fraud and forms the motivation of the fraudster (Machado & Gartner, 2018).

Rationalization. Rationalization is the psychological self-protecting element of the fraud triangle (Schuchter & Levi, 2016).

Tax evasion. Tax evasion occurs when an individual acquires taxable income and fails to disclose the correct amount of taxes (McLaren, 2008). It is the failure to report income that is taxable (Dictionary.com, 2019).

Summary

In this dissertation, the statement problem discusses the impact that cryptocurrencies have on financial statements. The purpose was to gain further understanding of how to account for cryptocurrencies properly. A conceptual framework focuses on the fraud triangle. The study's nature consists of a qualitative method using phone interviews to collect and gather the necessary information to carry out the study. This study was significant because guidelines need developing for correctly accounting for cryptocurrencies on financial statements. A definition of key terms provides a clearer understanding of certain concepts that are not widely known. The next chapter will consist of a literature review which will give an even further explanation as to why this qualitative study was necessary.

Chapter 2: Literature Review

This research study must have a strong foundation. A literature review finds areas of research that need improvement for further exploration. Literature reviews require the researcher to establish a research topic that brings together what is known about the topic. The review also determines if there are gaps in the research study and how it can provide additional knowledge (Winchester & Salji, 2016). This literature review focuses on establishing an understanding and furnishing the individual reading the research with the most recent studies on cryptocurrencies. The problem of this study focuses on how to determine how accountants should properly account for cryptocurrency transactions.

The sources for this literature came from online library databases. Developing a sufficient framework for this qualitative study was done using peer-reviewed articles, such as EBSCO, JSTOR, SAGE Journals, ProQuest, and ResearchGate. Search engines used for this study include Google Scholar and Science Digest. These articles will allow the researcher to develop themes throughout this chapter. Other professional accounting websites were also used in addition to searching online libraries such as the American Institute of Certified Public Accountants (AICPA) and the Association of Certified Fraud Examiners (ACFE). Information collected from the online libraries and professional websites consists of scholarly peer-reviewed articles, journals, and periodicals. Keywords used in the search were *fraud triangle, history of cryptocurrencies, taxation, accounting, anonymity and regulation of cryptocurrencies, risks of cryptocurrencies, characteristics of cryptocurrencies, tax evasion and illicit activities, ethical theory, ethics in accounting, and trust*. The majority of the literature that was collected is from articles published within the last five years.

Conceptual Framework

The conceptual framework is the fraud triangle. The fraud triangle model (Cressey, 1953) continues to be prevalent in identifying fraud. Cressey suggested that pressure, opportunity, and rationalization are all integral elements that must occur concurrently for fraud to be present (Ruankaew, 2016). Pressure can motivate someone to look for an opportunity, and pressure and opportunity can promote rationalization. None of the elements, entirely or mutually, will prompt someone to engage in fraudulent activities. Those in the auditing profession mostly utilize the fraud triangle to identify and detect fraud. The model contends that if any of the triangle elements are not present, it will become improbable that fraud has or will happen. However, the fraud triangle model is unsatisfactory in demonstrating fraudulent behavior when committed in a group.

Lo and Wang (2009) cited that the fraud triangle concept demonstrated the rationale behind a person's decision to participate in fraudulent activities. The first research into fraud was performed by Cressey (1953) on the factors of why a person commits fraud. Cressey (1953) explored the circumstances by which someone is motivated to commit fraud. Cressey (1953) concludes that those who commit fraud do so because they are in trouble and cannot share their problems with others. People have an opportunity to resolve the issue and have distinct qualities that justify their actions as acceptable. The problem that the person feels cannot be revealed and generates the pressure factor of Cressey's (1953) triangle. The reality that an available opportunity exists is the second factor of the triangle (Cressey, 1953). The final element of the fraud triangle is that people can rationalize their actions (Cressey, 1953).

Cressey administered interviews with prisoners who embezzled. Cressey (1953) used the three factors of the fraud triangle to identify if (a) there was a desire for cash (pressure), (b) there

was a way to get the cash by stealing (opportunity), and (c) the person justified their actions by believing they could borrow the funds and pay it back at a later date or felt they were due the cash (rationalization). Cressey's (1953) theory has become the cornerstone of research that focuses on fraud. The fraud triangle theory is part of the auditing process and gives an acknowledged foundation for examining specific fraudulent actions (Dellaportas, 2013).

SAS No. 122 explains that auditors should identify fraud and depend on the fraud triangle to help them (Dorminey et al., 2010). The fraud triangle is contained within auditing principles and is responsible for identifying the grounds for examining deceptive behavior (Ramamoorti, 2008).

The Fraud Triangle does not provide an adequate basis for analyzing occurrences of collaboration; however, the fraud triangle's employment should be at the beginning of the auditing process (Buchholz, 2012). Some argue that all three elements of the fraud triangle only relate to those who commit fraud unintentionally and does not relate to those who continuously commit fraudulent acts (Suh et al., 2018).

Further research has been conducted since its development to try and determine if more elements exist. Trompeter et al. (2014) theorized that prior research focuses mostly on the motive instead of the pressure. The fraud triangle is a representation of why and how someone would commit fraud. One downfall of the fraud triangle is that it is from the viewpoint of the individual carrying out the crime. Mackevicius and Giriunas (2013) disputed that recent and modern types of fraudulent behavior have developed in current growth and development, leaving the fraud triangle outdated. During the auditing function, both monetary and business pressures are the primary motivators of the fraud triangle. (Brazel et al., 2010). Another drawback is that it does not adequately convey the activities of someone who commits the crime. Auditors use the fraud

triangle as a foundation for establishing a practical certainty for detecting and identifying fraudulent acts (Boyle et al., 2015).

According to Albrecht et al. (2008), if opportunity and pressure are more significant, then there is less rationalization to commit the crime. An organization's management must consider all three components of the fraud triangle and must implement adequate controls. Being able to understand the fraud triangle is utterly imperative when a researcher is reviewing white-collar crime. An essential component of the fraud triangle is to grasp how and why fraud occurs. Researchers have speculated that the opportunity is the only manageable element, and the removal of opportunity would make the chances of committing the crime less likely. Murphy and Free (2016) used a theoretical framework by utilizing a survey to carry out their study. Participants had varying viewpoints of fraud, and the results showed that about 40% of fraud cases contain instrumental climate (Murphy & Ford, 2016). The fraud triangle illustrates the groundwork of what makes someone commit fraud (See Figure 1).

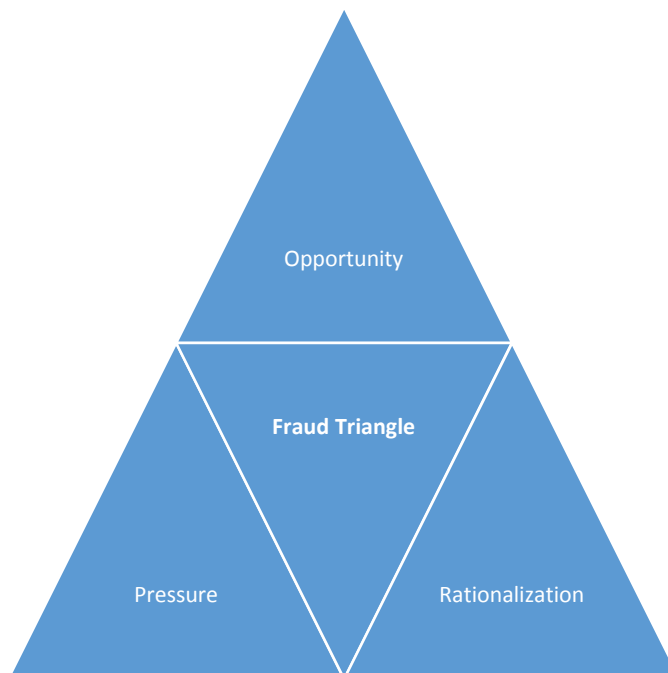


Figure 1. Fraud Triangle. Adapted from “Conversations with Inmate Accountants: Motivation, Opportunity and the Fraud Triangle,” by S. Dellaportas, Accounting Forum, 37(1), p.30. Copyright 2012 by Elsevier Ltd.

Perceived pressure. Pressure is the most common element to trigger someone to commit fraud (Schuchter & Levi, 2016). Perceived pressure refers to the aspects that influence someone to commit fraud. Individuals commit fraud to fulfill their financial wants and needs (Andon et al., 2015). Abdullahi and Mansor (2015) noted that in every instance of fraud, the person committing the fraud faces some sort of pressure, whether financial or not. Individuals become trust offenders when they believe they have sustained a financial burden, which is socially unacceptable; however, the only way to lift this burden is to commit fraud (Kassem & Higson, 2012). An individual encounters pressure when there are insufficient resources to fight the impulse to engage in illegal acts when the opportunity to be discovered or reprimanded appears unlikely (Harrison et al., 2018).

People who are undergoing pressure financially typically do not want to convey their issues to others making the financial burden classifiable as a confidential circumstance (Dorminey et al., 2010). Additionally, when a person exists above their financial limits, this is classified, to auditors, as a situation that cannot have the ability to see if someone is living above their limits (Kassem & Higson, 2012). The following are some pressures that individuals encounter: financial difficulty, debts, gambling troubles, poor credit, alcohol, or drug dependencies (Little & Handel, 2016). An individual perceives the pressure to commit fraud as legit; however, it does not have any substantiality.

Perceived opportunity. In this particular element, individuals examine the possibility of carrying out fraud without being caught (Schuchter & Levi, 2016). An opportunity becomes apparent when a person has specialized capability and experience of resources, people, insight,

and computer systems. However, it allows the individual to perpetrate fraudulent acts but also disguise the fraud (Lokanan, 2015). Unlike perceived pressure, the perceived opportunity is apparent since auditors can examine a company's internal control framework (Dorminey et al., 2010). An individual can carry out fraudulent acts when there is a lack of adequate internal controls (Bonsu Osei-Assibey et al., 2018). An individual can also commit fraud when the environment allows them to do so without being caught (Sabli et al., 2016). A Chief Financial Officer (CEO) manipulating financial records and assuming that others will never find out is an example of someone who can commit fraud.

People can carry out fraud when there is inadequate oversight from management (Steinmeier, 2016). Bujaki et al. (2019) indicated that when there is a lack of internal controls present, then the opportunity to commit fraud becomes apparent. Opportunity signifies individuals' to commit fraudulent acts with the notion that their actions would not be noticed or penalized (Schnatterly et al., 2018). According to Smaili and Arroyo (2019), an opportunity refers to the categories and amount of available resources to the individual committing the fraud.

With opportunity, individuals observe weaknesses and assess the risk of getting caught against the benefits. Vona (2008) claimed that an individual's status in an organization provides an opportunity for them to carry out fraudulent acts and a relationship that exists amongst the chance to commit deceitful behavior and the possible means to disguise the fraud. Dorminey et al. (2012) asserted that opportunity is the understanding that a control deficiency is existent, and that the probability of getting discovered is unlikely. If opportunities can be removed for fraud to occur, then the likelihood of it happening will weaken. The more internal controls that are in place, the less chance someone has to commit fraud.

Perceived rationalization. Rationalization is the last element in an individual's reasoning process that leads them to develop unethical desires and behaviors (Harrison et al., 2018). For someone to carry out fraud, the person needs to rationalize their actions and determine a justifiable reason why their activities are not illegal (Azam, 2018). When someone commits fraud, they are looking to lessen the negative emotions they are experiencing (Murphy & Free, 2016). Ramamoorti and Epstein (2016) perceived rationalization to be the necessity for individuals to substantiate to themselves and others that their actions are acceptable.

Rationalization gets communicated to others as the person who committed the fraud is trying to gain support for their actions (Wall & Fogarty, 2016). Thinking that committing fraud is acceptable because others might be doing it is another way someone tries to rationalize their actions (Burke & Sanney, 2018). Rodgers et al. (2015) suggested that fostering an environment that encourages a robust ethical culture and a positive work environment can reduce rationalization. When the motivation and compulsion to commit a crime are present, the more individuals will rationalize their actions (Soltani, 2014).

Rationalization results in fabricated explanations as to why it is appropriate for someone to carry out fraud. Anyone can become a fraudster when the reward is big enough. Ramos (2003) defined rationalization as the strategy of integrating someone's deceitful behavior with ethical standards. In this element, the fraudster can lessen the harshness of their actions and advance without any guilt (Dorminey et al., 2012). Several scholars (Albrecht et al., 2010; Kassen et al., 2012; Dellaportas, 2013) realize that the opportunity element is an essential characteristic of fraud and other fraudulent behavior. According to ACFE, individuals have an inclination to justify a fraudulent activity way before they decide to carry out the act (ACFE, 2018).

History of Cryptocurrencies

Developer, Satoshi Nakamoto, started Bitcoin in 2009, and this became the first notable centralized cryptocurrency (Nakamoto, 2008). Cryptocurrencies are an encrypted, peer-to-peer system for advancing electronic exchanges (DeVries, 2016). Cryptocurrencies allow users to pay for goods and services without having to deal with a centralized authority. Cryptocurrencies contain several characteristics: peer-to-peer exchange, consists of limited and predetermined amounts or supplies of coins, includes a database that keeps a record of all transactions. Cryptocurrencies rely on coding software to certify and safeguard transactions utilizing a digital method that illustrates an actual monetary value to the user (Sánchez, 2017).

Rose (2015) believes that the development of cryptocurrencies has created an innovative financial system designed by the people and for the people. Beaton (2019) conveyed that Bitcoin contained a value of about one cent; however, in late 2009, its value had increased to \$27 for one Bitcoin. By the end of 2017, the cost for one Bitcoin had hit a little over \$20,000. Limón (2018) claimed that the design of cryptocurrencies was for those who did not trust the traditional banking systems. They are inherent to the internet and extracted by individuals and organizations. The evolution of cryptocurrencies is a declaration against the current monetary system (Malherbe et al., 2019).

Blockchain technology has evolved as an attention-seeking creation that simplifies transactions and reduces costs. The development of this type of technology was to avoid intermediaries that allow for transactions to occur peer-to-peer. Blockchain technology consists of both technological and non-technological ideas and notions. The combination of these ideas allows for price trading without government interference (Kiviat, 2015). Blockchain is the technology behind cryptocurrencies crucial for ensuring security and privacy are improved and

of high-quality (Miraz & Ali, 2018). Blockchains rely on three key concepts: distributed computation, cryptography, and consensus (Salviotti et al., 2018). One of Blockchain's primary elements is its capability to store and track information in a responsible, constant, and decentralized means (Munier & Kembal-Cook, 2019).

Taxation of Cryptocurrencies

Since the inception of cryptocurrencies, Lerer (2019) believed CPAs must understand virtual currencies to assist their clients on the tax ramifications. Ahmed (2018) noted that one approach to taxing virtual currencies is determining which of them is an investment and which will be maintained and considered a currency. Evading taxes when it comes to cryptocurrencies, according to Mills (2018), is due to skepticism and lack of knowledge about the proper way to account for this type of income. The sale and use of cryptocurrencies for goods and services have specific tax ramifications that could lead to tax liability (Toscher & Stein, 2018).

Chodorow (2017) disputed that the origin of taxpayer's digital currencies are to make sure that their profits and deficiencies balance to their earned gains and losses. Elliott (2017) argued that since cryptocurrencies do not contain the same characteristics as the traditional currency, there should be no taxation. According to Lambert (2015), the Internal Revenue Service (IRS) viewed virtual currencies as property for tax purposes and has neglected to establish appropriate methods for valuing cryptocurrencies. With the IRS treating cryptocurrencies as property, Firth (2019) suggested that those investing in them should be keeping track of the cost basis, quantity, price, and dates. Under the IRS ruling, the transformation of cryptocurrency transactions into taxable occurrences are done with the recording of transactions (Hampton, 2016).

Sánchez (2017) advocated that cryptocurrencies should conform to the Bank Secrecy Act (BSA) in hopes to combat the evasion of taxes and money laundering. Cryptocurrencies have become the new liking to investors because tax havens have ceased in evading taxes (Yereli & Orkunoglu-Sahin, 2018). Since cryptocurrencies are currently a trending innovation and there has been a lot of inaccurate information put in the media about them, taxpayers could think that selling or trading would alleviate them from having to report them for tax purposes (Prewett et al., 2019). Bal (2015) argues that there are increasing issues due to the growing popularity since earnings are not taxed, or not taxed in the right domain where the economic activities occur.

Accounting of Cryptocurrencies

Cryptocurrencies should be accounted for as intangible assets since they lack a physical element (Deloitte, 2019). Due to virtual currencies being intangible, testing for impairment is essential; therefore, those who have invested in cryptocurrencies would only realize decreases in value (Ernst & Young, 2018). The future of cryptocurrencies will be complicated and continuously advancing, but technology has created innovative possibilities to improve results that would rectify challenges (Efrima, 2019). PricewaterhouseCoopers concluded that a fair market value framework realizes and unrealizes variations found in financial statements (PwC, 2018). Anytime cryptocurrencies are sold, purchased, transferred, or depleted in any situation, this will produce a taxable circumstance (Smith, 2018).

Accounting ledgers serves as the fundamental component of a firm's financial records; however, with an increasing trend in digital currency, the ledger now exists in a blockchain database (Coyne & McMickle, 2017). Until newly developed guidance is implemented, communication is highly essential to reveal how cryptocurrencies are categorized and calculated (Retief, 2018). Fair value accounting is the most appropriate foundation of practical information

for those who use financial statements when purchasing cryptocurrencies for investment purposes (Procházka, 2018).

Anonymity

Chaffee (2019) defined cryptocurrencies as digital storage that is dispersed anonymously throughout the world. Yin et al. (2019) mentioned that those who invest in cryptocurrencies could establish anonymous transactions without personal data. According to Noked (2018), anonymity in cryptocurrencies can create more significant issues for tax authorities, since it is difficult for them to capture those who try to evade taxes. Cryptocurrencies offer the ability to disguise transactions with a degree of anonymity that presently exists with other types of transactions (Middlebrook & Hughes, 2014). The majority of people have stated that anonymity and freedom are the primary factors in why they invest in cryptocurrencies (Mirea et al., 2019).

Lockaby (2018) asserted that it is challenging to regulate large cryptocurrency transactions of anonymous individuals. As Weaver (2018) claimed, cryptocurrencies give complete anonymity and eliminate the need to move amongst dollars, which will end up seeing an eruption in the markets. Herrera-Joancomarti (2014) speculated that anonymity is one of the characteristics that has made cryptocurrencies so desired. Morris (2015) proclaimed that people should not view anonymity as a critical attribute of cryptocurrencies. Lansky (2018) alleged that anonymity diminishes when the cryptocurrency is transmitted, accepted, and a person's profile intentionally disclosed.

Bhosale and Mavale (2018) stated in their research article that the anonymous feature of cryptocurrency allows an individual to carry out criminal acts. Reynolds and Irwin (2017) concluded that a challenge that regulators face is that while a user's public key can be detected, they continue to be unknown unless they provide certain personal information. Cryptocurrencies

have a high degree of anonymity, making them designated the preferred means to carry out illegal acts (Yin et al., 2019). Reynolds and Irwin (2017) imply that cryptocurrencies are not entirely anonymous; however, they are reasonably anonymous so that individuals do not feel threatened to utilize them without ramifications.

Regulating Cryptocurrencies

The virtual currency market is one of the biggest unregulated exchanges in the world. The regulation of cryptocurrencies in keeping with recently developed or managing systems could be in disagreement with the principles initially laid out. In their present state, putting cryptocurrencies under the direction of a prominent jurisdiction would be impossible. It is essential that, in the future, to take different approaches to regulate cryptocurrencies. Regulations are needed since cryptocurrencies carry the risk of aiding in illegal transactions.

Countries encounter challenges when it comes to cryptocurrency regulation because it is difficult to find a proper balance of regulations that do not disregard a person's rightful ownership. Since cryptocurrencies are hard to define, they are also hard to regulate. It is not apparent if cryptocurrencies are permitted, but there is no institution to manage or anyone to apprehend (Davis, 2011). Therefore, this presents difficulties for regulators (Bohme et al., 2015).

Cryptocurrencies continue to increase in popularity, and Lovell (2019) deemed it necessary to find suitable ways to regulate them. Hughes and Middlebrook (2015) argued that if there is too much regulation, that this can cause regulatory overreach and cause those investing in cryptocurrencies to move to an area with fewer regulations. Alkadri (2018) indicated that regulators continue to be speculative about how cryptocurrencies should be regulated. Ryznar (2019) claimed that proper oversight would assist in declaring cryptocurrencies as a legal form of currency.

In the opinion of Sotiropoulou and Guegan (2017), regulators should establish a system that protects the defiance of remote and immediate risks; while restricting or prohibiting innovativeness. Due to cryptocurrencies gaining so much popularity over the years, Spithoven (2019) recommended that at the possibility of oppressing advancements and elevating developments by legalizing it, utilizing virtual currency and providing services should have oversight for combating crime, safeguarding traditional monetary systems, and protecting those who purchase them. Furthermore, Charfeddine et al. (2019) expressed that while most regulators feel that there should be regulations, the form of the regulations is uncertain due to not being completely understood. As mentioned by Rainer Bohme et al. (2015), a central issue for regulators is establishing restrictions because it can be challenging to control virtual currencies without infringing on a persons' constitutional rights.

Turpin (2014) theorized that by regulating cryptocurrency exchanges, this would be the most accessible avenue to impose restrictions. At this time, the Federal Reserve does not have the jurisdiction to oversee cryptocurrencies (Liedel, 2018). Due to the instability in cryptocurrencies, governments everywhere should consider how virtual currencies can be managed (PwC, 2018). Due to their unpredictability, the majority of governments have cautioned about investing in digital currencies and shown their concern for insufficient oversight (Venter, 2018).

Cryptocurrencies have a lot of uncertainty, and the lack of a known issuer creates challenges for regulators. Rueckert (2019) contended that governments need to take advantage of possibilities and conditions when trying to regulate them because of the technological characteristics of cryptocurrencies. Regulations of cryptocurrencies, through 2014, primarily concentrated on collecting taxes, preventing the laundering of money, economic injunctions,

unlisted security offerings, and commerce of goods and services with digital currencies as the central means (Hughes & Middlebrook, 2015). Cryptocurrency regulations are vital due to: inconstancies in pricing, protecting investors from risks, averting criminal acts, integration of earnings produced from the selling of virtual currencies (Yereli & Orkunoğlu-Sahin, 2018).

Cryptocurrencies lack sufficient regulations, which can cause public uncertainty and deterioration in the economy (Wang, 2018). The regulation of cryptocurrencies is regarded to individuals in specific ways (Filippi, 2014). The most distinguished are those with regulatory disbelief because of the tension of the privacy and deregulation, as well as regulations necessary to have more effective controls and assist in reducing illicit activities. Kaplanov (2012) mentioned that instead of prohibiting cryptocurrencies, lawmakers should understand them to utilize current techniques to examine and charge those who carry out illegal acts.

Risk of Cryptocurrencies

Acceptance of cryptocurrencies faces a lot of opposition. The absence of merchant approval, the danger of incurring losses due to hacking, the lack of knowledge, apprehension that cryptocurrencies might be fraudulent, and uncertainty about the legalities of them as well as the tax ramifications. Cryptocurrencies present varying risks, some of which are inaccessible; while, some are instantaneous. If the remote risks do not demand regulatory involvement, then the immediate risks should not endure past the influence of regulatory guidelines (Sotiropoulou & Guégan, 2017). It is essential to invest in cryptocurrencies to effectively and efficiently consider and understand the risks (Bruno & Gift, 2019).

Weaver (2018) stated that the most significant technical risk that cryptocurrencies have is their susceptibility to crime, and the most prominent systematic risks are worms, networks, and governmental influence. Instabilities cryptocurrencies' values can harm those who invest in them

(Raymaekers, 2015). Cryptocurrencies cannot sustain equal benefits in terms of goods and services to maintain economic stability (Costantini, 2019). Parashara and Rasiwala (2019) provided that the risk to cryptocurrencies is that there is little protection to users. Harvey (2015) indicated that the primary problems with the undertaking of cryptocurrencies are the lack of liquidity, instability, and the possibility of obscure uses.

Characteristics of Cryptocurrencies

Cryptocurrencies are a numerical or virtual form of currency that functions using cryptography for safety measures. They are difficult to duplicate (Conti et al., 2017). A characterizing aspect of cryptocurrencies is their natural essence. They are not distributed by a central authority; which, makes them resistant to government oversight. A registered computer operator verifies cryptocurrency transactions, rather than placing reliance on conventional financial institutions that validate and assure transactions (Tschorsch & Scheuermann, 2016). Due to cryptocurrencies being secured and coded, it becomes unlikely that the fund's supply can increase since there is a predetermined algorithm. Currently, the most popular cryptocurrency is Bitcoin. Bitcoin's features make it inherently independent of government currency (Böhme et al., 2015). The value of cryptocurrencies is entirely dependent upon what people are inclined to purchase them.

Tax Evasion and Illicit Activities

Hussain (2017) communicated that cryptocurrencies are becoming the chosen method for fraudsters to launder funds and terrorist financing, due to their difficulty to tract activities. Kethineni and Cao (2019) found that as the desire to purchase cryptocurrencies rises, they present avenues for fraudsters to disguise the apparent obscurity and ambiguity. Guadamuz and Marsden (2015) believed that cryptocurrency anonymity ceases due to the user base not being

able to function in everyday life. According to Foley et al. (2019), roughly one-quarter of people who use cryptocurrencies become engaged in illicit acts.

As cryptocurrencies continue to grow in popularity, by both consumers and businesses, the threat of immoral or dishonest people increases (Smith, 2018). The absence of regulations and the prospect of eluding anti-money laundering laws have generated possibilities and desirable ones for criminal activities to be carried out (Brown, 2016). Cryptocurrencies are a popular activity for users to launder funds for three primary considerations: 1) used as a way to move funds anonymously, 2) unexamined transactions for illicit acts 3) transferred immediately anywhere in the world without any restraints or limitations (Haffke et al., 2019).

Seele (2018) disclosed that cryptocurrencies are sometimes used in blackmailing schemes as well as compensation for computer viruses. Since cybercrimes are inspired by profits, finding a robust design that will guarantee that the revenue earned ends up with the person committing the crime without being able to trace the money (van Wegberg et al., 2018). Cryptocurrencies' association with the illegal activities started gaining recognition after the Silk Road conception, a website that was only accessible through the Dark Web (Kleiman, 2013). Anonymity is a significant concern when discussing evading taxes. When tax authorities do not have any idea of investing in cryptocurrencies that are taxable, it becomes difficult to determine who is responsible for tax evasion (Houben & Snyers, 2018).

Trust

The idea of trust is crucial to any currency as a form of money. Trust is created and managed in currency through the utilization of anti-money laundering software, central banks, third-party confirmation, and agencies that help prevent the manipulation and intrusion of systems. Nonetheless, cryptocurrencies foster a set of systems of currency that is entirely

different from conventional currencies. Cryptocurrencies have regulatory authorities from their core without getting rid of the trust. The substitution of trust is vital to why cryptocurrencies provide a realistic and appealing replacement to the customary models of currency. Gikay (2018) mentioned that cryptocurrencies eliminate the need for trusting providers for record transactions.

Cryptocurrencies can develop into a disordering creation because they represent a new concept: the deterioration of trust in a secured transaction without a principal command jurisdiction (Mendoza-Tello et al., 2019). Bucko et al. (2015) commented that instability in cryptocurrencies makes the retaining of them speculative since they could be exploited by falsely overstating prices by creating inaccurate assertions, to promote cryptocurrencies purchased at an elevated price. Once the seller of the cryptocurrencies sells out, then the cost of the cryptocurrencies drops, and those retaining them already will lose their investment.

Ethical Theories

Business ethics is a distinct and unique aspect of ethics that centers around moral principles that pertain to an organization and its operations. A normative ethical theory provides various moral theories, each one advising moral standards that people can implement into their decision-making process to determine if their actions are ethical or unethical (Alder et al., 2008). There are three broad categories of normative ethical theory: deontology, utilitarianism, and virtues.

Deontology. Mpho (2017) concluded that deontology grounds the opinion that if a person acts to uphold their wants and needs, they do not act out of a moral purpose. Misselbrook (2013) argued that the basis of morals and integrity is on deontological ethics. Deontology claims that the noble actions of an individual rely on the inherent essence of the action. In short, deontology is a normative theory that considers which choices are honestly and respectably necessary,

prohibited, and reasonable. According to Thomas (2015), “deontology is the rationalization of an individual’s behavior that fulfills a specific set of obligations.” Playford et al. (2015) suggest that deontology is specific actions are unethical; however, they are impartial of the outcome.

Utilitarianism. Utilitarianism’s objective is to gain the utmost good from one’s actions for the most significant number (Garner, 2017). Khan (2016) specified that utilitarianism means that ethical behavior is the behavior that will generate the most exceptional outcomes.

Utilitarianism is the behavior of right and wrong that is established by the consequences. The right action is the one that will exhibit the most significant amount of satisfaction. Riley (2010) illustrates that utilitarianism’s goal is to optimize a person’s enjoyment of quality and quantity. Individuals who encounter difficult decisions, utilitarianism provides a beneficial approach to moral reasoning (Robertson & Walter, 2007). Utilitarianism is a concept that explains how behaviors are correct in part since they encourage happiness; while, wrongdoing precipitates the opposite of enjoyment (Purshouse, 2018).

Virtues. Morris and Morris (2016) inferred that virtue ethics acknowledges that rectification of difficult issues relies on the person’s mental and moral qualities. Gardiner (2003) speculated that virtue ethics concentrates on the merits of ethical means instead of the appropriateness of behavior. Zyl (2005) stated that opponents of virtue ethics disputed that its refusal of general rules of right actions conveys virtue ethics with the inability to clarify the matters of what should or should not be done in particular circumstances. Virtue ethics provides an interpretation of ethical and unethical actions established by a righteous person (Sakellariou, 2015). In simple terms, the moral thing to do is what an honest person does. This person has qualities that are morally acceptable and does not have wrongdoing.

Ethics in Accounting

Accounting cannot thrive, not having reliability and confidence, and assurance and certainty are not achievable without ethics (Mele et al., 2017). The task of accountants is engaging in honest and righteous decisions; however, based on past scandals (Enron, WorldCom, Tyco, etc.), all accountants understand what it means to be ethical. People have expectations for accountants, and they should be able to trust the services that the accountants perform for them to be accurate (Yarahmadi & Bohlooli, 2015). Accountants need to produce financial statements that are ethical and correct because this will improve their character (Jaijairam, 2017). Sonnerfeldt and Loft (2018) believed that accountants play a significant part in producing financial consistency.

Organizations need to incorporate policies to ensure there is sufficient and adequate ethical conduct, to protect their image, promising a better future financial representation, and encouraging continued development (Kaptein, 2008). The American Institute of Certified Public Accountants (AICPA), was founded to develop a Professional Code of Conduct to advise accountants on their responsibilities to furnish a valid and accurate illustration of financial statements and behave ethically (AICPA, 2019). Stuart et al. (2014), defined accounting ethical as (1) the means to present accounting and ethical issues by forming conclusions (2) that establish consistent and reasonable accounting standards and (3) exhibit the accountant's principles and obligation to the public by displaying good ethical behavior.

Accountants face various circumstances that require considerable ethical outcomes. They realize that there are many possibilities to become involved in unethical behavior to obtain some benefit. The accounting industry has been under a lot of criticism due to some significant financial scandals (Enron, Tyco, WorldCom). These scandals have placed a lot of distrust within

the public eye. The establishment of thorough auditing standards, in accounting, prevent accountants from possessing unethical acts.

Summary

This chapter summarized and analyzed the literature that surrounds cryptocurrencies. It focuses on the principal findings of researchers. It has been challenging to find enough research on this topic. The first portion of the literature discussed the conceptual framework involving the fraud triangle. Specifically, it recognized the three elements of the fraud triangle: pressure, opportunity, and rationalization. Each of the components must be present for fraud to occur. Pressure is the most common element of the fraud triangle that triggers an individual to carry out fraud. An opportunity arises when there is a lack of controls or adequate oversight. And finally, rationalization is the last element in which the person committing the fraud tries to justify their actions.

The second portion of the literature concentrated on the taxation, anonymity, accounting, and regulation of cryptocurrencies. Currently, the IRS views digital currencies as property for tax purposes. CPAs need to understand cryptocurrencies to assist their clients. Anonymity in digital currencies can create accountants' issues because it is hard for them to determine who is evading taxes. Accounting for cryptocurrencies will be ever-evolving. Regulations must be in place regarding cryptocurrencies.

The final portion of the literature focuses on risks of cryptocurrencies, characteristics, tax evasion and illicit activities, trust, ethical theories, and ethics in accounting. The most significant dangers of cryptocurrencies are that they offer little protection to those who invest in them. Bitcoin is the most popular cryptocurrency. Cryptocurrencies have become the method of choice for fraudsters to carry out illicit activities. Trust is essential when discussing any currency.

Ethical theories provide moral standards for people to determine whether their decisions are moral or immoral. There is a direct correlation between ethics and accounting.

Chapter 3 addresses the methodological approach used by the researcher. It details the research design, population and sample, material and instruments, study procedures, and data collection and analysis. It also explains the assumptions, limitations, delimitations, and ethical assurances.

Chapter 3: Research Method

The research approach for this qualitative study is how accountants determine the appropriate accounting treatment for cryptocurrency transactions. This study aims to determine which strategies accountants should utilize to properly account for cryptocurrency transactions to conform accurately with U.S. GAAP and IFRS standards. Throughout this chapter, the research focused on how accountants should treat cryptocurrency transactions. This study was selected because of the growing trend in cryptocurrencies and the lack of guidelines into how cryptocurrencies impact financial statements. The research design for this study required conducting phone interviews with accountants to collect qualitative data to determine how to account for cryptocurrencies appropriately. The researcher conducted a semistructured, open-ended interview with accountants. Throughout the remaining chapter, assumptions, limitations, delimitations, and ethical assurances for this research are addressed.

Research Methodology and Design

The primary research focus for this study entails gathering qualitative data to properly determine how accountants should account for cryptocurrencies. Qualitative research is the best approach for this particular study because it focuses on understanding experiences or circumstances (Sargeant, 2012). Qualitative research is sometimes criticized as one-sided, limited scale, unreliable, and lacking adversity; however, when used appropriately this type of research is impartial, rigorously, reasonable, dependable, and plausible (Anderson, 2010).

Qualitative research provides a thorough account of the participant's assessment and viewpoints and gives the researcher the ability to explain their actions (Rahman, 2017). This type of research also allows the researcher to understand human experience and meaning (Yilmaz, 2013). A qualitative approach gives the researcher the means to interact directly with the

participant and comprehend differences in people's opinions and meanings (Rahman, 2017). A qualitative method can be vague and confusing to some, and the results will not extend to broader populations with similar degrees of assurances as a quantitative approach (Atieno, 2009). The results of two qualitative data sources will never produce the same conclusions; therefore, the findings will not be apparent to a larger group (Shakouri, 2014). This type of approach does not have sustainable results and can be time-consuming throughout the interview process (Choy, 2014). Qualitative research seeks to establish ideas that help researchers understand social experiences in a standard-setting instead of a hypothetical setting (Agius, 2013). Knowledge in qualitative studies is fundamental because much of what researchers find are in fields that benefit mainly from qualitative comprehension (Watkins, 2012).

The researcher chose not to use a quantitative method for the research; due to quantitative research primarily focusing on impartiality and used when it is possible to gather data from a population that can be measured and evaluated (Queiros et al., 2017). With this method, there lacks human perception and experiences (Yilmaz, 2013). Quantitative research gives just a glimpse of an experience rather than the whole picture (Rahman, 2017). This methodology relies on valuable standards, such as internal validity, comprehensiveness, and dependability (Wisdom et al., 2012). Quantitative research concentrates on numbers and figures when gathering and analyzing the data from the study (Daniel, 2016).

The researcher used a qualitative case study design to understand the accounting of cryptocurrencies to ensure they are accounted for properly. Case study research has become a valuable method to examine and understand complicated matters in a real-world environment (Harrison et al., 2017). This approach can provide perceptions that may not be attainable using other research methods (Rowley, 2002). A case study approach can give more knowledge into

gaps that might be present in its execution or why one way might be used instead of another (Crowe et al., 2011). In case study research, one cannot conclude just one example, it can be challenging to encapsulate certain instances, and this approach can be impartial towards validation. The case study method focuses on finding the solutions to the “how” and “why” (Teegavarapu et al., 2008)

Ethnography is another qualitative approach that focuses on learning and studying individuals (Jones & Smith, 2017). This type of approach gives the researcher the ability to get perceptions into social customs disguised from the population; however, it can be challenging to gain approval from ethics committees (Reeves et al., 2013). The volume of data gathered using an ethnography method can be confusing to the researcher. It lacks a two-way approach for observation because ethnographies explore the details of all perspectives that are attainable (Najafi et al., 2016). The ethnography method allows the researcher to submerge themselves into the study (Teegavarapu et al., 2008).

Ground theory is another approach that researchers can use since it focuses on establishing theory (Foley & Timonen, 2015). This approach is beneficial in research where gaps, and a new understanding could be effective (Singh & Estefan, 2018). Grounded theory collects qualitative data and examines the data to develop specific categories to communicate an experience (Chong & Yeo, 2015). This method permits the development of substantive theories to demonstrate social experiences between individuals (Barreto et al., 2018).

Phenomenology is a research method used by researchers to examine an individual’s life happenings (Neubauer et al., 2019). This approach focuses on first-hand experiences of an individual’s life (Eddles-Hirsh, 2015). Phenomenology is more of philosophy than a systematic approach (Norlyk & Harder, 2010). The main characteristic of a phenomenology study

understands the nature of the participant's life experiences, which can be objective and subjective (Padilla-Diaz, 2015). A phenomenology approach can assist researchers in gaining further knowledge into the framework of how individuals perceive their life encounters (Bliss, 2016).

The most common method of collecting data in qualitative research is conducting interviews (Jamshed, 2014). Using phone interviews to conduct qualitative studies is one of the best methods to see another's perspective and form an analysis of patterns and themes (Oltmann, 2016). While phone interviews are more of an appealing approach in collecting data, they can also have some obstacles. Interviews can be time-consuming; they lack anonymity and can be prejudice and unpredictable (Alshenqueeti, 2014). The researcher used a purposive sampling technique to interview regulators and accountants. This method allows the researcher to choose participants based on qualities to furnish information by merit of understanding or insight (Etikan et al., 2016). The data collected during the interview process was analyzed to determine the proper accounting treatment of cryptocurrencies to ensure the accuracy of financial statements.

Population and Sample

The study population included individuals from the accounting industry. The participants vary in age, gender, ethnicity, and educational backgrounds. The national estimate of employed accountants and auditors as of May 2018 is 1,259,930 (U.S. Bureau of Labor and Statistics, 2020). This population is appropriate for this study because it allows the researcher to draw a conclusion based on the findings. The study participants included ten individuals from the accounting field. The accountants are individuals who have obtained their CPA license and have had at least five years of experience in the accounting industry and have some knowledge of

cryptocurrencies. Data saturation is an essential element in qualitative research (Marshall et al., 2013). Saturation is a method used in qualitative research to ensure that sufficient and reliable data is collected to contribute to the study (Saunders et al., 2018). Qualitative research demands a lot of time and can also be work-intensive; using a smaller sample size is more practical (Mason, 2010).

This sample size was adequate for the principal purpose of this study. In qualitative research, sample size tends to be small so that the degree of case-oriented reasoning supports the underlying methods of research (Vasileiou et al., 2018). This sample size allows perspectives from participants who have accounting practice experience. Purposeful sampling allows the researcher to recruit participants who can give extensive and thorough information about an experience (Palinkas et al., 2015). This type of sampling requires accessibility to participants in a particular field that can help determine informative cases (Suri, 2011). It is essential not to focus on a specific number of participants but on whether there is adequate information gathered to comprehensibly answer the research questions (Sidhu et al., 2017). A letter was sent to all participants to request their participation in this research study (See Appendix A).

Materials and Instrumentation

The study instrument is a set of structured questions that allows the participants to give their perspective on how cryptocurrencies should be accounted for (See Appendix B). This type of discussion allows the researcher to collect comprehensive information using predetermined open-ended questions (Jamshed, 2014). Interviewing enables the researcher to capture the participant's perspective, opinions, and overall experience and then explain the findings (Rahman, 2017). Interviews give the researcher qualitative information that is vivid and thorough for grasping the participant's insights and experiences (Castillo-Montoya, 2016). In

semistructured qualitative interviews, the researcher is the instrument, and they provide unique characteristics that can impact the gathering of practical resources (Pezalla et al., 2012). The researcher gave participants open-ended questions to provide them with the flexibility to answer with thoughts of importance (Alshenqueeti, 2014).

In qualitative research, the researcher gathers the opinions and perspectives of those participating in the study (Sutton & Austin, 2015). Researchers who conduct a qualitative study can increase the dependability of their interviews as instruments by improving them through the interview protocol refinement (IPR) concept (Castillo-Montoya, 2016). Interview protocols enhance the usefulness of the interview strategies by establishing thorough information during a designated time (Yeong et al., 2018).

Study Procedures

Research that uses human participants must comply with specific ethical standards set out by Northcentral University. First, before the gathering of any data, there must be approval obtained from the Northcentral University Institutional Review Board (IRB). Once approved, a recruitment letter was sent to ten accountants to invite them to participate. Next, consent letters were given to those willing to participate in the study. Screening questions established if participants were qualified to participate in the research (See Appendix D). Participants that chose not to participate in the study could elect to dismiss themselves. The interview questions concentrated on the accountant's understanding of cryptocurrencies.

Data Collection and Analysis

Due to the research containing human participation, IRB approval must be gained first (Parker, 2016). The researcher obtained approval from Northcentral University Institutional Review Board (IRB). IRBs protect the participants of a research study by ensuring that the

research is ethical (Grady, 2015). For approval, IRB ensures appropriate measures so that the participants involved in the study are protected (Heflin et al., 2016). Recruiting participants is an essential element of the research and is necessary to carry out the research (Newington & Metcalfe, 2014). It is good to understand the behaviors of possible participants to ensure that they align with what the study is trying to accomplish (Archibald & Munce, 2015). When recruiting participants, the researcher needs to build a relationship with each participant to build trust (Eide & Allen, 2005). The researcher emailed a consent form to each participant before scheduling the interview (See Appendix E). The researcher allowed each participant to read over the entire consent form and asked them to sign, scan, and email it back to them. Once the signing of the consent form was received, the researcher scheduled an interview for a convenient time. The interview aims at addressing the research questions that were mentioned earlier in the study. The researcher gathered the data for this research through a semistructured, open-ended phone interview process. Ten participants were interviewed over the phone, lasting at most 60 minutes, and at a time that worked for the participant. The researcher should not be concerned with gathering distinguishing data that includes in-depth personal and privileged information of the participants (Wiles et al., 2008).

The researcher collected data by using an audio recording device. The recordings from the interview were transcribed into a written format so that the researcher could further analyze it. Data gathered from conducting interviews are typically recorded to be watched or listened to when there is uncertainty (Al-Yateem, 2012). At the conclusion of the interviews, the researcher began reviewing the transcripts using qualitative data analysis software (QDAS), which helped the researcher analyze the data collected. The researcher has specifically chosen, NVivo, as the application to analyze the data for this study. CAQDAS allows the researcher to organize the

recordings, assemble and explain the data, and produce the results to the researcher (Schonfelder, 2011). The software provides the researcher with immediate access to individual data files, create and retrieve codes, and examine the association of the codes (Gibbs et al., 2005). NVivo is a transcription service that assists the researcher in producing a text from the recordings captured during the interview. Transcribing requires the researcher to pay close attention to the data by repeatedly listening or watching (Bailey, 2008). After transcription, then it is ready for coding.

Coding is an essential element of the analytical design and the approach that researchers take to analyze the data collected to develop something innovative (Elliott, 2018). Coding allows the researcher to be able to start understanding each of the participant's perspectives (Sutton & Austin, 2015). Coding is how the researcher defines what the data that is being analyzed is about (Gibbs, 2007). The use of codes offers support for the text elements of the data, grouped by themes (Glaser & Laudel, 2013). After completing the coding process, the researcher developed themes based on the overall data collected and analyzed. The data is coded based on their relation to the research questions, and this allows the researcher to look for patterns that will lead the researcher to establish themes (Belotto, 2018). Themes are key topics that arranges groups of related ideas to allow the researcher to answer the research questions (Vaidismoradi et al., 2016).

Assumptions

Assumptions are concerns and actualities that are present in studies and can impact the association from other realities that exist (Wolgemuth et al., 2017). This current research contains assumptions associated with gaining an adequate response rate, integrity from the participants, and participant's knowledge and experience regarding the accounting practices of cryptocurrencies. The first assumption of the study aims at getting a total of ten participants who have accounting experience. Carefully selecting participants to participate in this qualitative

research is essential. The second assumption of the study is to get participants that will give open and honest answers during the interview process. For this to happen, the researcher must gain a mutual understanding with each of the participants. It is speculated that the participant's responses will be honest. There is an assumption that the participants will have an interest in participating in the study. It is essential to recruit participants who fully comprehend the purpose of the research and are committed to participating throughout the study.

Limitations

As with any research, this particular research has limitations that could impact the accuracy of the data. Limitations in a study are those obstacles and challenges that can hinder the study's validity (Price & Murnan, 2004). The interview process will be mostly open-ended questions; therefore, the participants will have more influence over the data collection, making it difficult for the researcher to validate the results (Chetty, 2016). With a small sample size, the study's findings are less apparent and could make it difficult to draw conclusions based on the results. Another possible limitation is researcher prejudice. It will be crucial for the researcher to limit their bias as much as possible by including specific interview protocols. A third limitation that is possible with this study is the limited time needed to complete the research, which could limit the amount of data gathered. The researcher ensured that data collected during the interviews are thorough, sufficient, and accurate. The final limitation is that there has not been much prior research on this topic; therefore, the researcher needed to explore the literature gaps.

Delimitations

Delimitations are a complete narrative of interpretation that describes the scope of the research study, with its design and foundation (Theofanidis & Fountouki, 2018). The researcher has established specific controls to influence the scope of the research. The participants are

qualified accountants with several years of accounting experience and some knowledge of cryptocurrencies. The sample size is small when compared to the number of accountants that exist throughout the United States. This research can provide some thorough and comprehensive information about the accounting practices that should occur with cryptocurrencies. Another delimitation is that all the participants will be from the United States, making it harder to draw a conclusion based on the findings. These delimitations can give some clarification and an examination of the results.

Ethical Assurances

There are a few ethical considerations taken into account before conducting research; confidentiality, and informed consent (Sanjari et al., 2014). Before conducting any interviews, adequate and beneficial information was given to each participant that is part of the study, to make sure that they have grasped the goals of the study (Reid et al., 2018). The researcher must protect every participant's rights so that they do not cause any distress or suffering (Alshenqeeti, 2014). The researcher will also make sure that the participants understand the systems and procedures utilized throughout the study to protect their privacy (Reid et al., 2018).

The participants were provided guarantees that they were not pressured or compelled to participate in the study, and given the option to withdraw from the study at any time if they feel the need to (Sutton & Austin, 2015). Participants that will take part in research sometimes want to maintain autonomy so that they can have the liberty to speak how they feel without getting backlash (Surmiak, 2018). A coded identifier will be assigned to each of the participants to protect their identity. For example, a descriptive code to outline the main topic of a section of the notes (Saldana, 2016). All of the information collected throughout the study will be password protected or stored in a file cabinet that will remain locked.

Summary

In this chapter, the research method was discussed qualitative study. The target population included individuals recruited from the accounting industry. Data collection involves a qualitative semistructured interview protocol that provides for in-depth, open-ended questions with a sample of participants that include ten accountants. The items included in the interview protocol link the problem, research questions, and research methods, with the principle for incorporating thresholds for this research in association with the aimed objective of the study. Also discussed in this chapter are assumptions, limitations, delimitations, and ethical assurances that ensure adherence to ethical standards. In the next section, an assessment of the research findings.

Chapter 4: Findings

This chapter presents an analysis of the purpose of this dissertation study, as well as the research questions presented earlier. The themes and sub-themes developed from the data are discussed further in this chapter. This chapter concludes with an assessment of the findings from the study and a summarization review. This qualitative research study aims to determine what strategies accountants should utilize to complete journal entries when recording transactions for cryptocurrencies. The researcher interviewed CPAs to gain a better understanding of how cryptocurrencies should be accounted for properly. This study will assist those in this type of industry to better grasp the proper way for the accounting of cryptocurrencies. The researcher used this methodology to conduct the study to be able to ask detailed open-ended questions of the participants.

The researcher aimed to gain further knowledge of what accountants believe is the best way to account for cryptocurrencies to conform with U.S. GAAP and IFRS Standards. The sample for this research study was ten accountants. All participants had obtained a CPA license and had at least five years of experience in the industry and have knowledge of cryptocurrencies. The sample size of 10 participants was enough to come up with a saturation sufficient to establish themes. The study contained structured questions used to interview the participants. Interviews were conducted over the phone and recorded.

The researcher discussed, in Chapter 3, the research methodology and design, population and sample, material and instrumentation, study procedures, data collection and analysis, and ethical assurances. The research methods conveyed in the previous chapter established the findings for reporting in Chapter 4. The researcher organizes the chapter as follows: the trustworthiness of the data, results, research question1/hypothesis, evaluation of the outcome,

and a summary. In Chapter 4, there is a comprehensive analysis of the research questions and interview questions from the ten participants who are accountants. Data analysis allowed the researcher to develop themes and sub-themes that describe how cryptocurrencies should be accounted for properly. This chapter addresses the results of this qualitative study and provides an assessment of the findings. The chapter focuses on the study's research questions. The following research questions examined how accountants should adequately account for cryptocurrencies:

RQ1. How do cryptocurrencies affect the accounting journal entries and financial statements?

RQ2. What strategies do accountants use to accurately represent cryptocurrency transactions in accounting records to prevent fraud, theft, and tax evasion?

Trustworthiness of the Data

The researcher wanted to ensure trustworthiness in the study design is apparent. According to Elo et al. (2014), the purpose of trustworthiness in qualitative research is to provide the groundwork for the argument that the research findings are important and worth exploring. It involves having processes and procedures that offer assurance in the information, understanding, and practices used to strengthen the reliability of the study (Polit & Beck, 2014). It becomes a circumstance of convincing the researcher to make the practices noticeable and auditable (Gunawan, 2015). Incorporation of relevant and practical researcher interpretation establishes trustworthiness. Exhibited by virtue, along with the researcher's behavior being absent of deception, fabrication of data, or any other actions deemed inappropriate that of a researcher (Louw et al., 2011). Trustworthiness consists of four characteristics: credibility, transferability, dependability, and confirmability (Morse et al., 2002). Additionally, these characteristics

examine the study's trustworthiness, which is imperative when analyzing their worthiness and quality (Lee, 2009).

Credibility. Triangulation establishes the credibility of data (Statistics Solution, 2020). Creswell (2013) asserts that credibility is a vital determinant in developing trustworthiness in qualitative research. Lincoln and Guba (1985) recommend that the researcher and participants have an opportunity to engage with one another to establish trust among all parties. The researcher reached out to each of the participants by email, providing them with a recruitment letter explaining the purpose of the study, and requirements to participate. Also provided was a copy of the research questions and informed consent that each participant was to read and sign. Throughout the interview, the researcher read each study question and gave the participant ample time to review the questions before they answered to ensure they understood. Some researchers advise offering a refusal to participate to ensure trustworthiness by the participants (Creswell, 2013; Lincoln & Guba, 1985). In this study, the researcher provides the participants with a refusal to participate in the original email and informed consent. One person responded by refusing to participate. The researcher notified each of the participants that when they reviewed the informed consent that participation was entirely voluntary and that if they did choose to participate that any time during the interview process, they could request to stop without any penalty. Korstjens and Moser (2018) recommend that another method to improve credibility is to conduct member checks. After each interview, the researcher asked the participant if there were any additional questions or further comments. Each participant had ample time to answer each question before moving to the next question.

Transferability. Korstjens and Moser (2018) suggest that transferability occurs when the researcher can use the results to determine if the findings transfer to their own setting. The

research has presented adequate information about this study. It can be duplicated in other regions with other CPAs so that other participants could be involved in a more comprehensive study. In qualitative studies, transferability relies on boosted factors by using assumptions (Kuper & Levinson, 2008). Transferability results from one setting to the next is dependent on the feasibility between standard attributes, and conditions of the settings (Rodon & Sesé, 2008). When a researcher gives a thorough description of the study, and participants intentionally choose, it will establish the transferability in the study (Anney, 2015).

Dependability. According to Trochim and Donnelly (2008), dependability occurs when the researcher conveys sufficient information to allow future researchers to replicate the study. The researcher gave thought as to whether or not the findings would differ if a different set of participants participated or if they conducted face-to-face interviews, would the outcomes be similar? Dependability results in the participants analyzing the findings and the meanings and suggestions of the study to ensure that all participants have sustainability through the data collected from the informants (Anney, 2015). The researcher requested collaboration from the participants the same way and sent the same recruitment letter and informed consent form, which required their signature. The researcher used the same recording device for each interview and each participant asked the same questions. The researcher used NVivo to assist them in developing themes and sub-themes. All of the strategies utilized by the researcher provides additional dependability, which enables future replication of the study.

Confirmability. In qualitative research, confirmability pertains to the degree to which the study's findings can be verified and attested to by others (Anney, 2015). Confirmability is concerned with determining that the data collected and the meanings of the results are not fabricated but rather formulated from the data (Korstjens & Moser, 2018). The researcher made

sure that the participants met specific requirements and had voluntarily agreed to participate. The researcher provided the informed consent to each participant and asked if they had received their CPA certification before the interview could be scheduled or conducted. There was sufficient time for each participant to review and sign the informed consent before starting the interview. The researcher provided the participants with a copy of the questions. At the start of each of the interviews, the researcher gave the participants the option to decide whether they wanted to participate and told them they didn't have to answer some questions if they weren't comfortable with answering. They also could ask the researcher to stop the interview. The researcher had no personal relationships with the participants. The researcher verified that each of the participants was a licensed CPA within the state they reside. All the proper methods and procedures were taken by the researcher to elevate trustworthiness and prevent any misrepresentations.

Results

Table 1

Participant demographic information

Participant	Sex	Age	License	Experience
P1	Male	41-45	CPA-2002	16-19 years
P2	Male	31-35	CPA-2014	3-5 years
P3	Male	>50	CPA-1992	>25 years
P4	Male	41-45	CPA-2014	11-15 years
P5	Male	36-39	CPA-2011	6-10 years
P6	Male	36-39	CPA-2008	11-15 years
P7	Male	31-35	CPA-2014	6-10 years
P8	Female	36-39	CPA-2013	6-10 years
P9	Female	36-39	CPA-2014	6-10 years
P10	Male	31-35	CPA-2013	6-10 years

Demographics

The researcher gathered demographic information for each participant: sex, age, and years of experience. Included in Table 1 is a summary of this information. An email was sent to 10 CPAs requesting their participation in the study. The participants provided vital and essential information. Of the 10 participants, two were female, and eight were male. All interviews were conducted over the phone due to the participant's locations. The most common age group was 36-39.

Four of the participants had experience over ten years, five had between 6-10 years, and only one had 3-5 years of experience. Most of the participants had 6-10 years of tax accounting experience. The researcher had emailed about twenty CPAs throughout the U.S.; however, only 10 participants agreed to participate or met the required criteria. Every participant interviewed signed an informed consent.

Research Questions

The researcher reported the results of this study to determine what strategies accountants should use for cryptocurrency transactions. The purpose of this study was to gather information from licensed CPAs on how they think cryptocurrencies should be accounted. All of the participants were open and honest about their responses. The researcher used eight open-ended questions to interview the participants. All of the participants were able to answer all the questions without any issues. The researcher was able to collect information from the responses. The participant's responses were themed and coded and put into categories based on specific themes.

Research Question 1 - How do cryptocurrencies affect the accounting entries and financial statements? The researcher asked the following interview questions to address this research question:

1. What, if anything, would you change about how cryptocurrencies are accounted for?
2. Do you consider cryptocurrencies a form of currency?
3. Do you have clients who hold cryptocurrencies on their balance sheet? If so, where is it included?

Table 2

Alignment of Research and Interview Questions

RQ1	Interview Questions
How do cryptocurrencies affect the accounting entries and financial statements?	What if anything, would you change about how cryptocurrencies are accounted for? Do you consider cryptocurrencies a form of currency? Do you have clients who hold cryptocurrencies on their balance sheet? If so, where is it included?
RQ2	
What strategies do accountants use to accurately represent transactions in accounting records to prevent fraud, theft and tax evasion	Do you feel cryptocurrencies should be regulated?

One theme emerged in response to this research question: Proper accounting for cryptocurrencies. The results presented that 70% of the participants answered the first question based on their experience with cryptocurrency accounting. Participants No.1, 2, 3, 4, 6, 7, and 9 all believe cryptocurrencies should be accounted for as personal property, per the IRS guidance. According to the Internal Revenue Service (2014), “For federal tax purposes, virtual currency is treated as property.” Participant 2 stated, “personal property makes the most sense.” Participant 6 said, “the way that cryptocurrencies are accounted for makes the most sense, but in the future, if more companies start using them, then it might need to be accounted for differently.”

Participant 5 stated, “cryptocurrencies should be reported as capital gains or losses and to develop a different stand-alone schedule.” Participant 8 said, “cryptocurrencies need their own asset class.” Participant 10 stated, “as a whole, the accounting of cryptocurrencies needs to become more simplified.” The results also suggest that 70% of the participants believe that personal property is the correct way to account for cryptocurrencies.

Participants No.1, 2, 3, 4, 6, 9, and 10 feel that cryptocurrencies are a form of currency. Participant 3 stated, “cryptocurrencies are used as a currency.” Participant 4 said, “cryptocurrencies should be accounted for as property for tax purposes, but should be on the books as currency.” Participant 6 said, “it depends on how cryptocurrencies are used.”

Participants No. 5, 7, and 10 had clients that hold cryptocurrencies on their balance sheet. Participant 5 stated, “cryptocurrencies are reported as an investment.” Participant 7 said, “cryptocurrencies are held as current assets.” Participant 10 stated, “cryptocurrencies are listed as digital assets.” Only 30% of the participants had clients that hold cryptocurrencies on their balance sheets.

Research Question 2 - What strategies do accountants use to accurately represent cryptocurrency transactions in accounting records to prevent fraud, theft, and tax evasion? To address this question, the following interview question was asked:

1. Do you feel cryptocurrencies should be regulated?

One theme emerged in response to this research question: Regulation of cryptocurrencies. The results presented that 90% of the participants answered the question based on their familiarity with cryptocurrency regulations. All but one of the participants feel that they should be regulated. Participant 3 stated, “regulation of cryptocurrencies depends on the approach.”

Participant 4 stated, “some regulation is needed.” Participant 7 said, “cryptocurrencies should be

regulated, but lawmakers need to take time to understand them.” Participant 8 stated, cryptocurrencies should be regulated, but rules need to be in place that makes sense.” Participant 9 said, “cryptocurrencies need to be regulated to some extent because some clients have gotten screwed over.” Participant 6 stated, “cryptocurrencies should not be regulated at this time, but maybe down the line there might be a need for stronger regulations.” The vast majority of participants believe that cryptocurrencies should have some form of regulation.

Evaluation of the Findings

The purpose of this qualitative study was to determine what strategies accountants should utilize to complete journal entries when recording transactions for cryptocurrencies. Since cryptocurrencies are not financial assets and lack a physical substance, they would be considered an intangible asset and be recorded at acquisition cost (BDO, 2019). In accordance with IAS 38 and 21, virtual currencies look to be an intangible asset (Procházka, 2018). Accounting for cryptocurrencies at fair value with fluctuations or changes revealed in the gain or loss would provide investors with valuable information (Berchowicz, 2017). Individuals hold cryptocurrencies typically as an investment; therefore, when the cryptocurrencies sell, the capital gains and losses from the sale must be recognized. For tax purposes, this gain or loss would be included on IRS Form 8949 (IRS, 2019). Currently, GAAP standards require cryptocurrencies to be held as intangible assets based on the purchase price and then adjusted for impairment losses. In doing so, there is no recognition of the gains and losses; which, results in the misstatement of cryptocurrency values.

In response to a request from the IASB, the IFRS published the following disclosure requirements for holding cryptocurrencies. The following are the requirements:

1. Holding of cryptocurrencies that are measured at FV less the costs to sell (IFRS, 2019).
2. Managements judgment of how cryptocurrencies are being accounted for (IFRS, 2019).
3. Details involving any significant non-adjusting events (IFRS, 2019).
4. Cryptocurrencies held for sale in the course of business and as it applies to IAS 38 (IFRS, 2019).

The study used eight interview questions in Appendix F. All ten participants read and signed the informed consent form before the interview began. The researcher introduced herself to all participants and then asked them some questions about themselves and their background. Each interview was conducted over the phone. Per the participant's consent, each conversation was recorded. The researcher used NVivo to develop codes and themes. The researcher organized themes and included direct quotes from the participants. Two themes emerged from the data that was collected. The research exhibits the themes and codes in Table 3.

Table 3

Themes and Codes

Themes	Codes
Proper accounting of cryptocurrencies	Personal Property Intangible Assets
Regulation of cryptocurrencies	Criminal Activity Price Discrepancies

The findings were generally consistent with the previous findings of scholars. The findings were similar to those of Lambert (2015), who showed that the majority of participants agree that the accounting of virtual currencies can be classified as personal property. The

findings also align with those of Deloitte (2019), who suggested that cryptocurrencies should be considered intangible assets since they do not possess a physical component. The findings also show that most of the participants have been working in the accounting industry for 6 to 10 years. Hence, this is an indication that they are knowledgeable of proper accounting practices. The findings are also consistent with Toscher and Stein (2018), who believe the sale and use of cryptocurrencies for goods and services have inevitable tax consequences that could lead to some tax liability. The findings support Hampton (2016) because he suggests that a taxable situation occurs when there is a recording of a cryptocurrency transaction. Smith (2018) also believes that any time a transaction happens, that a taxable occurrence arises.

The findings also conform with Lovell (2019) results, who expresses that it is imperative to find avenues to regulate cryptocurrencies. The findings support Yereli and Orkunoğlu-Sahin (2018), who stated that cryptocurrency regulations are essential since discrepancies in their pricing, risks to investors, and would prevent criminal activities. The research findings also align with Ryznar (2019), who claims that with proper oversight, this would help make cryptocurrency a legal form of currency. The research study paralleled Sotiropoulou and Guegau (2017), who believe regulators should develop a system that provides protection from risks but does not restrict or prohibit innovativeness. The findings conform with Ahmed (2018), who believes that to tax cryptocurrencies, a determination must be made to establish which ones can be considered investments and which should be a currency.

The results identified two themes in response to the research questions: proper accounting and regulation of cryptocurrencies. Studies by Lambert (2015), Deloitte (2019), Toscher and Stein (2018), Hampton (2016), and Smith (2018) were in alignment with theme 1. Theme 2

supported the findings of Lovell (2019), Yerehi and Orkunoğlu-Sahin (2018), Ryznar (2019), Sotiropoulou and Guegau (2017), and Ahmed (2018).

Summary

This chapter presented the data collection methods and formalities and analyzed the results. This chapter contained a brief description of the purpose, along with the research questions. This chapter also included what measures were taken by the researcher to ensure trustworthiness in the data, research utilized to fulfill data analyzation, participant demographics, results, and the evaluation of the findings. The research findings included emerging themes and codes. In Chapter 5, implications, recommendations, and conclusions will be discussed.

Chapter 5: Implications, Recommendations, and Conclusions

The problem examined in this qualitative study is to determine how accountants complete journal entries accurately for cryptocurrency transactions. This study explored CPAs' perceptions and experiences regarding the accounting of cryptocurrencies. This study aims to identify the strategies that accountants should use for recording cryptocurrency transactions to conform to accounting standards. The researcher interviewed CPAs to gain further understanding as to how they think cryptocurrencies should be accounted. This research study may assist other accountants in guiding them better when dealing with cryptocurrencies. The methodology for this study was qualitative. This design allowed participants an opportunity to share their experiences. This research design gave the researcher the ability to ask thorough open-ended questions.

This study was conducted by the researcher ethically and under the guidance of an NCU dissertation committee and the IRB. The researcher utilized purposive sampling to select participants for the study. The researcher was the only one to conduct the interviews and analyze the data. The researcher adhered to a proper protocol to maintain the data's trustworthiness and credibility, described in the previous chapter. The results of this qualitative study encompassed several themes and sub-themes. The first theme discovered in this research was the proper accounting of cryptocurrencies, which included two sub-themes of personal property and intangible assets. The second theme that emerged was the regulation of cryptocurrencies, which included two sub-themes of criminal activity and price discrepancies.

The research study contained several limitations. One limitation was the sample size. The participants had to meet specific criteria before they could participate in the study, outlined in the informed consent. Another limitation was the limited time needed to complete the study. The

researcher made sure that the data gathered was thorough, sufficient, and accurate. The final limitation of this research study is that there has not been much previous research on this topic. There is very little information about this topic at this point in time. The researcher needed to explore gaps in the literature.

This chapter presents the conclusion of this study. This chapter addresses the implications of each research question. This chapter provides the study results concerning the problem and purpose statement and its contribution to existing literature. Also included in this chapter are recommendations for practice, which discusses how the findings can apply to practice or theory. The recommendations for future research explain how the results and implications can impact future researchers and how they can improve upon this study. Finally, the conclusion provides the results of the study and what they mean to prior research.

Implications

In Chapter 2, the literature review provided discussions on how accountants should properly account for cryptocurrency transactions that needs further exploration. Previous research examines the topic of accounting for cryptocurrencies; however, there is limited research that provides adequate guidance. The findings from this research can assist accountants when recording cryptocurrency transactions.

Research Question 1 was developed to determine how cryptocurrencies impact financial statements. **Research Question 1** – How do cryptocurrencies affect the accounting entries and financial statements? Two codes were developed from this research question. The theme that emerged was: proper accounting of cryptocurrencies. 70% of the participants answered this question based on their experience with cryptocurrency accounting.

Research Question 2 was developed to determine which strategies accountants use to represent cryptocurrency transactions. **Research Question 2** – What strategies do accountants use to accurately represent cryptocurrency transactions in accounting records to prevent fraud, theft, and tax evasion? Two codes were developed from this question. The theme that merged from this question was: regulation of cryptocurrencies. 90 % of the participants answered this question based on their familiarity with cryptocurrency regulations.

The findings align with a previous study by Lambert (2015), which suggested that the accounting of virtual currencies can be classified as personal property. The findings are also consistent with Deloitte (2019), who suggested that cryptocurrencies should be considered intangible assets since they do not possess a physical aspect. The findings also agree with Lovell (2019), who suggests that it is important to find ways to regulate cryptocurrencies. The findings parallel Ryznar (2019) claiming that with proper oversight, cryptocurrencies would become a legal form of currency. **The IRS is looking to provide further guidance on how cryptocurrency transactions should be reported. The agency will require individuals who receive virtual currency through a crowdsourcing platform for providing a service would need to report the currency as ordinary income (IRS, 2019).**

Recommendations for Practice

Several recommendations can be made from the results of this research study. First, researchers need to engage in continuing education programs such as those offered through the ACFE. Continuing education programs on cryptocurrencies are important and allow researchers to keep up with emerging issues such as security and market risks (Smith, 2018). Another recommendation would be to include cryptocurrencies as part of accounting coursework in which students would learn how the blockchain works and students could explore the different

cryptocurrency platforms. Finally, it would be recommended to have improved guidance from the IRS on cryptocurrencies.

Recommendations for Future Research

There is a limited amount of research conducted on the accounting of cryptocurrencies to date, and there is limited guidance provided, which creates gaps in research. Furthermore, a gap exists between the knowledge and understanding of the accountant's and what is suggested in the literature. There are several recommendations for future research that came about throughout this qualitative study. Future research is needed that focuses on a broader group of accountants. Because the accounting of cryptocurrencies is a new topic, it is prudent to conduct similar research in the next five years when this topic has further evolved, and accountants have more experience working with them. Additionally, conducting a similar study in different parts of the world where cryptocurrencies are more prevalent would be beneficial. Finally, further research could be conducted using a quantitative approach surveying accountant's about issues and concerns regarding the accounting of cryptocurrencies. **Future researchers should explore new IRS guidance going forward. Changes in guidance effect practitioners, taxpayers, and clients.**

Conclusions

The purpose of this study is to determine the strategies that accountants will use to complete journal entries to record cryptocurrency transactions on financial statements. The researcher spent time exploring what accountants believe to be the best avenue to account for cryptocurrencies. Several researchers agree with the findings (Lambert 2015; Deloitte 2019; Hampton 2016; Lovell 2019).

The researcher interviewed CPAs to determine how cryptocurrencies should be accounted for properly. The participants were selected based on specific criteria. Each participant

agreed to participate in an interview and signed an informed consent form. Their answers were used to generate results to draw conclusions. This particular approach was utilized so that the participants could share, in detail, their experiences with cryptocurrency transactions. The findings of this qualitative research study consisted of two themes. The first theme that emerged was the proper accounting of cryptocurrencies. The second theme that was identified by the researcher was the regulation of cryptocurrencies.

This study provides suggestions for practice: researchers engaging in continuing education programs and including cryptocurrencies into accounting coursework. The research study also provides several recommendations for future research. These include focusing on a broader group of CPAs, taking research into larger accounting firms, and creating a quantitative tool to measure a person's familiarity on this particular topic.

References

- Abdullahi, R., & Mansor, N. (2015, October). Fraud Triangle Theory and Fraud Diamond Theory. Understanding the Convergent and Divergent for Future Research. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 5(4), 38-45. Retrieved from <http://www.hrmars.com>
- Agius, S. (2013, June). Qualitative Research: Its Value and Applicability. *The Psychiatrist*, 37(6), 204-206. doi:10.1192/pb.bp.113.042770
- Al-Yateem, N. (2012). The Effect of Interview Recording on quality of Data Obtained: A Methodological Reflection. *Nurse Researcher*, 19(4), 31-35. Retrieved from <http://www.pdf.semanticscholar.org/8749/353a280c964af680533450be4706baa9170c.pdf>
- Albrecht, W. S., Albrecht, C., & Albrecht, C. (2008). Current Trends in Fraud and its Detection. *Information Security Journal: A Global Perspective*, 17(10), 2-12. doi:10.1080/19393550801934331
- Albrecht, S., Turnbull, C., Zhang, Y., & Skousen, C. (2010). The Relationship Between South Korean Chaebols & Fraud. *Management Research Review*, 33(3), 257-268. doi:10.1108/01419171011030408
- Alder, G., Schminke, M., Noel, T., & Kuenzi, M. (2008, July). Employee Reactions to Internet Monitoring: The Moderating Role of Ethical Orientation. *Journal of Business Ethics*, 80(3), 481-498. doi:10.1007/s10551-007-9432-2
- Alexander, L., & Moore, M. (2016). *Deontological Ethics* (Winter). Stanford, CA: Metaphysics Research Lab.

- Alkadri, S. (2018). Defining and Regulating Cryptocurrency: Fake Internet Money or Legitimate Medium of Exchange. *Duke Law & Technology review*, 17, 71-98. Retrieved from <http://www.neinonlin.org.proxy1.ncu.edu/HOL/Page?handle=hein.journals/dltr17&div=4>
- Alshenqeeti, H. (2014). Interviewing as a Data Collection Method: A Critical Review. *English Linguistics Research*, 3(1), 39-45. Retrieved from <http://www.sciedu.ca/elr>
- American Institute of Certified Public Accountants. (2019). Code of Professional Conduct. Retrieved from <http://www.aicpa.org>
- Amhed, S. (2017, December). Cryptocurrency & Robots: How to Tax and Pay Tax on Them. 69 *South Carolina Law Review*, 697, 1-68. Retrieved from <http://www.ssrn.com/abstract=3083658>
- Anderson, C. (2010, October). Presenting & Evaluating Qualitative Research. *American Journal of Pharmaceutical Education*, 74(8), 1-7. doi:10.5688/aj408141
- Andon, P., Free, C., & Scard, B. (2015). Pathways to Accountant Fraud: Australian Evidence & Analysis. *Accounting Research Journal*, 28(1), 10-44. doi:10.1108/arj-06-2014-0058
- Andrianto, Y., & Diputra, Y. (2017). The Effect of Cryptocurrency on Investment Portfolio Effectiveness. *Journal of Finance and Accounting*, 5(6), 229-238. doi:10.11648/j.jfa.20170506.14
- Anney, V. (2015). Ensuring the Quality of the Findings of Qualitative Research: Looking at Trustworthiness Criteria. *Journal of Emerging Trends in Educational Research & Policy Studies*, 5(2), 272-281. Retrieved from <http://www.jeteraps.scholarlinkresearch.com>
- Archibald, M., & Munce, S. (2015, July). Challenges & Strategies in the Recruitment of Participants for Qualitative Research. *University of Alberta Health Sciences Journal*, 11(1), 34-37. Retrieved from <http://www.researchgate.net/publication/299483270>

- Association of Certified Fraud Examiners. (2018). Report to the Nations on Occupational Fraud & Abuse. Retrieved from <http://www.acfe.com>
- Atieno, O. (2009). An Analysis of the Strengths and Limitations of Qualitative and Quantitative Research Paradigms. *Problems of Education in the 21st Century*, 13, 13-18. Retrieved from http://www.scientiasocialis.It/pec/files/pdf/Atieno_Vol.13.pdf
- Austin, Z., & Sutton, J. (2015, May). Qualitative Research: Data Collection, Analysis & Management. *The Canadian Journal of Hospital Pharmacy*, 68(3), 226-231. doi:10.4212/cjhp.v68i3.1456
- Azam, M. (2018). Theory application: Why people commit fraud. *International Journal of Management, Accounting & Economics*, 5(1), 54-65. Retrieved from <http://www.ijmae.com>
- Bailey, J. (2008, May). First Steps in Qualitative Data Analysis: Transcribing. *Family Practice*, 25(2), 127-131. doi:10.10936/fampra/cmn003
- Bal, A. (2015). Taxing Virtual Currency: Challenges & Solutions. *Intertax*, 43(5), 380-394. Retrieved from <http://www.kluwerlawonline.com>
- Barlin, R. (2017, June). Regulation on the Rise as Bitcoin Gains Popularity. *CPA Journal*. Retrieved from <http://www.cpajournal.com/2017/06/30/regulation-rise-bitcoin-gains-popularity>
- Barreto, M., Marcon, S., & Garcia-Vivar, C. (2018). Methodological Quality of Grounded Theory Research with Families Living with Chronic Illness. *International Journal of Africa Nursing Sciences*, 8(2), 14/22. doi:10.1016/j.ijans.2018.01.001
- BDO. (2019, January). Cryptocurrencies: The Top Things You Need to Know. Retrieved from <http://www.bdo.com>

- Beaton, N. (2019, January). Cryptocurrency: The Future of Currency or Twenty-First Century Mythical Beast? *Cryptocurrency: The Future of Currency or Twenty-First Century Mythical Beast?* 6-12. Retrieved from <http://www.valueexaminer.com>
- Belotto, M. (2018, November). Data Analysis Methods for Qualitative Research: Managing the Challenges of Coding, Interrater Reliability & Thematic Analysis. *The Qualitative Report*, 23(11), 2622-2633. Retrieved from <http://www.nsuworks.nova.edu/tqr/vol23/iss11/2>
- Berchowitz, G. (2017, November). Accounting for Cryptocurrency. Retrieved from <http://www.pwc.blogs.com>
- Bhosale, J., & Mavale, S. (2018, March). Volatility of select Crypto-currencies: A comparison of Bitcoin, Ethereum and Litecoin. *Annual Research Journal of SCMS*, 6, 132-141. Retrieved from <http://www.scmspune.ac.in>
- Bliss, L. (2016, July). Phenomenological Research: Inquiry to Understand the Meanings of People's Experiences. *International Journal of Adult Vocational Education & Technology*, 7(3), 14-26. doi:10.4018/IJAVET.2016070102
- Bohme, R., Christin, N., Edelman, B., & Moore, T. (2015, Spring). Bitcoin: Economics, Technology, and Governance. *Journal of Economic Perspectives*, 29(2), 213-238. doi:10.1257/jep.29.2.213
- Bohme, R., Christin, W., Edelman, B., & Moore, T. (2015, Spring). Bitcoin: Economics, Technology, & Governance. *Journal of Economic Perspectives*, 29(2), 213-238. doi:10.1257/jep.29.2.213

- Bonneau, J., Miller, A., Clark, J., Narayanan, A., Kroll, J., & Felten, E. (2015, July). SoK: Research Perspectives & Challenges for Bitcoin & Cryptocurrencies. *2015 IEEE Symposium on Security & Privacy*, 104-121. doi:10.1109/SP.2015.14
- Bonsu Osei-Assibey, M., Muyun, Z., Dui, L., & Asare, E. (2018, October). Corporate Fraud: Causes, Effects & Deterrence on Financial Institutions in Ghana. *European Scientific Journal*, 14(28), 315-335. doi:10.19044/esj.2018.v14n28p315
- Brazel, J., Carpenter, T., & Jenkins, J. (2010). Auditors' use of Brainstorming in the Consideration of Fraud: Reports from the Field. *The Accounting Review*, 85(4), 1273-1301. doi:10.2139/ssrn.965453
- Brown, S. (2016, July). Cryptocurrency & Criminality: The Bitcoin Opportunity. *The Polico Journal: Theory, Practice & Principles*, 89(4), 327-339. doi:10.1177/0032258x16658927
- Bruno, D., & Gift, L. (2019, March). How Businesses Can Deal with Cryptocurrency Risks. *Intellectual Property & Technology Law Journal*, 31(3), 20-22. Retrieved from <http://www.mondaq.com>
- Bryans, D. (2014, Winter). Bitcoin & Money Laundering: Mining for an Effective Solution. *Indiana Law Journal*, 89(1), 441-472. Retrieved from <http://www.proxy1.ncu.edu/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=93745150&site=eds=live>
- Buchholz, A. (2012). SAS99: Deconstructing the Fraud Triangle & some Classroom Suggestions. *Journal of Leadership, Accountability & Ethics*, 9(2), 109-118. Retrieved from <http://www.ssrn.com/abstract=2034586>

- Bucko, J., Vejacka, M., & Palova, D. (2015, September). Security & Trust in Cryptocurrencies. *CEFE 2015 Central European Conference in Finance and Economics*, 1-11. Retrieved from <http://www.researchgate.net>
- Bujaki, M., Lento, C., & Sayed, N. (2019). Utilizing Professional Accounting Concepts to Understand & Respond to Academic Dishonesty in Accounting Programs. *Journal of Accounting Education*, 47(C), 28-47. doi:10.1016/j.jaccedu.2019.01.001
- Burke, D., & Sanney, K. (2018, February). Applying the Fraud Triangle to Higher Education: Ethical Implications. *Journal of Legal Studies Education*, 35(1), 5-43. doi:10.1111/jlse.12068
- Castillo-Montoya, M. (2016). Preparing for Interview Research: The Interview Protocol Refinement Framework. *The Qualitative Report*, 21(5), 811-831. Retrieved from <http://www.nsuworks.nova.edu/tqr/vol21/iss5/2>
- Chaffee, E. (2019). The Heavy Burden of Thin Regulation: Lessons Learned from the SEC's Regulation of Cryptocurrencies. *Mercer Law Review*, 70(3), 615-639. Retrieved from <http://www.hdl.handle.net/10898/10130>
- Charfeddine, L., Benlagha, N., & Maouchi, Y. (2019, July). Investing the dynamic relationship between cryptocurrencies and conventional assets: Implications for financial investors. *Economic Modeling*, 85, 1-20. doi:10.1016/j.econmod.2019.05.016
- Chiu, J., & Koepl, T. (2017, September). The Economics of Cryptocurrencies - Bitcoin and Beyond. Retrieved from <http://www.ssrn.com/abstract=3048124>
- Chodorow, A. (2017, August). Rethinking Basis in the Age of Virtual Currencies. *Virginia Tax Review*, 36, 371. Retrieved from <http://www.ssrn.com/abstract/=2851942>

- Chong, C., & Yeo, K. (2015). An Overview of Grounded Theory Design in Educational Research. *Asian Social Science*, 11(12), 258-268. doi:10.5539/aaa.v11n12p258
- Choy, L. (2014, April). The Strengths and Weaknesses of Research Methodology: Comparison and Complimentary between Qualitative and Quantitative Approaches. *IOSR Journal of Humanities and Social Science*, 19(4), 99-104. Retrieved from <http://www.iosrjournals.org>
- Conti, M., Lal, C., Kumar, E., & Ruj, S. (2017, June). A Survey on Security & Privacy Issues of Bitcoin. *IEEE Communications Survey Tutorials*, 20(4), 3416-3452. doi:10.1109/comst.2018.2842460
- Conway, P., & Gawronski, B. (2013). Deontological & Utilitarian Inclinations in Moral Decision Making: A Process Dissociation Approach. *Journal of Personality & Social Psychology*, 104(2), 216-235. doi:10.1037/a0031021
- Coyne, J., & McMickle, P. (2017, Fall). Can Blockchains Serve an Accounting Purpose. *Journal of Emerging Technologies in Accounting*, 14(2), 101-111. doi:10.2308/jeta-51910
- Crowe, S., Cresswell, K., Robertson, A., Huby, G., Avery, A., & Sheikh, A. (2011). The Case Study Approach. *BMC Medical Research Methodology*, 11(100), 1-9. Retrieved from <http://www.biomedcentral.com/1471-2288/11/100>
- Cressey, D. (1973). *Other people's money; a study in the social psychology of embezzlement*. Montclair, NJ: Patterson Smith.
- Daniel, E. (2016). The Usefulness of Qualitative & Quantitative Approaches & Methods in Researching Problem-Solving Ability in Science Education Curriculum. *Journal of Education and Practice*, 7(15). Retrieved from <http://www.iiste.org>

- Davis, J. (2011, October). The Crypto-Currency. Retrieved from
<http://www.newyorker.com/magazine/2011/10/10/the-crypto-currency>
- Dellaportas, S. (2013, March). Conversations with inmate accountants: Motivation, opportunity and the fraud triangle. *Accounting Forum*, 37(1), 29-39. doi:10.1016/j.accfor.2012.09.003
- Deloitte. (2019). Classification of Cryptocurrency Holdings. Retrieved from
<http://www2.deloitte.com/us/en/pages/audit/articles/fra-classification-of-cryptocurrency-holdings.html>
- DeVries, P. (2016, September). An Analysis of Cryptocurrency, Bitcoin & the Future. *International Journal of Business Management & Commerce*, 1(2), 1-9. Retrieved from
http://www.researchgate.net/publication/316656878_An_Analysis_of_Cryptocurrency_Bitcoin_and_the_Future
- Dictionary.com, LLC. (2019). Tax Evasion. Retrieved from
<http://www.dictionary.com/taxevasion>
- Doran, M. (2018, December). The Impact of Cryptocurrency on Modern-Day Cybercrime. *ISSA Journal*, 16(12), 23-29. Retrieved from
<http://www.proxy1.ncu.edu/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=tsh&AN=133502575&site=eds-live>
- Dorminey, J., Fleming, A., Kranacher, M., & Riley, R. (2010, July). Beyond the Fraud Triangle. *The CPA Journal*, 80(7), 17-23. doi:10.2308/iace-50131
- Dorminey, J., Fleming, A., Kranacher, M., & Riley, R. (2012, May). The Evolution of Fraud Theory. *Issues in Accounting Education*, 27(2), 555-579. doi:10.2308/iace-50131
- Dyntu, V., & Dykyi, O. (2019). Cryptocurrency In the System of Money Laundering. *Baltic Journal of Economic Studies*, 4(5), 75-81. doi:10.30525/2256-0742/2018-4-5-75-81

- Eddles-Hirsh, K. (2015, June). Phenomenology & Educational Research. *International Journal of Advanced Research*, 3(8), 251/260. Retrieved from <http://www.journalijar.com/article/5631/phenomenology-and-educational-research>
- Efrima, A. (2019, May). A Bright Future for Cryptocurrency Accounting. Retrieved from <http://www.forbes.com/sites/forbestechcouncil/2019/05/14/a-bright-future-for-cryptocurrency-accounting/#6840e5ce4afa>
- Eide, P., & Allen, C. (2005, June). Recruiting Transcultural Qualitative Research Participants: A Conceptual Model. *International Journal of Qualitative Methods*, 4(2), 44-56.
doi:10.1177/160940690500400204
- Elliott, V. (2018, November). Thinking About the Coding Process in Qualitative Data Analysis. *The Qualitative Report*, 23(11), 2850-2861. Retrieved from <http://www.nsuworks.nova.edu/tqr/vol23/iss11/14>
- Elo, S., Kaariainen, M., Kanste, O., Polkki, T., Utriainen, K., & Kyngas, H. (2014). Qualitative Content Analysis: A Focus on Trustworthiness. *Sage Journals*, 4(1), 3-10.
doi:10.1177/2158244014522633
- Ernst & Young. (2018, October). A Holder's Accounting for Cryptocurrencies. Retrieved from <http://www.ey.com/us/accountinglink>
- Ernst & Young. (2019, August). Holding of Cryptocurrencies. Retrieved from <http://www.ey.com>
- Etikan, I., Musa, S., & Alkassim, R. (2016). Comparison of Convenience Sampling and Purposive Sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), 1-4.
doi:10.11648/j.ajtas.20160501.11

- Free, C. (2015, January). Looking Through the Fraud Triangle: A Review and Call for New Directions. *Meditari Accountancy Research*, 23(2), 175-196. doi:10.1108/MEDAR-02-2015-0009
- Filippi, P. (2014, May). Bitcoin: A Regulatory Nightmare to a Libertarian Dream. *Internet Policy Review*, 3(2), 1-12. Retrieved from <http://www.ssrn.com/abstract=2468695>
- Firth, R. (2019, April). Cryptocurrencies: Issues and Best Practices. *Journal of Financial Planning*, 32(4), 28-29. Retrieved from <http://www.FPAJournal.org>
- Foley, G., & Timonen, V. (2015). Using Ground Theory Method to Capture & Analyze Health Care Experiences. *Health Services Research*, 50(4), 1195-1210. doi:10.1111/1475-6773.12275
- Foley, S., Karlsen, J., & Putnins, T. (2019, May). Sex, Drugs, & Bitcoin: How Much Illegal Activity is Financed through Cryptocurrencies? *The Review of Financial Studies*, 32(5), 1798-1853. doi:10.1093/rfs/hhz015
- Gardiner, P. (2003, October). The Virtue Ethics Approach to Moral Dilemmas in Medicine. *Journal of Medical Ethics*, 29(5), 297-302. doi:10.1136/jme.29.5.297
- Garner, R. (2017, August). Bovine TB, Badger Culling & Applied Ethics: Utilitarianism, Animal Welfare and Rights. *Journal of Agricultural & Environmental Ethics*, 30(4), 579-584. doi:10.1007/s10806-017-9677-4
- Gibbs, G. (2007). *Thematic Coding & Categorizing*. London: SAGE Publications.
- Gikay, A. (2018). Regulating Decentralized Cryptocurrencies Under Payment Services Law: Lesson from European Union Law. *Journal of Law, Technology, & the Internet*, 9, 1-35. Retrieved from <http://www.scholarlycommons.law.case.edu>

- Glaser, J., & Laudel, G. (2013, May). Life with & without Coding: Two Methods for Early-Stage Data Analysis in Qualitative Research Aiming at Casual Explanations. *Forum Qualitative Sozialforschung*, 14(2), 1-38. doi:10.17169/fqs-14.2.1886
- Grady, C. (2015, November). Institutional Review Boards Purposes and Challenges. *Chest*, 148(5), 1148-1155. doi:10.1378/chest.15-0706
- Guadamuz, A., & Marsden, C. (2015, December). Blockchains & Bitcoin: Regulatory Responses to Cryptocurrencies. *Sustainable Technology eJournal*, 20(12), 1-46. doi:10.5210/fm.v20i12.6198
- Haffke, L., Fromberger, M., & Zimmermann, P. (2019, April). Cryptocurrencies & Anti-Money Laundering: The Shortcomings of the Fifth AML Directive (EU) & How to Address Them. *Journal of Banking Regulation*, 21, 125-138. doi:10.1057/s41261-019-00101-4
- Hammarberg, K., Kirkman, M., & deLacey, S. (2016, March). Qualitative Research Methods: When to Use Them & How to Judge Them. *Human Reproduction*, 31(3), 498-501. doi:10.1093/humrep/dev334
- Hampton, S. (2016, Winter). Undermining Bitcoin. *Washington Journal of Law, Technology, and Arts*, 11(4), 331-354. Retrieved from <http://www.digital.lib.washington.edu/dspace-law/handle/1773.1/1559>
- Harrison, H., Birks, M., Franklin, R., & Mills, J. (2017, January). Case Study Research: Foundations and Methodological Orientations. *Forum Qualitative Sozialforschung/Forum: Qualitative Social Research*, 18(1), 1-13. doi:10.17169/fqs-18.1.2655

- Harrison, A., Summers, J., & Mennecke, B. (2018, November). The Effects of the Dark Triad of Unethical Behavior. *Journal of Business Ethics, 153*, 53-177. doi:10.1007/s10051-016-3368-3
- Harvey, C. (2015, March). Do Cryptocurrencies Such as Bitcoin Have a Future? Retrieved from <http://www.wsj.com>
- Heflin, M., DeMeo, S., Nagler, A., & Hochenberry, M. (2016, April). Health Professions Education Research & the Institutional Review Board. *Nurse Educator, 41*(2), 55-59. doi:10.1097/NNE.0000000000000230
- Herrera-Joancomarti, J. (2014, September). Research and Challenges on Bitcoin Anonymity. *Data Privacy Management, Autonomous Spontaneous Security & Security Assurance, 8872*, 1-15. doi:10.1007/978-3-319-17016-9_1
- Hughes, S., & Middlebrook, S. (2015). Advancing a Framework for Regulating Cryptocurrency Payments Intermediaries. *Yale Journal on Regulation, 32*(2), 495-498. Retrieved from <http://www.digitalcommons.law.yale.edu/yjreg/vol32/iss2/8>
- Hussain, H. (2017, December). Reinventing Regulation: The Curious Case of Taxation of Cryptocurrencies in India. *NUJS Law Review, 10*(4), 1-26. Retrieved from <http://www.ssrn.com/abstract=3143091>
- IFRS. (2019, June). Holdings of Cryptocurrencies. Retrieved from <http://ifrs.org/news-and-events/updates/ifric-updates/june-2019/#8>
- Internal Revenue Service. (2014, April). Internal Revenue Bulletin: 2014-16. Retrieved from http://www.irs.gov/irb/2014-16_IRB#NOT-2014-21
- Internal Revenue Service. (2019, December). Frequently Asked Questions on Virtual Currency Transactions. Retrieved from <http://www.irs.gov>

Investopedia. (2018, November). Generally Accepted Accounting Principles-GAAP. Retrieved from <http://www.investopedia.com/terms/g/gaap.asp>

Jaijairam, P. (2017, November). Ethics in Accounting. *Journal of Finance & Accountancy*, 1-13. Retrieved from <http://www.researchgate.net/publication/321167489>

Jamshed, S. (2014, November). Qualitative Research Method-Interviewing and Observation. *Journal of Basic and Clinical Pharmacy*, 5(4), 87-88. doi:10.4103/0976-0105.141942

Jones, J., & Smith, J. (2017). Ethnography: Challenges & Opportunities. *EMJ Journals*, 20(4), 98-100. doi:10.1136/eb-2017-102786

Kaplanov, N. (2012, March). Nerdy Money: Bitcoin, the Private Digital Currency & the Case Against its Regulation. *Loyola Consumer Law Review*, 25(1), 1-46. doi:10.2139/ssrn.2115203

Kaptein, M. (2008). Developing a Measure of Unethical Behavior in the Workplace: A Stakeholder Perspective. *Journal of Management*, 34(5), 978-1008. doi:10.1177/0149206308318614

Kassem, R., & Higson, A. (2012). The New Fraud Triangle. *Journal of Emerging Trends in Economics & Model Management Services*, 3(3), 191-195. Retrieved from <http://www.jetems.scholarlinkresearch.org>

Kemball-Cook, A., & Munier, L. (2019, March). Blockchain & the General Data Protection Regulation: Reconciling, Protection & Innovation. *Journal of Securities Operations & Custody*, 11(2), 145-157. Retrieved from <http://www.henrystewartpublications.com>

Kethineni, S., & Cao, Y. (2019, February). The Rise in Popularity of Cryptocurrency & Associated Criminal Activity. *International Criminal Justice Review*, 30(3), 325-344. doi:10.1177/1057567719827051

- Khan, Z. (2016). A Quest for Utilitarian Approach in Research. *Indian Journal of Anaesthesia*, 60(1), 6-7. doi:10.4103/0019-5049.174805
- Kiviat, T. (2015, December). Beyond Bitcoin: Issues in Regulating Blockchain Transactions. *Duke Law Journal*, 65(3), 569-608. Retrieved from <http://www.scholarship.law.duke.edu>
- Klieman, J. (2013). Beyond the Silk Road: Unregulated Decentralized Virtual Currencies Continue to Endanger US National Security & Welfare. *National Security Law Brief*, 4(1), 59-79. Retrieved from <http://www.digitalcommons.wcl.american.edu>
- Korstjens, I., & Moser, A. (2018, December). Series: Practical Guidance to Qualitative Research. Part 4: Trustworthiness & Publishing. *European Journal of General Practice*, 24(1), 120-124. doi:10.1080/13814788.2017.1375092
- Kramer, B. (2015). Trust, but Verify: Fraud in Small Businesses. *Journal of Small Business & Enterprise Development*, 22(1), 4-20. doi:10.1108/JSBED-08-2012-0097
- Kuper, A., Levinson, W., & Lingard, L. (2008). Critically Appraising Qualitative Research. *BMJ*, 337, 687-692. doi:10.1136/bmj.a1035
- Lambert, E. (2015). The Internal Revenue Service and Bitcoin: A Taxing Relationship. *Virginia Tax Review*, 35(1), 88-115. Retrieved from <http://www.jmls.uic.edu>
- Lansky, J. (2018). Possible State Approaches to Cryptocurrencies. *Journal of Systems Integration*, 9(1), 19-31. doi:10.20470/jsi.v9i1.335
- Lerer, M. (2019, January). Taxation of Cryptocurrency. Retrieved from <http://www.cpajournal.com/2019/01/24/the-taxation-of-cryptocurrency>
- Liedel, D. (2018, January). The Taxation of Bitcoin: How the IRS Views Cryptocurrencies. *Drake Law Review*, 66(1), 107-145. Retrieved from <http://www.lawreviewdrake.files.wordpress.com>

- Limon, A. (2018, December). The Wild, Wild West: Understanding Cryptocurrencies & their Implications on Financial Planning. *Journal of Financial Planning*, 40-44. Retrieved from <http://www.FPAjournal.org>
- Lincoln, Y., & Guba, E. (1985). *Naturalistic Inquiry*. Newburg Park, CA: SAGE Publications, Inc.
- Little, J., & Handel, S. (2016, February). Student Cheating & the Fraud Triangle. *Business Education Forum*, 37-44. Retrieved from <http://www.sheephancpa.com/Bulletin/news/wp-content/uploads/2016/03/student-cheating-and-the-fraud-triangle.pdf>
- Lockaby, C. (2018). The SEC Rides into town: Defining an ICO Securities Safe Harbor in the Cryptocurrency "Wild West". *Georgia Law Review*, 53(1), 335-366. Retrieved from <http://www.georgialawreview.org>
- Lou, Y., & Wang, M. (2009, February). Fraud Risk Factor of the Fraud Triangle Assessing the Likelihood of Fraudulent Financial Reporting. *Journal of Business & Economics Research*, 7(2), 61-78. doi:10.19030/jber.v7i2.2262
- Lou, S., & Wang, C. (2014, September). Bitcoin as Money? Retrieved from <http://www.bostonfed.org/publications/current-policy-perspectives/2014/bitcoin-as-money.aspx>
- Louw, Q., Grimmer-Somers, K., & Bialocerkowski, A. (2011). Research Integrity & Misconduct: First-Hand Experiences of Plagiarism & Data Manufacture. *Physiotherapy Research International*, 16(2), 63-68. doi:10.1002/pri.511

- Lokanan, M., & Sharma, S. (2018). A Fraud Triangle Analysis of the Libor Fraud. *Journal of Forensic & Investigative Accounting*, 10(2), 187-212. Retrieved from <http://web.nacva.com/JFIA/Issues/JFIA-2018-No2-3.pdf>
- Mabunda, S. (2018). Cryptocurrency: The New Face of Cyber Money Laundering. 2018 *International Conference on Advances in Big Data*. doi:10.1109/ICABCD.2018.8465467
- Machado, M., & Gartner, I. (2018). The Cressey Hypothesis (1953) an Investigation into the Occurrence of Corporate Fraud: An Empirical Analysis Conducted in Brazilian Banking Institutions. *Revista Contabilidade & Financas*, 29(76), 60-81. doi:10.1590/1808-057x201803270
- Mackevicius, J., & Giriunas, L. (2013). Transformational Research of the Fraud Triangle. *Journal of Economics and Management Research*, 92(4), 150-163. doi:10.15388/Ekon.2013.0.2336
- Malgwi, C., & Rakovski, C. (2009). Behavioral Implications of Evaluating Determinants of Academic Fraud Risk Factors. *Journal of Forensic & Investigative Accounting*, 1(2), 1-37. Retrieved from http://www.researchgate.net/profile/Carter_Rakovski/publication/255660647_Behavioral_Implications_of_Evaluating_Determinants_of_Academic_Fraud_Risk_Factors/links/00b495359a6fdb87a000000/Behaviorial-Implications-of-Evaluating-Determinants-of-Academic-Fraud-Risk-Factors.pdf
- Malherbe, L., Montalban, M., Bedu, N., & Granier, C. (2019). Cryptocurrencies & Blockchain: Opportunities & Limits of a New Monetary Regime. *International Journal of Political Economy*, 48(2), 127-152. doi:10.1080/08911916.2019.1624320

- Marshall, B., Cardon, P., Poddar, A., & Fontenot, R. (2013, Fall). Does Sample Size Matter in Qualitative Research? A review of Qualitative Interviews in IS Research. *Journal of Computer Information Systems*, 54(1), 11-22. doi:10.1080/08874417.2013.11645667
- Mason, M. (2010, September). Sample Size and Saturation in PhD Studies Using Qualitative Interviews. *Forum Qualitative Sozialforschung/Forum: Qualitative Social Research*, 11(3), 1-19. Retrieved from <http://www.qualitative-research.net>
- McLaren, J. (2008). The Distinction Between Tax Avoidance & Tax Evasion Has Become Blurred in Australia: Why Has it Happened? *Journal of the Australasian Tax Teachers Association*, 3(2), 141-163. Retrieved from <http://www.ro.uow.edu.au/buspapers/51>
- Mele, D., Rosanas, J., & Fontrodona, J. (2017, February). Ethics in Finance & Accounting: Editorial Information. *Journal of Business Ethics*, 140, 609-613. doi:10.1007/s10551-016-3328-y
- Middlebrook, S., & Hughes, S. (2014). Regulating Cryptocurrencies in the United States: Current Issues and Future Directions. *William Mitchell Law Review*, 40(2), 813-816. Retrieved from <http://www.open.mitchellhamline.edu/wmlr/vol40/iss2/11>
- Mills, A. (2018, Spring). Taxing Cryptocurrencies: The Applicability of Like-Kind Exchange Tax Deferral. *Review of Banking & Financial Law*, 37(2), 620-630. Retrieved from http://www.bu.edu/rbfl/files/2018/12/Mills_DA.pdf
- Miraz, M., & Ali, M. (2018, January). Applications of Blockchain Technology Beyond Cryptocurrency. *Annals of Emerging Technologies in Computing*, 2(1), 16-22. doi:10.33166/AETIC.2018.01.001
- Mirea, M., Wang, V., & Jung, J. (2019, June). The Not so Dark Side of the Darkest: A Qualitative Study. *Security Journal*, 32(2), 102-118. doi:10.1057/s41284-018-0150-5

- Misselbrook, D. (2013, April). Duty, Kant, & Deontology. *British Journal of General Practice*, 63(609), 211. doi:10.3399/bjgp13x665422
- Morisse, M. (2015). Cryptocurrencies and Bitcoin: Charting the Research Landscape. *Twenty-first Americas Conference on Information Systems*, 1-16. Retrieved from <http://www.pdf.semanticscholar.org/8e4f/77ad35606c6f5d2689/a41e9d992fd8e0f60.pdf>
- Morris, M., & Morris, J. (2016, June). The Importance of Virtue Ethics in the IRB. *Research Ethics*, 12(4), 201-216. doi:10.1177/1747016116656023
- Morse, J., Barnett, M., Mayan, M., Olsen, K., & Spiers, J. (2002, June). Verification Strategies for Establishing Reliability & Validity in Qualitative Research. *International Journal of Qualitative Methods*, 1(2), 13-22. doi:10.1177/1609.40690200100202
- Mpho, B. (2017, April). Whistle Blowing: What Do Contemporary Ethical Theories Say? *Studies in Business & Economics*, 12(1), 19-28. doi:10.1515/sbe-2017-0002
- Murphy, P., & Free, C. (2016, February). Broadening the fraud triangle: Instrumental climate and fraud. *Behavioral Research in Accounting*, 28(1), 41-56. doi:10.2308/bria-51083
- Najafi, T., Roudsari, R., Ebrahimipour, H., & Bahri, N. (2016). Observation in Grounded Theory & Ethnography: What are the Differences? *Iranian Red Crescent Medical Journal*, 18(11), 1-2. doi:10.5812/ircmj.40786
- Nakamoto, S. (2009, March). Bitcoin: A Peer-to-Peer Electronic Cash System. Retrieved from http://www.researchgate.net/publication/288640975_Bitcoin_A_Peer-to-Peer_Electronic_Cash_System
- Newington, L., & Metcalfe, A. (2014). Factors Influencing Recruitment to Research: Qualitative Study of the Experiences & Perceptions of Research Teams. *BMC Medical Research Methodology*, 14(10), 1-11. doi:10.1186/1471-2288-14-10

- Noked, N. (2018). Tax Evasion and Incomplete Tax Transparency. *Laws*, 7(31), 1-15.
doi:10.3390/laws7030031
- Norlyk, A., & Harder, I. (2010). What Makes a Phenomenological Study Phenomenological? An Analysis of Peer-Reviewed Empirical Nursing Studies. *Qualitative Health Research*, 20(3), 420-431. doi:10.1177/1049732309357435
- Oltmann, S. (2016, May). Qualitative Interviews: A Methodological Discussion of the Interviewer & Respondent. *Forum Qualitative Sozialforschung/Forum:Qualitative Social Research*, 17(2), 15. Retrieved from <http://www.nbn-resolving.de/urn:nbn:de:0014-fgs1602156>
- Padilla-Diaz, M. (2015, May). Phenomenology in Educational Qualitative Research: Philosophy as Science or Philosophical Science? *International Journal of Educational Excellence*, 1(2), 101-110. Retrieved from <http://pdfs.semanticscholar.org/1c751935d3682047beb9723cc467a136b8456e794.pdf>
- Palinkas, L., Horwitz, S., Green, C., Wisdom, J., Duan, N., & Hoagwood, K. (2015, September). Purposeful Sampling for Qualitative Data Collection and Analysis in Mixed Method Implementation Research. *Adm Policy Ment Health*, 42(5), 533-544. doi:10.1007/s10488-013-0528-y
- Parashar, N., & Rasiwala, F. (2019, January). Bitcoin - Asset or Currency? User's Perspective About Cryptocurrencies. *IUP Journal of Management Research*, 18(1), 102-122.
Retrieved from <http://www.questia.com>
- Parker, G. (2016). The Framework for Navigating Institutional Review Board (IRB) Oversight in the Complicated Zone of Research. *Cureus*, 8(10), 1-9. doi:10.7759/cureus.844

- Pezalla, A., Pettigrew, J., & Miller-Day, M. (2012, April). Researching the Researcher-as-Instrument: An Exercise in Interviewer Self-Reflexivity. *Qual Res*, 12(2), 165-185. doi:10.1177/1487941111422107
- Playford, R., Roberts, T., & Playford, D. (2015). Deontological & Utilitarian Ethics: A Brief Introduction in the Context of Disorders of Consciousness. *Journal Disability & Rehabilitation*, 37(21), 2006-2011. doi:10.3109/09638288.2014.989337
- Polit, D., & Beck, C. (2014). *Essentials of Nursing Research: Appraising Evidence for Nursing Practice* (8th ed.). Philadelphia, PA: Lippincott, Williams & Wilkins.
- Prewett, K., Dorsey, R., & Kumar, G. (2019, July). A Primer on Taxation of Investment in Cryptocurrencies. *Journal of Taxation of Investments*, 36(4), 3-16. Retrieved from <http://www.civicrosearchinstitute.com>
- PricewaterhouseCoopers. (2018, March). Cryptocurrencies: Time to Consider Plan B. Retrieved from <http://www.pwc.com/us/en/cfodirect/publications/point-of-view/cryptocurrency-bitcoin-accounting.html>
- Price, J., & Murnan, J. (2004). Research Limitations & the Necessity of Reporting Them. *American Journal of Health Education*, 35, 66-67. doi:10.1080/19325037.2004.10603611
- Prochazka, D. (2018, January). Accounting for Bitcoin & Other Cryptocurrencies Under IFRS: A Comparison & Assessment of Competing Models. *The International Journal of Digital Accounting*, 18, 161-188. doi:10.4192/1577-8517-v18-7
- Purshouse, C. (2018, March). Utilitarianism as Tort Theory: Countering the Caricature. *Legal Studies*, 38(1), 24-41. doi:10.1017/1st.2017.6

- Queiros, A., Faria, D., & Almeida, F. (2017). Strengths and Limitations of Qualitative and Quantitative Research Methods. *European Journal of Education Studies*, 3(9), 369-386. doi:10.5281/zenodo.887089
- Rahman, M. (2017). The Advantages and Disadvantages of Using Qualitative and Quantitative Approaches and Methods in Language "Testing and Assessment" Research: A Literature Review. *Journal of Education and Learning*, 6(1), 102-112. doi:10.5539/jel.v6n1p102
- Raiborn, C., & Sivitanides, M. (2015). Accounting Issues Related to Bitcoins. *The Journal of Corporate Accounting & Finance*, 25-34. doi:10.1002/jcaf.22016
- Ramamoorti, S. (2008). The Psychology & Sociology of fraud: Integrating the Behavioral Sciences Component into Fraud and Forensic Accounting Curricula. *Issues in Accounting Education*, 23(4), 521-533. doi:10.2308/iace.2008.23.4.521
- Ramamoorti, S., & Epstein, B. (2016, November). When Reckless Executives Become Dangerous Fraudsters. *CPA Journal*, 86(1), 6-10. Retrieved from <http://www.cpajournal.com>
- Ramos, M. (2003). Auditors Responsibility for Fraud Detection. *Journal of Accountancy*, 195(1), 28-36. Retrieved from <http://www.journalofaccountancy.com>
- Raymaekers, W. (2015, March). Cryptocurrency Bitcoin: Disruption, Challenges & Opportunities. *Journal of Payments Strategy & Systems*, 9(1), 30-40. Retrieved from <http://www.semanticscholar.org>
- Reeves, S., Peller, J., Goldman, J., & Kitto, S. (2013). Ethnography in Qualitative Education Research: AMEE Guide No. 80. *Med Teach*, 35(8), 1365-1379. doi:10.3109/0142159x.2013.804977

- Reid, A., Brown, J., Smith, J., Cope, A., & Jamieson, S. (2018, April). Ethical Dilemmas & Reflexivity in Qualitative Research. *Perspect Med Educ*, 7(2), 69-75.
doi:10.1007/s40037-018-0412-2
- Retief, E. (2018). Accounting for Cryptocurrency. Retrieved from http://www.saipa.com.za/wp-content/uploads/2018/05/Professional-Accountant_32_Low.pdf
- Reynolds, P., & Irwin, A. (2017). Tracking Digital Footprints: Anonymity with the Bitcoin System. *Journal of Money Laundering Control*, 20(2), 172-189. doi:10.1108/JMLC-07-2016-0027
- Reynolds, P., & Irwin, S. (2017). Tracking digital footprints: anonymity within the bitcoin system. *Journal of Money Laundering Control*, 20(2), 172-189. doi:10.1108/JMLC-07-2016-0027
- Riley, J. (2010, February). Mill's Extraordinary Utilitarian Moral Theory. *Politics, Philosophy, & Economics*, 9(1), 67-116. doi:10.1177/1470594x09351952
- Robertson, M., & Walter, G. (2007, April). A Critical Reflection on Utilitarianism as the Basis for Psychiatric Ethics. *Journal of Ethics in Mental Health*, 2(1), 1-4. Retrieved from http://www.jemh.ca/issues/v2n1/documents/JEMH_V2N1_Article1_UtilitarianismAsAnEthicalTheory.pdf
- Rodgers, W., Soderbon, A., & Guiral, A. (2015, November). Corporate Social Responsibility Enhanced Control Systems Reducing the Likelihood of Fraud. *Journal of Business Ethics*, 131(4), 871-882. doi:10.1007/si0551-014-2152-5
- Rodon, J., & Sese, F. (2008). Towards a Framework for the Transferability of Results in IS Qualitative Research. *Sprouts: Working Papers on Information Systems*, 8(17), 1-17. Retrieved from <http://www.sprouts.aisnet.org/8-17>

- Ron, D., & Shamir, A. (2013). Quantitative Analysis of the Full Bitcoin Transaction Graph. *Financial Cryptography & Data Security*, 7859, 6-24. doi:10.1007/978-3-642-39884-1_2
- Rose, C. (2015, August). The Evolution of Digital Currencies: Bitcoin, A Cryptocurrency Causing a Monetary Revolution. *International Business & Economics Research Journal*, 14(4), 617-622. doi:10.19030/iber.v14i4.9353
- Rowley, J. (2002). Using Case Studies in Research. *Management Research News*, 25(1), 16-27. doi:1.1108/01409170210782990
- Ruankaew, T. (2016). Beyond the Fraud Diamond. *International Journal of Business Management and Economic Research*, 7(1), 474-476. Retrieved from <http://www.ijbmer.com>
- Rueckert, C. (2019, June). Cryptocurrencies & Fundamental Rights. *Journal of Cybersecurity*, 5(1), 1-12. doi:10.1093/cybsec/tyz004
- Ryznar, M. (2019, January). The Future of Bitcoin Futures. *Houston Law Review*, 56(3), 539-563. Retrieved from <http://www.houstonlawreview.org>
- Sabli, N., Rahim, N., Dangi, M., Hamid, N., Adnan, M., Wahab, R., & Haron, N. (2016, May). Erosion of Academic Integrity in Higher Education System: Symbolization of Dishonesty. *Malaysian Journal of Education*, 41(1), 53-64. Retrieved from <http://www.journalarticle.ukm.my>
- Sakellariouv, A. (2015). Virtue Ethics & its Potential as the Leading Moral Theory. *Discussions*, 12(1), 1-2. Retrieved from <http://www.inquiriesjournal.com/a?id=1385>
- Saldana, J. (2016). *An Introduction to Codes & Coding* (3rd ed.). London: Sage.
- Salviotti, G., DeRossi, L., & Abbatemarco, N. (2018). A structured Framework to Assess the Business Application Landscape of Blockchain Technologies. *Conference: Hawaii*

- International Conferences on System Sciences*, 3467-3476.
doi:10.24251/H1CSS.2018.440
- Sanchez, E. (2017, April). Crypto-Currencies: The 21st Century's Money Laundering & Tax Havens. *Journal of Law & Public Policy*, 28(1), 167-191. Retrieved from <http://www.ufjlpp.org>
- Sanjari, M., Fomani, F., Bahramnezhad, F., & Shoghi, M. (2014, August). Ethical Challenges of Researchers in Qualitative Studies: The Necessity to Develop & Specific Guideline. *Journal of Medical Ethics & History of Medicine*, 7(14), 1-6. Retrieved from <http://www.researchgate.net/publication/269712541>
- Sargeant, J. (2012, March). Qualitative Research Part II: Participants, Analysis, and Quality Assurance. *Journal of Graduate Medical Education*, 4(1), 1-3. doi:10.4300/JGME-D-11-00307.1
- Saunders, B., Sim, J., Kingstone, T., Baker, S., Waterfield, J., Bartlam, B., Burroughs, H., & Jinks, C. (2018). Saturation in Qualitative Research: Exploring its Conceptualization & Operationalization. *Quality & Quantity*, 52(4), 1893-1907. doi:10.1007/s11135-017-0574-8
- Schnatterly, K., Tuschke, A., & Gangloff, K. (2018, April). CEO Wrongdoing: A Review of Pressure, Opportunity, and Rationalization. *Journal of Management*, 44(6), 2405-2432. doi:10.1177/0149206318771177
- Schonfelder, W. (2011, January). CAQDAS & Qualitative Syllogism Logic - NVivo8 and MAXQDA 10 Compared. *Forum Qualitative Sozialforschung*, 12(1), 21. doi:10.17169/gqs-12.1.1514

- Schuchter, A., & Levi, M. (2016). The Fraud Triangle Revisited. *Security Journal*, 29, 107-121.
doi:10.1057/sj.2013.1
- Seele, P. (2018, July). Let Us Not Forget: Crypto Means Secret. Cryptocurrencies as Enabler of Unethical & Illegal Business and the Question of Regulation. *Humanistic Management Journal*, 3(1), 133-139. doi:10.1007/s41463-018-0038-x
- Shakouri, N. (2014, June). Qualitative Research: Incredulity toward Metanarrativeness. *Journal of Education and Human Development*, 3(2), 671-380. Retrieved from http://www.jehdnet.com/journals/jehd/Vol_3_No_2_June_2014/40.pdf
- Sidhu, K., Jones, R., & Stevenson, F. (2017, May). Publishing Qualitative Research in Medical Journals. *British Journal of General Practice*, 67(658), 229-230.
doi:10.3399/bjgp17x69081
- Singh, S., & Estefan, A. (2018, October). Selecting a Ground Theory Approach for Nursing Research. *Global Qualitative Nursing Research*, 5. doi:10.1177/23333393618799571
- Smaili, N., & Arroyo, P. (2019, June). Categorization of Whistleblowers Using the Whistleblowing Triangle. *Journal of Business Ethics*, 157, 95-117. doi:10.1007/s10051-017-3663-7
- Smith, S. (2018). How Cryptocurrencies Are Changing What CPAs Need to Know About Fraud Prevention. *Theoretical Economics Letters*, 8, 3252-3266. doi:10.4236/tel.2018.814201
- Slattery, T. (2014). Taking a Bit out of Crime: Bitcoin and Cross-Border Tax Evasion. *Brooklyn Journal of International Law*, 39(2), 829-873. Retrieved from <http://www.brooklynworks.brooklaw.edu/bjil/vol39/iss2/7>

- Soltani, B. (2014, March). The Anatomy of Corporate Fraud: A Comparative Analysis of High Profile American & European Corporate Scandals. *Journal of Business Ethics*, 120, 251-274. doi:10.1007/s10551-013-1660-z
- Sonnerfeldt, A., & Loft, A. (2018, January). The Changing Face of Ethics - Developing a Code of Ethics for Professional Accountants from 1977 to 2006. *Accounting History*, 23(4), 521-540. Retrieved from <http://10.1177/1032373217751219>
- Sotiropoulou, A., & Guegan, D. (2017, October). Bitcoin & the Challenges for Financial Regulation. *Capital Markets Law Journal*, 12(4), 466-479. doi:10.1093/cmlj/kmx037
- Spithoven, A. (2019, June). Theory and Reality of Cryptocurrency Governance. *Journal of Economic Issues*, 53(2), 385-393. doi:10.1080/00213624.2019.1594518
- Steinmeier, M. (2016). Fraud in Sustainability Departments? An Exploratory Study. *Journal of Business Ethics*, 138(3), 477-492. doi:10.1007/s10551-015-2615-3
- Stuart, I., Pederson, L., & Stuart, B. (2014). *Accounting Ethics* (). West Sussex: John Wiley & Sons Ltd.
- Stuckey, H. (2015). The Second Step in Data Analysis: Coding Qualitative Research Data. *Journal of Social Health and Diabetes*, 3(1), 7-10. doi:10.4103/2321-0656.140875
- Suh, J., Shim, H., & Button, M. (2018, June). Exploring the Impact of Organizational Investment on Occupational Fraud: Mediating Effects of Ethical Culture & Monitoring Control. *International Journal of Law, Crime & Justice*, 53, 46-55. doi:10.1016/j.ijlcrj.2018.02.003
- Suri, H. (2011). Purposeful Sampling in Qualitative Research Synthesis. *Qualitative Research Journal*, 11(2), 63-75. doi:10.3316/QRJ1102063
- Surmiak, A. (2018, September). Confidentiality in Qualitative Research Involving Vulnerable Participants: Researchers' Perspectives. *Forum Qualitative Sozialforschung/Forum:*

- Qualitative Social Research*, 19(3), 1-26. Retrieved from <http://www.qualitative-research.net>
- Sutton, J., & Austin, Z. (2015). Qualitative Research: Data Collection, Analysis, and Management. *The Canadian Journal of Hospital Pharmacy*, 68(3), 226-231. Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4485510>
- Tajir, G. (2018). Ethical Treatment of Participants in Public Health Research. *Journal of Public Health and Emergency*, 2(2), 1-10. Retrieved from <http://www.jphe.amegroups.com>
- Teegavarapu, S., Mocko, G., & Summers, J. (2008). Case Study Method for Design Research: A Justification. *ASME Design Engineering Technical Conference*. doi:10.1115/DETC2008-49980
- Theofanidis, D., & Fountouki, A. (2018). Limitations: Delimitations in the Research Process. *Perioperative Nursing*, 7(3), 155-163. doi:10.5281/zenodo.2552022
- Toscher, S., & Stein, M. (2018, March). Cryptocurrency and IRS Enforcement - Get Ready for Uncle Sam to Look into your Digital Wallet. *Journal of Tax Practice & Procedure*, 20(1), 25-32. Retrieved from <http://www.media.staffordpub.com>
- Trompeter, G., Carpenter, T., Desai, N., Jones, K., & Riley, Jr., R. (2013). A Synthesis of Fraud-Related Research. *Auditing: A Journal of Practice & Theory*, 32(1), 287-321. doi:10.2308/ajpt-50360
- Tschorsch, F., & Scheuermann, B. (2016, March). Bitcoin & Beyond: A Technical Survey on Decentralized Digital Currencies. *IEEE Communications Survey & Tutorials*, 18(3), 2081-2123. doi:10.1109/comst.2016.2535718

- Turpin, J. (2014, Winter). Bitcoin: The Economic Case for a Global, Virtual Currency Operating in an Unexplored Legal Framework. *Indiana Journal of Global Legal Studies*, 21(1), 335-368. Retrieved from <http://www.repository.law.indiana.edu/ijgla/vol21/iss1/13>
- Tziakouris, G. (2018, August). Cryptocurrencies - A forensic Challenge of Opportunity for Law Enforcement. *IEEE Security & Privacy*, 16(4), 92-94. doi:10.1109/MSP.2018.3111243
- United States Department of Labor. (2009, March). Accountant & Auditors. Retrieved from <http://www.bls.gov/oes/current/oes132011.htm#st>
- VanWegberg, R., Oerlemans, J., & Van Deventer, O. (2018). Bitcoin Money Laundering: Mixed Results. *Journal of Financial Crime*, 25(2), 419-435. doi:10.1108/JFC-11-2016-0067
- Vaismoradi, M., Jones, J., Turunen, H., & Snelgrove, S. (2016, January). Theme Development in Qualitative Content Analysis & Thematic Analysis. *Journal of Nursing Education & Practice*, 6(5), 100-110. doi:10.5430/jnep.v6n5p100
- Vasileiou, K., Barnett, J., Thorpe, S., & Young, T. (2018). Characterizing and Justifying Sample Size Sufficiency in Interview-Based Studies: Systematic Analysis of Qualitative Health Research over a 15-year Period. *BMC Medical Research Methodology*, 18(148), 1-18. doi:10.1186/s12874-018-0594-7
- Venter, H. (2018, May). Digital Currency - A Case for Standard Setting Activity. Retrieved from http://www.ifrs.org/_/media/feature/meetings/2018/may/eeg/ap2d-digital-currencies-paper.pdf
- Vona, L. (2008). *Fraud Risk Assessment: Building a Fraud Audit Program*. Hoboken, NJ: John Wiley & Sons.

- Wall, J., & Fogarty, T. (2016). Foxes in the Henhouse: An Exploratory Inquiry into Financial Markets Fraud. *Journal of Forensic & Investigative Accounting*, 8(1), 120-139. Retrieved from <http://www.nacva.com/JFIA/Issues/JFIA-2016-9.pdf>
- Wang, S., & Vergne, J. (2017, January). Buzz Factor or Innovation Potential: What Explains Cryptocurrencies' Returns? *PLoS One*, 12(1), 1-17. doi:10.1371/journal.pone.0169556
- Wang, Y. (2018, March). A Regulation Scheme Based on the Ciphertext-Policy Hierarchical Attribute-Based Encryption in Bitcoin System. *IEEE Access*, 6, 16267-16278. doi:10.1109/ACCESS.2018.2814620
- Watkins, D. (2012). Qualitative Research: The Importance of Conducting Research that Doesn't Count. *Health Promotion Practice*, 13(2), 153-158. doi:10.1177/1524839912437370
- Weaver, N. (2018, June). Risks of Cryptocurrencies. *Communications of the ACM*, 61(6), 20-24. doi:10.1145/3208095
- Weaver, N. (2018, June). Risks of Cryptocurrencies: Considering the Inherent Risks of Cryptocurrency Ecosystems. *Communications of the ACM*, 61(6), 20-24. doi:10.1145/3208095
- Wikipedia. (2019, May). Computer-assisted qualitative data analysis software. Retrieved from http://www.en.wikipedia.org/wiki/Computer-assisted_qualitative_data_analysis_software
- Wiles, R., Crow, G., Heath, S., & Charles, V. (2008). The Management of Confidentiality and Anonymity in Social Research. *International Journal of Social Research Methodology*, 11(5), 417-428. doi:10.1080/13645570701622231
- Winchester, C., & Salji, M. (2016, May). Writing a Literature Review. *Journal of Clinical Urology*, 9(5), 308-312. doi:10.1177/2051415816650133

- Wisdom, J., Cavaleri, M., Onwuegbuzie, A., & Green, C. (2012, April). Methodological Reporting in Qualitative, Quantitative and Mixed Methods. *Health Services Research*, 47(2), 721-745. doi:10.1111/j.1475-6773.2011.01344.x
- Wolgemuth, J., Hicks, T., & Agosto, V. (2017, April). Unpacking Assumptions in Research Synthesis: A Critical Construct Synthesis Approach. *Educational Researcher*, 46(3), 131-139. doi:10.3102/0013189x17703946
- Yarahmadi, H., & Bohlooli, A. (2015). Ethics in Accounting. *International Journal of Accounting and Financial Reporting*, 5(1), 356-360. doi:10.5296/ijafr.v5i1.7829
- Yereli, A., & Orkunoglu-Sahin, I. (2018, October). Cryptocurrencies & Taxation. Retrieved from <http://www.researchgate.net/publication/340210271>
- Yilmaz, K. (2013). Comparison of Quantitative and Qualitative Research Traditions: epistemological, theoretical, and methodological differences. *European Journal of Education*, 48(2), 311-325. doi:10.1111/ejed.12014
- Yin, H., Langenheldt, K., Harlev, M., Mukkamala, R., & Vatrappu, R. (2019, January). Regulating Cryptocurrencies: A Supervised Machine Learning Approach to De-Anonymizing the Bitcoin Blockchain. *Journal of Management Information Systems*, 36(1), 37-73. doi:10.1080/07421222.2018.1550550
- Yin, H., Langenheldt, K., Mukkamala, R., Vatrappu, R., & Harlev, M. (2019, March). Regulating Cryptocurrencies: A Supervised Machine Learning Approach to De-Anonymizing the Bitcoin Chain. *Journal of Management Information Systems*, 36(1), 37-73. doi:10.1080/07421222.2018.1550550
- Yeong, M., Ismail, R., Ismail, N., & Hamzah, M. (2018, November). Interview Protocol Refinement: Fine-Tuning Qualitative Research Interview Questions for Multi-Racial

Populations in Malaysia. *The Qualitative Report*, 23(11), 2700-2713. Retrieved from <http://www.nsuworks.nova.edu/tqr/vol23/iss11/7>

Zyl, L. (2005, December). Virtue Theory & Applied Ethics. *South African Journal of Philosophy*, 21(2), 1-16. doi:10.4314/sajpem.v21i2.31341

Appendices

Appendix A: Inquiry Letter

Dear XXX,

My name is Jackie Woods and I am a doctoral student from Northcentral University. I am writing to invite you to participate in my research study about the accounting of cryptocurrencies. You're eligible to be in this study because you are a CPA and have accounting experience.

If you decide to participate in this study, you will be interviewed by phone for at most 60 minutes regarding how cryptocurrencies should be accounted for. I would like to record the interview so that I can use this information for my research.

Participation is completely voluntary. If you'd like to participate or have any questions about the study, please email me at J.woods2792@o365.ncu.edu or by phone at 573-301-8540.

Thank you very much.

Sincerely,

Jackie Woods

Appendix B: Informed Consent

Introduction:

My name is Jackie Woods. I am a doctoral student at Northcentral University.

I am conducting a research study on accounting for cryptocurrencies.

I am completing this research as part of my doctoral degree.

Your participation is completely voluntary.

I am seeking your consent to involve you and your information in this study.

Reasons you might *not* want to participate in the study include lack of knowledge and/or accounting experience.

Reasons you might want to participate in the study include help determine how to properly account for cryptocurrencies.

An alternative to this study is simply not participating.

I am here to address your questions or concerns during the informed consent process.

PRIVATE INFORMATION

Certain private information may be collected about you in this study.

The following efforts will be made to protect your private information, including properly disposing, destroying, or deleting study data/documents.

Data will be securely stored within a locked location which will limit access.

Even with this effort, there is a chance that your private information may be accidentally released. The chance is small but does exist.

You should consider this when deciding whether to participate.

Activities:

If you participate in this research, you will be asked to:

1. Phone interview lasting at most 60 minutes.

Eligibility:

You are eligible to participate in this research if you:

1. Least 5 years of accounting experience
2. CPA license
3. Some knowledge of cryptocurrencies

You are not eligible to participate in this research if you:

1. Don't have a CPA license
2. 5 years or less of accounting experience
3. Have little or no knowledge of cryptocurrencies

I hope to include ten people in this research.

Risks:

There are minimal risks in this study. Some possible risks include: privacy issues.

To decrease the impact of these risks, you can: skip a question or withdraw yourself from the interview at any time.

Benefits:

If you decide to participate, there are no direct benefits to you.

The potential benefits to others are: further understanding of how to account for cryptocurrencies.

Confidentiality:

The information you provide will be kept confidential to the extent allowable by law.

Some steps I will take to keep your identity confidential are: I will use a number to identify you.

The people who will have access to your information are: myself and/or my dissertation chair.

The Institutional Review Board may also review my research and view your information.

I will secure your information with these steps: lock any data/documents in a file cabinet.

I will keep your data for 7 years. Then, I will delete electronic data and destroy paper data.

Contact Information:

If you have questions for me, you can contact me at: J.woods2792@o365.ncu.edu or 573-301-8540

My dissertation chair's name is Marie Bakari. She works at Northcentral University and is supervising me on the research.

You can contact her at: mbakari@ncu.edu.

If you contact us you will be giving us information like your phone number or email address.

This information will not be linked to your responses if the study is anonymous.

If you have questions about your rights in the research, or if a problem has occurred, or if you are injured during your participation, please contact the Institutional Review Board at: irb@ncu.edu or 1-888-327-2877 ext. 8014.

Voluntary Participation:

Your participation is voluntary. If you decide not to participate, or if you stop participation after you start, there will be no penalty to you.

You will not lose any benefit to which you are otherwise entitled.

Audiotaping:

I would like to use a recorder to record your responses. You can still participate if you do not wish to be recorded.

Please sign here if I can record you: _____

Future Research

Any information collected from you during this research may **not** be used for other research in the future.

Signature:

A signature indicates your understanding of this consent form. You will be given a copy of the form for your information.

Participant Signature

Printed Name

Date

Researcher Signature

Printed Name

Date

Appendix C: Interview Questions

1. Tell me what kind of accounting experience you have
2. When did you obtain your CPA license?
3. How familiar are you with cryptocurrencies?
4. Do you have clients who hold cryptocurrencies on their balance sheet? If so, where is it included.
5. What, if anything, would you change about how cryptocurrencies are accounted for?
6. What does cryptocurrencies mean to you?
7. Do you feel cryptocurrencies should be regulated?
8. Do you consider cryptocurrencies a form of currency?



2488 Historic Decatur Road, Suite 100, San Diego, CA 92106 | www.ncu.edu

Date: November 19, 2019

PI Name: Jackie Woods

Chair Name (if applicable): Marie Bakari

Application Type: Initial Submission

Review Level: Expedited – Category 7

Study Title: Accounting for Cryptocurrencies: A Qualitative Study

Approval Date: November 18, 2019

Expiration Date: November 17, 2020

Dear Jackie:

Congratulations! The purpose of this letter is to inform you that your IRB application has been approved. Your responsibilities include the following:

1. Follow the protocol as approved. If you need to make changes, please submit a modification form requesting approval of any proposed changes before you make them.
2. If there is a consent process in your research, you must use the consent form approved with your final application. Please make sure all participants receive a copy of the consent form.
3. Continuing review is required as long as you are in data collection or if data have not been deidentified. Failure to receive approval of the continuing review before the expiration date means the research must stop immediately.
4. If there are any injuries, problems, or complaints from participants, you must notify the IRB at IRB@ncu.edu within 24 hours.
5. IRB audit of procedures may occur. The IRB will notify you if your study will be audited.
6. When data are collected and de-identified, please submit a study closure form to the IRB.
7. You must maintain current CITI certification until you have submitted a study closure form.
8. If you are a student, please be aware that you must be enrolled in an active dissertation course with NCU in order to collect data.

Congratulations from the NCU IRB. Best wishes as you conduct your research!