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Considerations for organizations in the virtual currency industry

The path to becoming audit-ready

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Introduction

October 2018 marked ten years since a whitepaper written by Satoshi Nakamoto—the still anonymous individual or group of individuals—was released on the internet.

The paper described a compelling vision of the future in which "a purely peer-to-peer version of electronic cash would allow online payments to be sent directly from one party to another without going through a financial institution."[1] Bitcoin was the first decentralized cryptocurrency (the first genesis block was created in 2009), and currently has the highest market capitalization. Since then, however, numerous other cryptocurrencies have been created and there are now estimated to be over 2,000 different virtual currencies in existence. For reasons which we explore in this article, however, while there is an impetus from many organizations in this industry to become an audited institution, there still exists a gap between expectations and reality in achieving this. There are challenges in becoming "auditable"—along with practical recommendations for how organizations in this field can move forward on a path to becoming audit-ready.

1 Nakamoto, Satoshi. 2009. "Bitcoin: A Peer-to-Peer Electronic Cash System." www.bitcoin.org. https://bitcoin.org/bitcoin.pdf

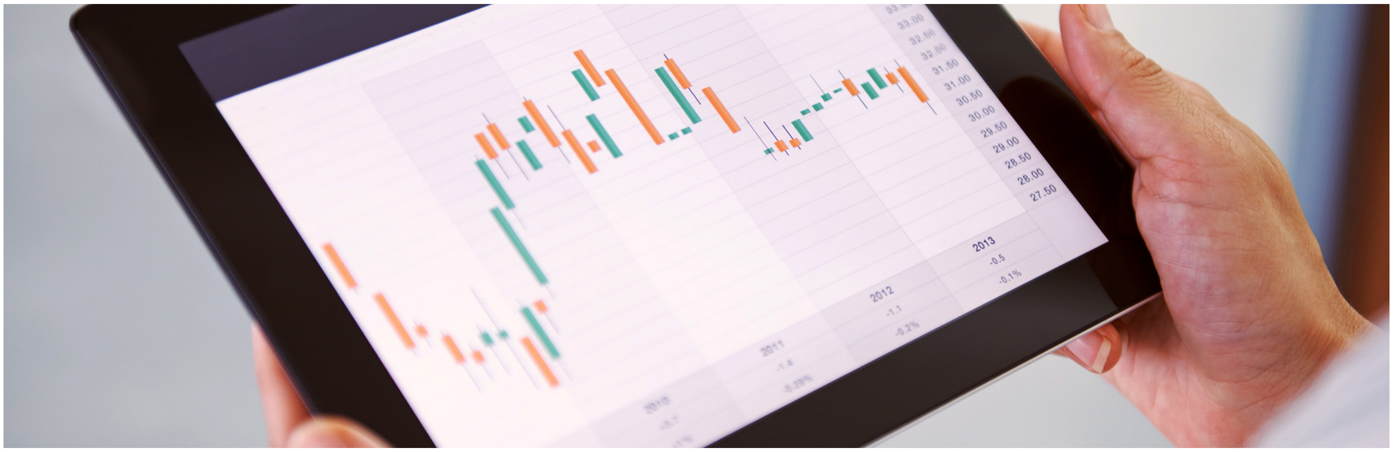
The challenge

The notion of the "trusted third party" in Nakamoto's vision has the potential for far reaching positive implications in our organizations and society broadly, not least for the accounting profession, where—depending on who you talk to or what source you read/watch—you will be met with differing opinions on the impact that bitcoin's underlying technology, blockchain, will have on the accounting profession.

At the heart of this debate are two considerations. First, to what extent will the technology impact the accounting profession as a whole? Much continues to be talked about on this topic, specifically around concepts such as automated accounting and the role of the traditional accountant in a blockchain world.

2,000+

Estimated number of cryptocurrencies



Second, and fundamental to all other discussions in this realm, is the applicability of current accounting and auditing standards to the world of cryptocurrency. While the popularity of cryptocurrencies has soared in recent years, they do not fit easily within the financial reporting frameworks, including International Financial Reporting Standards. There are challenges in accounting for cryptocurrency holdings. It is not a currency in the traditional sense since it is not backed by a central bank, and there is currently no mandate to treat it as legal tender, at least not in Canada. In contrast to traditional forms of money, which are controlled using centralized banking systems, cryptocurrencies use decentralized control through a blockchain, which is a public transaction database functioning as a public ledger.[2] It simply doesn't fit neatly anywhere.

These challenges are compounded when considering the scale at which the industry is developing and the rate at which new business models are forming. Very quickly we have seen the emergence of industries within an industry. As one example, "initial coin offerings (ICOs) raised more money in the first three months of 2018 than the whole of 2017. At $6.3 billion, ICO funding in the first quarter was 118 percent of the total for 2017."[3] In "Accounting for cryptocurrencies—the basics" published by Grant Thornton International Limited, we discussed in detail the challenges of accounting for cryptocurrencies and recommended ultimately treating them as an intangible asset in most cases. However, a case by case assessment is required, along with a deep study of the technology and mechanics of the cryptocurrency in question.

2 Grant Thornton. 2018. "Accounting for cryptocurrencies." https://www.grantthornton.global/en/insights/viewpoint/accounting-for-cryptocurrencies--the-basics/
3 Floyd, David. 2018. "$6.3 Billion: 2018 ICO Funding Has Passed 2017's Total." Coindesk. https://www.coindesk.com/6-3-billion-2018-ico-funding-already-outpaced-2017/

Growth through transparency

All this to say, in many respects, organizations in the cryptocurrency space are like so many other organizations which, in the pursuit of growth and protection of value, look to professional services firms for assurance on the financials of their business. Many organizations in this space have grown quickly, often with the focus (naturally) having been on the commercial side of the business. However, many have now grown to a level of maturity which increasingly warrants that attention be given to assurance on the financial statements, internal controls and processes of the business, as well as other factors, such as compliance, be it regulatory or otherwise. Not just an increasingly prevalent internal requirement, we have also seen the need for assurance on the financial statements being driven by external stakeholders and influencers—not only banks, institutional investors and partners, but also an organization's customers and the public broadly.

It is hard not to notice the media coverage that many organizations in this field have experienced in relation to the integrity of their financial information. Aside from it being good business practice, there is a very real reputational challenge to tackle in any new industry. In part, this can be managed by increased transparency over the financial information, including the financial statements of the business itself. Reputational merit in this burgeoning industry is crucial not only for sustaining operations and protecting the business for today, but for gaining the public's trust and realizing growth for tomorrow.

The other side of the coin: client acceptance

To articulate the stepping stones on the path to becoming audit-ready, some context is first required. For professional services firms like Grant Thornton, client acceptance is the fundamental stage in deciding whether or not to undertake an assurance engagement, of any type. At a macro level, the Canadian Standard on Quality Control (CSQC 1) requires a firm to establish policies and procedures for the acceptance and continuance of client relationships and specific engagements. These policies and procedures are designed to provide the firm with reasonable assurance that it will only undertake or continue relationships and engagements where certain factors are satisfied. Two such factors include:

- "whether the firm has considered the integrity of the client, and does not have information that would lead it to conclude that the client lacks integrity; and
- whether the auditor is competent to perform the engagement and has the capabilities, including time and resources, to do so."[4]

Independent from the requirements of CSQC 1, any professional services firm will also evaluate other elements that may impact client acceptance, such as the expected use and distribution of the audit report, as well as their own internal policies that reflect their own risk tolerance towards different types of clients and client engagements. The above points are explored further in this section.

a) Integrity of the client

An assessment of client integrity factors in a number of considerations. These considerations vary by client type and industry and, to a certain degree, require further due diligence when concerning organizations in the business of cryptocurrency. For example, how and why a prospective client "uses cryptocurrency is likely to be relevant to the auditor in deciding whether to accept or continue an engagement to audit an entity's financial statements."[5]

> "At a macro level, the **Canadian Standard on Quality Control (CSQC 1)** requires a firm to establish policies and procedures for the acceptance and continuance of client relationships and specific engagements."

There are many good business reasons why an entity would use or deal in cryptocurrencies. In Canada and other jurisdictions around the globe, those entities deemed to be "dealing in virtual currencies" have come under growing regulatory scrutiny in recent years from a money laundering and terrorist financing perspective. There is evidence to suggest that, like many other forms of value transfer, cryptocurrencies have been used to launder illicit funds and are seen as an attractive option for individuals or entities inclined to do so due to several factors, not least

4 CPA Canada. 2018. "Audit Considerations Related to Crytocurrency Assets and Transactions." https://www.cpacanada.ca/en/business-and-accounting-resources/audit-and-assurance/canadian-auditing-standards-cas/publications/cryptocurrency-audit-considerations

5 CPA Canada. 2018. "Audit Considerations Related to Crytocurrency Assets and Transactions." https://www.cpacanada.ca/en/business-and-accounting-resources/audit-and-assurance/canadian-auditing-standards-cas/publications/cryptocurrency-audit-considerations

due to their fungibility, or pseudo-anonymity and borderless nature. As such, in assessing client integrity, the auditor's acceptance procedures will likely include consideration of whether there are indicators the client may be involved in such activities, as well as understanding whether the entity has policies and controls in place to safeguard against unwitting involvement in such activities, such as having in place an anti-money laundering (AML) program. Furthermore, the auditor is also required to remain alert to the possibility of instances of non-compliance or suspected non-compliance with laws and regulations, including money laundering or other illegal activities.[6]

b) Auditor competence and capabilities to perform the engagements

When considering acceptance of any engagement, the audit team needs to assess its own ability to appropriately execute the engagement including considering knowledge of relevant industries or experience with relevant regulatory or reporting requirements, as well as the tools, necessary methodologies and technical expertise to undertake the work.

For many professional service firms, meeting these requirements in established industries is a matter of normal business. However, in new and emerging industries, meeting these requirements can create new and unique challenges for the auditor before accepting an engagement. Some common considerations applicable to engagements that involve cryptocurrencies are set out below:

Availability of information needed to perform the audit

An auditor is required to gain an understanding as to management's knowledge of matters related to cryptocurrency, including the financial reporting implications and the controls in place related to cryptocurrency balances and transactions. Further, Canadian Auditing Standards (CASs) require the auditor to obtain an understanding of the entity's information systems.[7] A recent report by the New York Attorney General's office highlighted that "trading platforms lack a consistent and transparent approach to independently auditing the virtual currency purportedly in their possession", making it "difficult or impossible" to confirm that the exchanges are responsibly holding customer accounts.[8] This environment creates unique challenges to an auditor accepting the engagements.

6 IFAC. 2009. "International Standard on Auditing 250." Paragraph 16. http://www.ifac.org/system/files/downloads/a013-2010-iaasb-handbook-isa-250.pdf

7 IFAC. 2009. "International Standard on Auditing 315." Paragraph 18. http://www.ifac.org/system/files/downloads/a013-2010-iaasb-handbook-isa-315.pdf

8 Irrera, Anna. 2018. "Cryptocurrency exchanges at risk of manipulation: report." Reuters. https://www.reuters.com/article/us-cryptocurrency-exchanges/cryptocurrency-exchanges-at-risk-of-manipulation-report-idUSKCN1LY2UG

In response to this challenge, the entity should be able to demonstrate that it has designed procedures and controls to record, process and track its crypto assets and transactions—not only to ensure it is acting responsibly with its customers' crypto assets, but also to show that it has the requisite understanding of the environment in which it is operating and is able to minimize the risk of material misstatement in financial reporting. These procedures and controls will likely differ from procedures in place in a fiat landscape, but will also differ, out of necessity, among subsets of the crypto environment. Today, there are over 2,000 virtual currencies,[9] many built on differing protocols and with different functionality. Add to the mix a multitude of different crypto business models and entity types all interacting with crypto assets in different manners and it becomes imperative that management is able to demonstrate and articulate to its auditor its understanding and treatment, from an accounting perspective, of cryptocurrency in its specific organizational context and the controls and procedures designed around that context. In our earlier IFRS Viewpoint series "Accounting for cryptocurrencies—the basics" and "Accounting for crypto assets—mining and validation issues," we explore our thoughts around appropriate accounting treatments for crypto assets in more detail. We build more on this point below in articulating the path forward to becoming audit-ready.

Environmental factors related to the audit: expected distribution of the audit report

We are seeing a somewhat unique scenario with a number of companies in the cryptocurrency space regarding the intended use of a financial statement audit report. Unlike most private companies, where audited financial statements are used by a limited number of users (e.g. a financial institution / shareholders), there may be a desire that audited financial statements in this space serve, in some cases, to assure the public as well. The level of scrutiny that many firms in this space are coming under from the public—be it customers, media or otherwise—means that an audit report could go a long way to assuring legitimacy in a number of the areas mentioned above. However, these are purposes for which a financial statement audit are simply not intended.

In this environment of potentially "unlimited users" the risk for a professional services firm increases significantly, particularly because it elevates the risk of unintended reliance. The purpose and scope of the use of the report will generally be limited and will have to be documented in your agreement with the auditor and appropriate in the circumstances.

9 CoinMarketCap. October 22, 2018. "All Cryptocurrencies." https://coinmarketcap.com/all/views/all/

Unique factors related to the industry—a caveat

A common theme that runs through this article and exemplifies the reasons for many of the challenges explored here is that this industry is unique; it is unlike any other we have seen before and with this comes unique challenges that can quell many efforts to become auditable, right from the get-go. Before we turn our attention below to possible avenues and ways in which organizations in this space can start on a path to becoming audit-ready, it is important that these unique challenges are given their due. A good example of this is in the crypto asset exchange arena. Identifying, securing and maintaining banking relationships in this field is a struggle many are dealing with currently. Many "top-tier" banking institutions are taking a cautious approach to this industry, leaving entities in this space looking elsewhere for banking services. This has had the effect of many finding relationships with other, smaller financial institutions.

In an audit context, this can present challenges. Larger exchanges and organizations in this space have amassed sizable financial assets, and it is not unheard of for those assets, once deposited in a banking institution, to represent a major percentage of that institution's overall capitalization. This immediately presents an auditor with the problem of reliability and calls into question the independence of any information that subsequently is to be relied on as part of a financial statement audit from that institution. Many organizations in this space have grown exponentially in an extremely short space of time; some are so large that they are as big as the very institutions they are seeking banking services from. In many respects, this challenges an audit before it has even started.

There are other factors unique to this industry which are gaining the attention of different stakeholders (such as regulators). These factors present considerations for those both looking to receive, and seeking to undertake, a financial statement audit of an organization in this space. Those areas include how the integrity of a blockchain is audited, how controls over the access to private keys are tested and--while unique to the mining portion of the industry--oversight over rewards from mining pools.

All this to say, there are unique circumstances like this—unique to this industry—which have a major bearing on one's ability to perform a financial statement audit. Like many aspects of this industry, however, this is changing quickly as the more traditional financial institutions and cryptocurrency entities find more and more ways to work together.

Establishing a foundation and a path to becoming audit-ready

With the current lack of authoritative guidance from standards setters, there is likely to be a large amount of diversity in practice as to what alternative accounting treatments may be acceptable for crypto assets and in particular cryptocurrencies. Furthermore, as the use of blockchain technology evolves, with more specific guidance issued, and more standardized industry practice established, there may be changes in the current thinking around acceptable accounting treatments.[10]

Even in this uncertain environment, there are steps that organizations in this space can take that will set them on the path to becoming audit-ready. While these steps, listed below, should not be viewed as a checklist that, upon completion, would result in a professional services firm accepting an organization in this space as an audit client, they will provide a solid foundation for audit readiness.

1) Leadership / financial reporting governance

Management's level of understanding of cryptocurrency risks and internal control over cryptocurrency transactions and balances is key. More than this, the financial reporting governance that the organization has in place must be designed in a way to support this, and the organization's ability to prepare financial statements must be in alignment with the context of the area of the virtual currency industry it is operating in.

10 Grant Thornton. 2018. "Accounting for cryptocurrencies." https://www.grantthornton.global/en/insights/viewpoint/accounting-for-cryptocurrencies--the-basics/

Context is a key ingredient for consideration when thinking about financial reporting governance. In many organizational environments, there is flexibility in the form and structure that a financial reporting governance model can take, and the model used will depend in part on the type and structure of your organization. For example, as a private company, you can choose to establish a formal audit committee as part of the broader board of your organization (if applicable) or just have the broader board fulfill the financial governance responsibilities. Given the public interest in having visibility to the financial reporting of what are traditionally private companies in the virtual currency world, the formal and structured development of an audit committee could provide transparency into the governance process and the organization could choose to include independent persons on the committee.

Irrespective of the approach taken, the governance structure should assume oversight responsibility for the design and development of a system of processes and controls to facilitate the preparation of GAAP-compliant financial statements. They also set the tone-from-the-top organizationally, which can be a key client acceptance consideration. One of the most important roles is having qualified and competent financial personnel to action the design and development of a system of processes and controls over financial reporting; this is foundational. This is an early step and needs to be considered in conjunction with all other elements.

2) Preparation of GAAP-compliant financial statements

For an entity that does not yet have a set of GAAP-compliant financial statements (including financial statement notes) available, investments of time and expertise are required to accomplish this. Below are some key considerations for this scenario:

Selection of a financial reporting framework

This decision will have implications for your organization and will need to be determined based on the goals and long-term strategy of your business. For example, US GAAP, Canadian Accounting Standards for Private Enterprises, or International Financial Reporting Standards are just three possible accounting frameworks to evaluate. The selection of the framework can have a significant impact on the look and possibly financial results as included in your financial statements. In some cases, organizations may not have a choice of framework. Either way, the ultimate conclusion on why a particular framework should be a decision formally made by the governance structure previously discussed. Grant Thornton is here to assist you with an analysis and evaluation of the available accounting or required frameworks that apply.

Type of virtual currency business

Until further guidance is issued, selecting the framework for determining appropriate accounting treatment requires an in-depth analysis of the industry, the particular type of cryptocurrency and use of blockchain technology being considered in your organization. In our recent whitepaper discussing the accounting implications for mining and validation, we put forward an approach that an organization operating in this space can use to determine such treatment. The steps include understanding the blockchain environment the entity is operating in (proof-of-work vs. proof-of-stake), understanding how the entity operates (solo or in a pool) and understanding the rights associated with the particular cryptocurrency (or crypto asset). Determining how to apply existing accounting standards to the specific facts and circumstances will be based on the understanding obtained to the above points.

It takes an investment of time and expertise to develop GAAP-compliant financial statements

Accounting expertise

To prepare GAAP financial statements, your organization will need to onboard additional financial reporting expertise (either internally, through a third-party service provider arrangement, or both). Depending on the accounting framework selected, preparation of GAAP financial statements in the crypto space requires a high degree of specialization. Our firm is actively participating with the standard setting process across North America and globally. As part of this involvement, there is robust dialogue among standard setters and professional services firms as to the interpretation of the accounting rules to crypto specific situations. Current interpretations of the accounting standards remain fluid, so having the right people with the right expertise engaged in dialogue in the community is critical.

Completeness of records / availability of audit support

Related to the two previous items, the financial records of your organization will need to be complete, accurate and verifiable. For example, under any accounting framework, all bank accounts, irrespective of balance or physical geography, will need to be centrally compiled and reconciled. A similar process will be needed for all financial statement elements, including related party balances and transactions. This includes accounting for the cryptocurrency transactions themselves and the amounts held in your wallets, not just at a point in time on the balance sheet but throughout the period of the audit. Furthermore, a determination is required as to the entities and assets that your organization controls or doesn't control and how these will be incorporated into its financial reporting.

3) Business model, purpose and internal controls

Along with the appropriate governance models and reporting framework, the adoption of internal controls, including technology, throughout the organization will help in reaching an auditable status. As mentioned previously, the entity should be able to demonstrate that it has designed procedures and controls to record, process, track and control its crypto assets and transactions, not only to ensure it is acting responsibly with its customers' crypto assets, but also to show that it has the requisite understanding of the environment in which it is operating and is able to minimize risks, such as the risk of material misstatement and risks that may potentially affect other financial assertions.

A determination around required controls will, in part, be derived from the intended purpose of transactions and nature in which the organization intends to use cryptocurrencies as part of their overall business model. This is also an important consideration for the auditor in assessing the client for acceptance. The auditor is required to:

- "evaluate whether it gives rise to significant risks,
- inquire of management about the nature of these transactions and whether related parties could be involved, and
- assess whether the business rationale (or the lack thereof) suggests that they may have been entered into to engage in fraudulent financial reporting or to conceal misappropriation of assets."[11]

Further, "control" (in relation to how you control ownership and access to crypto assets) should be addressed. For an exchange, or crypto asset custodian, this is of particular importance due to the nature of the business model and the way cryptocurrencies are stored within such platforms. For example, it is common for many exchanges to operate a "cold storage" solution for their customers to enhance security. But what controls are built around this feature? What controls are in place around the movement of funds from the platform's hot wallet to their cold wallet? Who internally has access to the keys? Does the wallet structure allow for sharded keys to be distributed among key executives, for example to ensure that no one individual ever takes full control or access to user's funds? These, and others, are aspects of the organization's control environment to be considered along with the broader internal control environment.

Added to this, it is wise to think outside of the financial statement reporting box in considering controls in scope for development. While, for example, proposed amendments to current Canadian AML rules have been published, which bring exchanges under the purview of the financial regulator in Canada, these changes are yet to come in to force. Today, exchanges where cryptocurrencies are traded remain largely unregulated. That said, we see a number of operators in this space proactively seeking guidance and looking to get ahead of the curve in designing programs to effectively identify, monitor and mitigate the threat of money laundering and terrorist financing through their organization. This is one example of the types of other controls that should be considered for inclusion in your business. Whether developed independently, or with the help of a service provider/third party firm, the three pillars noted above will help organizations in the virtual currency space put themselves in a better position to be audited.

4) Consider a phased approach

The feasibility around conducting a full financial statement audit will need to be considered on a case-by-case basis. Depending on the scenario, it may not be necessary or realistic to conduct a full financial statement audit for the entire business at the outset. One step on the road to becoming fully auditable could instead be to start by taking a more focused and phased approach by auditing different parts of your business over time. This might take the form of auditing the use of particular coins, specific entities within a business or sections of the balance sheet, or may even constitute undertaking agreed upon procedures around certain aspects of your organization rather than the organization in its entirety. Equally, as your organization matures over time, there may be alternative testing that can be undertaken to support your position in the earlier stages, such as completing tests around control design related to particular coins that are traded on exchange. This could lead to a more formal system and organization control (SOC) report or controls examination report to provide stakeholders with increased transparency into your financial controls and provide independent assurance on controls over processes related to financial reporting. Situational context is extremely important in deciding on these factors and requires expert guidance to help identify what route is best for your organization.

11 CPA Canada. 2018. "Audit Considerations Related to Crytocurrency Assets and Transactions." https://www.cpacanada.ca/en/business-and-accounting-resources/audit-and-assurance/canadian-auditing-standards-cas/publications/cryptocurrency-audit-considerations

Conclusion and key takeaways

Preparing for a financial statement audit requires investment for any organization. In the case of a business dealing in a virtual currency such as cryptocurrency, there are additional factors to consider. However, there is a path forward.

Key takeaways
To build a solid foundation for audit readiness, consider:

Leadership/financial reporting governance:
Does management understand cryptocurrency risks and controls? Have you chosen a financial reporting governance model that supports this understanding and aligns to your organization's structure?

Preparation of GAAP-compliant financial statements:
Have you selected the right reporting framework for your type of virtual currency business? Do you have access to sufficient accounting expertise to prepare GAAP-compliant financial statements? Are your financial records complete, accurate and verifiable?

Business model, purpose and internal controls:
Have you designed procedures and controls to record, process, track and control your crypto assets and transactions? Do you understand which controls are appropriate for your operational context?

A phased approach:
Do you need a full financial statement audit right away? Or can you begin with a more focused audit of different parts of your business, and build up as your organization matures?

We can help

Whether it is our Financial Reporting and Accounting Advisory Services team helping prepare your financial statements or our Risk Services group assisting with your governance structure and other internal controls, the path to becoming audit-ready is a journey—one that Grant Thornton is here to help you with.

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