UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549 FORM 10-K

	ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCH	ANGE ACT OF 1934			
	For the fisca	l year ended December 31, 2019				
		or				
	TRANSITION REPORT UNDER SECTION 13 OR 15(d) C	OF THE SECURITIES EXCHANGE	GE ACT OF 1934			
	For the transiti	on period from to				
	Commis	sion file number 001-33675				
		RIOT BLOCKCHAIN, INC.				
	(Exact nar	me of registrant as specified in its ch	narter)			
	Nevada		84-1553387			
	(State or other jurisdiction of Incorporation or organization)		(I.R.S. Employer Identification No.)			
	202 6 th Street, Suite 401, Castle Rock, CO		80104			
	(Address of principal executive offices)		(Zip Code)			
	Registrant's telephone r	number, including area code (303) 7	94-2000			
Securities	registered under Section 12(b) of the Exchange Act:					
	Common Stock no par value per share	RIOT	The NASDAQ Capital Market			
	(Title of class)	(Trading Symbol)	(Name of each exchange on which registered)			
Indicate b	registered pursuant to Section 12(g) of the Securities Exchange Act: y check mark if the registrant is a well-known seasoned issuer, as de y check mark if the registrant is not required to file reports pursuant	fined in Rule 405 of the Securities A				
	ecking the box above will not relieve any registrant required to file	• • • • • • • • • • • • • • • • • • • •				
Indicate b shorter pe	y check mark whether the registrant (1) filed all reports required to riod that the registrant was required to file such reports), and (2) has	be filed by Section 13 or 15(d) of t been subject to such filing requirem	he Exchange Act during the preceding 12 months (or for such lents for the past 90 days. Yes \boxtimes No \square			
Indicate b company.	y check mark whether the registrant is a large accelerated filer, ar See definitions of "large accelerated filer," "accelerated filer," "sma	accelerated filer, a non-accelerate iller reporting company," and "emer	d filer, a smaller reporting company, or an emerging growth ging growth company" in Rule 12b-2 of the Exchange Act.			
	Large accelerated filer \square		Accelerated filer ☑			
	Non-accelerated filer \square		Smaller reporting company ✓			
	Emerging growth company \square					
If an emeraccounting	rging growth company, indicate by check mark if the registrant has g standards provided pursuant to Section 13(a) of the Exchange Act.	elected not to use the extended tran \Box	sition period for complying with any new or revised financial			
Indicate b	y check mark whether the registrant is a shell company (as defined in	n Rule 12b-2 of the Exchange Act).	Yes□ No ☑			
on the Na	gate market value of the common stock, no par value, held by non- sdaq Capital Market on June 28, 2019 (the last business day of the gly, the registrant qualifies under the SEC's revised rules as a "smalle	ne registrant's most recently comple				
As of Mar	rch 24, 2020, the Registrant had 31,034,308 shares of common stock	outstanding.				
	DOCUMENTS IN	NCORPORATED BY REFEREN	CE			
	of Riot Blockchain, Inc.'s definitive Proxy Statement to be delive porated by reference into Part III of this Form 10-K.	ered to stockholders in connection	n with its Annual Stockholders' Meeting to be held in 2020			

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RIOT BLOCKCHAIN, INC.

As used in this Annual Report on Form 10-K, the terms "we", "us", "our", the "Company", "Riot Blockchain, Inc." and "Riot" mean Riot Blockchain, Inc. and its consolidated subsidiaries, unless otherwise indicated.

FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K contains certain statements that are, or may be deemed to be, forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the "Securities Act") and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). These forward-looking statements (such as when we describe what "will," "may," or "should" occur, what we "plan," "intend," "estimate," "believe," "expect" or "anticipate" will occur, and other similar statements) include, but are not limited to, statements regarding future operating results, potential risks pertaining to these future operating results, future plans or prospects, anticipated benefits of proposed (or future) acquisitions, dispositions and new facilities, growth, the capabilities and capacities of business operations, any financial or other guidance, expected capital expenditures and all statements that are not based on historical fact, but rather reflect our current expectations concerning future results and events. We make certain assumptions when making forward-looking statements, any of which could prove inaccurate, including assumptions about our future operating results and business plans. Therefore, we can give no assurance that the results implied by these forward-looking statements will be realized. Furthermore, the inclusion of forward-looking information should not be regarded as a representation by the Company or any other person that future events, plans or expectations contemplated by the Company will be achieved. The following important factors, among others, could affect future results and events, causing those results and events to differ materially from those expressed or implied in our forward-looking statements:

- · our ability to achieve profitability in the future;
- high volatility in the value attributable to our business;
- the rapidly changing regulatory and legal environment in which we operate, may lead to unknown future challenges to operating our business or which may subject our business to added costs and/or uncertainty regarding the ability to operate;
- · risks related to our failure to continue obtaining financing on a timely basis and on acceptable terms;
- · our ability to keep pace with technology changes and competitive conditions;
- · our ability to execute on our business strategy;
- · other risks and uncertainties related to our business plan and business strategy.

For a further list and description of various risks, factors and uncertainties that could cause future results or events to differ materially from those expressed or implied in our forward-looking statements, see the "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" sections contained in this document, and any subsequent reports on Form 10-Q and Form 8-K, and other filings we make with the Securities and Exchange Commission ("SEC"). Given these risks and uncertainties, the reader should not place undue reliance on these forward-looking statements.

All forward-looking statements included in this Annual Report on Form 10-K are made only as of the date of this Annual Report on Form 10-K, and we do not undertake any obligation to publicly update or correct any forward-looking statements to reflect events or circumstances that subsequently occur, or of which we hereafter become aware. You should read this document completely and with the understanding that our actual future results or events may be materially different from what we expect. All forward-looking statements attributable to us are expressly qualified by these cautionary statements.

INDUSTRY AND MARKET DATA

Information regarding market and industry statistics contained in this Annual Report on Form 10-K has been obtained from industry and other publications that we believe to be reliable, but that are not produced for purposes of securities filings. We have not independently verified any market, industry or similar data presented in this Annual Report and cannot assure you of its accuracy or completeness. Further, we have not reviewed or included data from all sources. Forecasts and other forward-looking information obtained from third-party sources are subject to the same qualifications and the additional uncertainties accompanying any estimates of future market size, revenue and market acceptance of products and services. As a result, investors should not place undue reliance on any such forecasts and other forward-looking information.

PART I

ITEM 1. BUSINESS

Overview

Blockchain and Cryptocurrencies Generally

Distributed blockchain technology is a decentralized and encrypted ledger that is designed to offer a secure, efficient, verifiable, and permanent way of storing records and other information without the need for intermediaries. Cryptocurrencies serve multiple purposes. They can serve as a medium of exchange, store of value or unit of account. Examples of cryptocurrencies include: bitcoin, bitcoin cash, and litecoin. Blockchain technologies are being evaluated for a multitude of industries due to the belief in their ability to have a significant impact in many areas of business, finance, information management, and governance.

Cryptocurrencies are decentralized currencies that enable near instantaneous transfers. Transactions occur via an open source, cryptographic protocol platform which uses peer-to-peer technology to operate with no central authority. The online network hosts the public transaction ledger, known as the blockchain, and each cryptocurrency is associated with a source code that comprises the basis for the cryptographic and algorithmic protocols governing the blockchain. In a cryptocurrency network, every peer has its own copy of the blockchain, which contains records of every historical transaction - effectively containing records of all account balances. Each account is identified solely by its unique public key (making it effectively anonymous) and is secured with its associated private key (kept secret, like a password). The combination of private and public cryptographic keys constitutes a secure digital identity in the form of a digital signature, providing strong control of ownership.

No single entity owns or operates the network. The infrastructure is collectively maintained by a decentralized public user base. As the network is decentralized, it does not rely on either governmental authorities or financial institutions to create, transmit or determine the value of the currency units. Rather, the value is determined by market factors, supply and demand for the units, the prices being set in transfers by mutual agreement or barter among transacting parties, as well as the number of merchants that may accept the cryptocurrency. Since transfers do not require involvement of intermediaries or third parties, there are currently little to no transaction costs in direct peer-to-peer transactions. Units of cryptocurrency can be converted to fiat currencies, such as the US dollar, at rates determined on various exchanges, such as Cumberland, Coinsquare (in Canada), Coinbase, Bitsquare, Bitstamp, and others. Cryptocurrency prices are quoted on various exchanges and fluctuate with extreme volatility.

We believe cryptocurrencies offer many advantages over traditional, fiat currencies, although many of these factors also present potential disadvantages and may introduce additional risks, including:

- · acting as a fraud deterrent, as cryptocurrencies are digital and cannot be counterfeited or reversed arbitrarily by a sender;
- · immediate settlement;
- · elimination of counterparty risk;
- · no trusted intermediary required;
- · lower fees;
- · identity theft prevention;
- · accessible by everyone;
- · transactions are verified and protected through a confirmation process, which prevents the problem of double spending;
- · decentralized no central authority (government or financial institution); and
- · recognized universally and not bound by government imposed or market exchange rates.

However, cryptocurrencies may not provide all of the benefits they purport to offer at all or at any time.

Bitcoin was first introduced in 2008 and was first introduced as a means of exchange in 2009. Bitcoin is a consensus network that enables a new payment system and a completely new form of digital money. It is the first decentralized peer-to-peer payment network that is powered by its users with no central authority or middlemen. From a user perspective, we believe bitcoin can be viewed as cash for the Internet. The bitcoin network shares a public ledger called the "blockchain." This ledger contains every transaction ever processed, allowing a user's computer to verify the validity of each transaction. The authenticity of each transaction is protected by digital signatures corresponding to the sending addresses, allowing all users to have full control over sending bitcoins currency rewards from their own bitcoin addresses. In addition, anyone can process transactions using the computing power of specialized hardware and earn a reward in bitcoins for this service. This process is often called "mining."

As with many new and emerging technologies, there are potentially significant risks. Businesses (including the Company) which are seeking to develop, promote, adopt, transact or rely upon blockchain technologies and cryptocurrencies have a limited track record and operate within an untested new environment. These risks are not only related to the businesses the Company pursues, but the sector and industry as a whole, as well as the entirety of the concept behind blockchain and cryptocurrency as value. Factors such as access to computer processing capacity, interconnectivity, electricity cost, environmental factors (such as cooling capacity) and location play an important role in "mining," which is the term for using the specialized computers in connection with the blockchain for the creation of new units of cryptocurrency.

Riot's Business

The Company, commencing in late 2017, concentrated on developing its cryptocurrency mining operations and investing in blockchain-focused technologies. The Company invested in several companies and internal initiatives with the intent of building and supporting blockchain technologies ecosystem. The Company experienced large accumulated historical losses from pre-2017 efforts to obtain regulatory approval for new medical devices and the manufacture and distribution of specialized medical equipment. These historical human life sciences businesses, excluding the animal health business, were shuttered following the adoption of the Company's strategic plan to shift to blockchain and cryptocurrency business.

Blockchain and Cryptocurrency Mining

The Company has built a cryptocurrency mining operation, operating specialized computers manufactured by BitmainTech PTE. LTD. ("Bitmain") (also known as "miners") that generate cryptocurrency (primarily bitcoin). As of December 31, 2018, the Company owned approximately 8,000 acquired as a result of the business combination with Kairos Global Technology, Inc. ("Kairos") in November 2017 and in February 2018, two separate transactions acquired additional miners. During February 2018, Kairos entered into a lease agreement for an approximately 107,000-square foot facility in Oklahoma City, Oklahoma, which included data center improvements. Upon the execution of the facility lease the Company began consolidating all of its miners at the data center facility. As of December 31, 2019, approximately 7,400 of the previously acquired miners were operating.

During December 2019, the Company purchased 4,000 next generation Bitmain S17 Pro Antminers for approximately \$6.4 million from Bitmain. In December 2019, 3,000 miners were received at the Company's Oklahoma City facility, and the remaining 1,000 were received in early 2020. As of December 31, 2019, the 3,000 received miners had not been placed in service; however, all of the 4,000 next generation miners were placed in service during the first quarter of 2020.

Halving

Further affecting the industry, and particularly for the bitcoin blockchain, the cryptocurrency reward for solving a block is subject to periodic incremental halving. Halving is a process designed to control the overall supply and reduce the risk of inflation in cryptocurrencies using a Proof-of-Work consensus algorithm. At a predetermined block, the mining reward is cut in half, hence the term "halving". For bitcoin, the reward was initially set at 50 bitcoin currency rewards per block and this was cut in half to 25 in November 28, 2012 at block 210,000 and again to 12.5 on July 9, 2016 at block 420,000. The next halving for bitcoin is expected in May 2020 at block 630,000 when the reward will reduce to 6.25. This process will reoccur until the total amount of bitcoin currency rewards issued reaches 21 million, which is expected to occur around 2140. Similarly, litecoin first halved on August 25, 2015 at block 840,000 from 50 to 25 and the second halving occurred on August 5, 2019 at block 1,680,000 from 25 to 12.5. The next halving for litecoin is expected in August 2023 at block 2,520,000 when the reward will reduce to 6.25. Many factors influence the price of bitcoin and litecoin and potential increases or decreases in prices in advance of or following a future halving is unknown.

Network Hash Rate and Difficulty

In cryptocurrency mining, "hash rate" is a measure of the processing speed by a mining computer for a specific coin. An individual miner, such as Riot has a hash rate total of its miners seeking to mine a specific coin, and system wide there is a total has rate of all miners seeking to mine each specific type of coin. The higher total hash rate of a specific miner, as a percentage of the system wide total hash rate, generally results over time in a corresponding higher success rate in coin rewards as compared to miners with lower hash rates.

"Difficulty" is a relative measure of how complex the process is made to successfully solve the algorithm and obtain a coin award. The difficulty is adjusted periodically generally as a function of how much hashing power is deployed by the network of miners and designed to maintain certain mining results so that, on average, 10 minutes, is required to produce a block, currently producing a reward of 12.5 bitcoin. If the block is exceeding the 10-minute goal and miners are struggling with a target difficulty set too high, the network reduces it and vice versa, with this protocol called difficulty retargeting. At each interval of 2,016 blocks being mined (which takes roughly two weeks), the network re-analyzes the interval and revises the difficulty index, if needed.

Mining Pools

A "mining pool" is the pooling of resources by miners, who share their processing power over a network and split rewards according to the amount of work they contributed to the probability of placing a block on the blockchain. Mining pools emerged in response to the growing difficulty and available hashing power that competes to place a block on the bitcoin blockchain.

The Company participates in mining pools wherein groups of miners associate to pool resources and earn cryptocurrency together allocated to each miner according to the "hashing" capacity they contribute to the pool. As additional miners competed for the limited supply of blocks, individuals found that they were working for months without finding a block and receiving any reward for their mining efforts. To address this variance, miners started organizing into pools to share mining rewards more evenly on a pro rata basis based on total hashing capacity contributed to the mining pool.

The mining pool operator provides a service that coordinates the computing power of the independent mining enterprise. Fees are paid to the mining pool operator to cover the costs of maintaining the pool. The pool uses software that coordinates the pool members' hashing power, identifies new block rewards, records how much work all the participants are doing, and assigns block rewards for successful algorithm solutions in-proportion to the individual hash rate that each participant contributed to a given successful mining transaction. While we do not pay pool fees directly, pool fees are deducted from amounts we may otherwise earn. Fees (and payouts) fluctuate and historically have been approximately 2% on average.

Mining pools are subject to various risks such as disruption and down time. Riot has internally created software that monitors its hashing performance and reward rates to monitor credits for our contributed hashing power. In the event that a pool experiences down time or not yielding returns, our results may be impacted.

Other Activities

We have previously made targeted investments in, and acquisitions of, businesses and assets within the blockchain ecosystem. As of December 31, 2019, we owned approximately 11.7% of the equity interest of Coinsquare, Ltd. ("Coinsquare"), which operates a leading Canadian exchange for purchasing and selling cryptocurrencies. We also owned approximately 3.2% (on a fully diluted basis) of Verady, LLC ("Verady"). Verady provides accounting, audit and verification services for blockchain based assets such as cryptocurrencies. We also owned approximately 8.8% of TessPay Inc., ("Tess"). Tess is developing TessPay ("TessPay") and other blockchain solutions for telecommunications companies. Until April 2019, we owned over 50% of Tess and it was included in our consolidated financial statements until our ownership was reduced due to subsequent financings by Tess. During the year ended December 31, 2018, we formed Digital Green Energy Corp., a wholly owned subsidiary, which sought to identify environmentally friendly projects with large energy capacity and a cost-effective rate for energy for cryptocurrency mining operations and data center projects. Due to regulatory changes in the target region as well as the decline in the price of various cryptocurrencies, we have suspended work at this subsidiary. Digital Green Energy's operations during 2019 and 2018 were not significant.

Logical Brokerage Corp/RiotX

On March 27, 2018, we acquired 92.5% of Logical Brokerage Corp. ("Logical Brokerage" also known as "RiotX") for a \$600,000 cash payment, which was accounted for as an asset acquisition. Logical Brokerage is registered with the Commodity Futures Trading Commission ("CFTC") as an introducing broker and a member of the National Futures Association ("NFA"). As of December 31, 2019, the Company, after evaluating the RiotX business plan with the advice and guidance of its Advisory Board consisting of bitcoin and blockchain thought leaders, determined to focus on its core cryptocurrency mining business and therefore, to not move forward with the RiotX / Logical Brokerage business development plan. The Company considered a number of factors when evaluating the RiotX decision including, but not limited to, the evolving regulatory environment, cybersecurity risks, and the current competitive landscape facing U.S. based cryptocurrency exchanges. The Company is exploring possible options for Logical Brokerage, but no option is expected to generate any material return to the Company.

Business Profile and Risks

The decision to pursue blockchain and cryptocurrency businesses exposes the Company to risks associated with a new and untested strategic direction. The prices of cryptocurrencies have experienced substantial volatility, which may reflect "bubble" type volatility, meaning that high or low prices may have little or no merit, may be subject to rapidly changing investor sentiment, and may be influenced by factors such as technology, regulatory void or changes, fraudulent actors, manipulation, and media reporting. The results of the Company's mining operations in generating and reporting revenues from its mining operations are reported under the fair value method of accounting under present accounting rules.

Competition

In cryptocurrency mining, companies, individuals and groups generate units of cryptocurrency through mining. Miners can range from individual enthusiasts to professional mining operations with dedicated data centers. Miners may organize themselves in mining pools. The Company competes or may in the future compete with other companies that focus all or a portion of their activities on owning or operating cryptocurrency exchanges, developing programming for the blockchain, and mining activities. At present, the information concerning the activities of these enterprises is not readily available as the vast majority of the participants in this sector do not publish information publicly or the information may be unreliable. Published sources of information include "bitcoin.org" and "blockchain.info"; however, the reliability of that information and its continued availability cannot be assured.

Several public companies (traded in the U.S. and Internationally), such as the following, may be considered to compete with us, although we believe there is no company, including the following, which engages in the same scope of activities as we do.

- · Overstock.com Inc.
- Bitcoin Investment Trust
- · Blockchain Industries, Inc. (formerly Omni Global Technologies, Inc.)
- · Bitfarms Technologies Ltd. (formerly Blockchain Mining Ltd)
- DMG Blockchain Solutions Inc.
- Digihost International, Inc.
- · Hive Blockchain Technologies Inc.
- · Hut 8 Mining Corp.
- · HashChain Technology, Inc.
- · MGT Capital Investments, Inc.
- DPW Holdings, Inc.
- Layer1 Technologies, LLC
- Northern Data AG

While there is limited available information regarding our non-public competitors, we believe that our recent acquisition and deployment of 4,000 Bitmain S17 Pro Antminers (as discussed further below) positions us well among the publicly traded companies involved in the cryptocurrency mining industry. The cryptocurrency industry is a highly competitive and evolving industry and new competitors and/or emerging technologies could enter the market and affect our competitiveness in the future. For more information regarding those risk factors known to us, see the section entitled "Risk Factors" herein.

Cryptocurrency Mining - Operation

Riot operates a recently updated cryptocurrency mining facility for the sole purpose of mining cryptocurrencies (primarily bitcoin, and to a much lesser degree litecoin and bitcoin cash). Our facility and mining platform are operating with the primary intent of accumulating bitcoin which we may sell for fiat currency from time to time depending on market conditions and management's determination of our cash flow needs. Our mining operation in Oklahoma hosted about 8,000 ASIC miners during 2018 and 2019 which have access to approximately 12 megawatts of power supplied to our leased facility. During December 2019, the Company purchased 4,000 next generation Bitmain S17 Pro Antminers which have now been installed and are currently operating in our Oklahoma City, Oklahoma mining facility. The Company is currently evaluating plans for its miners previously acquired in 2017 / 2018, which currently have been taken offline.

These 4,000 next generation Bitmain S17 Pro Antminers are capable of producing a substantial increase in our total available hashing rate (as discussed further below), at a significant efficiency increase over our S9 miners. The approximate hashing rate generated from our mining operation during 2018-2019, from our approximately 7,500 S9 miners generally ranged from 80-100 petahash per second ("PH/s"); whereas, the estimated maximum hashing rate generated by our 4,000 next generation Bitmain S17 Pro Antminers currently installed in our OKC mine is 248 ("PH/s") at full deployment. This significant increase in total hashing rate is achieved by approximately half the total number of miners. The above information regarding approximate maximum hashing rates are estimates only and the actual outputs of the mine are subject to changes based in part on the difficulty rates associated with the bitcoin network, as well as other conditions that impact our mining output.

The following table presents additional information about our cryptocurrencies activity in coins and amounts (\$ in thousands):

	Quantities (in coins)			Cryptocurrencies	
	BTC	BTC LTC BCH		Amounts	
Balance at January 1, 2018	8	86	29	\$	200
Revenue recognized from cryptocurrencies mined	1,020	3,023	479		7,749
Mining pool operating fees	_	_	_		(155)
Purchase of cryptocurrencies	500	_	_		5,625
Sale / trade of cryptocurrencies	(1,364)	(27)	(508)		(9,237)
Realized gain on sale of cryptocurrencies	_	_	_		26
Impairment of cryptocurrencies	_	_	_		(3,501)
Balance at December 31, 2018	164	3,082			707
Revenue recognized from cryptocurrencies mined	944	3,477	500		6,741
Mining pool operating fees	_	_	_		(135)
Purchase of miner equipment with cryptocurrencies	(9)	_	_		(99)
Sale / trade of cryptocurrencies	(585)	(3,110)	(499)		(3,196)
Realized gain on sale of cryptocurrencies	_	_	_		665
Impairment of cryptocurrencies	_	_	_		(844)
Balance at December 31, 2019	514	3,449	1	\$	3,839

Performance Metrics - Hashing

Riot operates mining hardware which performs computational operations in support of the blockchain measured in "hash rate" or "hashes per second." A "hash" is the computation run by mining hardware in support of the blockchain; therefore, a miner's "hash rate" refers to the rate at which it is capable of solving such computations. The original equipment used for mining bitcoin utilized the Central Processing Unit (CPU) of a computer to mine various forms of cryptocurrency. Due to performance limitations, CPU mining was rapidly replaced by the Graphics Processing Unit (GPU), which offers significant performance advantages over CPUs. General purpose chipsets like CPUs and GPUs have since been replaced in the mining industry by Application Specific Integrated Circuits (ASIC) chips like those found in the Bitmain S9 Antiminers and the next generation Bitmain S17 Pro Antiminers currently utilized by Riot at its mining facility. These ASIC chips are designed specifically to maximize the rate of hashing operations.

Riot measures our mining performance and competitive position based on overall hash rate being produced in our mining sites. The latest equipment utilized in Riot's OKC mining operation, the Bitmain S17 Pro Antminer, performs in the range of approximately 50 - 62 terahash per second (TH/s) per unit. This mining hardware is on the cutting edge of available mining equipment and we believe our acquisition of 4,000 units places us among leaders of publicly-traded cryptocurrency miners; however, advances and improvements to the technology are ongoing and may be available in quantities to the market in the near future which may affect our perceived position. We believe that our current inventory of 4,000 Bitmain S17 Pro Antminers establishes us among the top public companies in the United States mining cryptocurrency.

Government Regulation

Government regulation of blockchain and cryptocurrency is being actively considered by the United States federal government via a number of agencies and regulatory bodies, as well as similar entities in other countries. State government regulations also may apply to our activities such and other activities in which we participate or may participate in the future. Other regulatory bodies are governmental or semi-governmental and have shown an interest in regulating or investigating companies engaged in the blockchain or cryptocurrency business.

Regulations may substantially change in the future and it is presently not possible to know how regulations will apply to our businesses, or when they will be effective. As the regulatory and legal environment evolves, we may become subject to new laws, further regulation by the SEC and other agencies, which may affect our mining and other activities. For instance, various bills have also been proposed in Congress related to our business, which may be adopted and have an impact on us. For additional discussion regarding our belief about the potential risks existing and future regulation pose to our business, see the Section entitled "Risk Factors" herein.

Intellectual Property

We actively use specific hardware and software for our cryptocurrency mining operation. In certain cases, source code and other software assets may be subject to an open source license, as much technology development underway in this sector is open source. For these works, Riot intends to adhere to the terms of any license agreements that may be in place.

We do not currently own, and do not have any current plans to seek, any patents in connection with our existing and planned blockchain and cryptocurrency related operations. We do expect to rely upon trade secrets, trademarks, service marks, trade names, copyrights and other intellectual property rights and expect to license the use of intellectual property rights owned and controlled by others. In addition, we have developed and may further develop certain proprietary software applications for purposes of our cryptocurrency mining operation.

Legacy Business - Animal Health IP

We continue to own and maintain an animal health patent portfolio which originated under the exclusive license agreement with Washington University in St. Louis ("WU" or "Washington University in St. Louis"), under which we obtained intellectual property rights to WU's patent estate. This extensive portfolio consists of patents related to our animal health products that we previously had under development. The term of the WU License Agreement continues until the expiration of the WU's patents (as defined in the WU License Agreement). We reimburse WU for the costs of patent filings, namely prosecution and maintenance fees. Additional patents in the animal health portfolio have been filed by us outside of the WU License Agreement.

A patent filing for the recombinant luteinizing hormone technology was submitted in 2004, entitled "Methods and Kits for Maintaining Pregnancy, Treating Follicular Cysts, and Synchronizing Ovulation Using Luteinizing Hormone." This patent family claims methods of administering rLH, the timing of administration, and dosage given in order to increase formation of accessory corpora lutea and maintain pregnancies in treated animals. To date, five foreign patents have been granted for "Methods and Kits for Maintaining Pregnancy, Treating Follicular Cysts, and Synchronizing Ovulation Using Luteinizing Hormone," New Zealand patent 542549 was granted March 12, 2009 (expiring March 2024), Australia 2004218365 was granted May 27, 2010 (expiring March 2024), European patent 1610803 was granted December 15, 2010 (expiring March 2024), Canadian patent 2518268 was granted December 10, 2013 (expiring March 2024) and Brazil was granted May 31, 2016 (expiring March 4, 2026). The patent was granted by the European Patent Office and has been validated in the following countries: Belgium, France, Germany, Ireland, Italy, the Netherlands, Spain, Switzerland and the United Kingdom. Currently, there are additional foreign patent applications that are in prosecution.

A patent filing for the recombinant bovine follicle stimulating hormone technology was submitted in 2008, entitled "Compositions and Methods Including Expression and Bioactivity of Bovine Follicle Stimulating Hormone." This patent family claims the rbFSH single-chain itself, as well as methods of administering rbFSH, the timing of administration, and dosage given in order to increase reproduction, induce superovulation or increase embryo production in ungulates. In October of 2011, the first patent in this family was granted by the European Patent Office (2134165), expiring October 12, 2028. The patent has also been granted in New Zealand (579740), expiring October 1, 2028. Following the grant of the patent in 2011 by the European Patent Office, the patent was validated in the following countries: France, Germany, Italy and the Netherlands. In August 2013, the patent was granted in the United States (8518881 B2) expiring February 8, 2028, followed in November 2013 by the grant in Australia (2008213567) expiring February 8, 2028. The patent was granted for Canada (2,685,437) on June 2, 2015 and will expire February 8, 2028. Currently, there are additional foreign patent applications that are in prosecution.

A patent filing for the equine follicle stimulating hormone technology was filed in 2008, entitled "Activity of Recombinant Equine Follicle Stimulating Hormone." This patent family provides coverage for the single chain eFSH itself, methods of administering reFSH, the timing of administration, and dosage given in order to increase reproductive activity in treated animals. The first patent in the patent family was granted in China in April 2013 (200880123523.8) expiring November 28, 2028. The U.S. Patent for this family was granted in September 2014 (8,835,386) expiring November 28, 2028. The patent was granted for Canada (2,685,437) on June 2, 2015 and will expire February 8, 2028. The European patent was granted in August 2018 (2244717), expires November 2028 and includes the following countries: Belgium, Germany, France, Great Britain, Italy and the Netherlands. Currently, there are additional foreign patent applications that are in prosecution.

The Company's animal health intellectual property has been licensed under the long-term agreement Ceva agreement under which the licensee continues to develop drugs for commercial use in non-human mammals.

Research and Development

As part of our normal operating activities we actively explore advanced methods of managing cryptocurrency mining operations at scale. This includes monitoring software, management tools, and programmable hardware components for gathering data and the configuration of mining equipment. This work includes software tools supporting at scale management of the Bitmain "Antminer" family of systems. These devices have an application interface that is accessible to users for the purposes of automation, monitoring and software maintenance. The existing software that is provided directly from the manufacturer is not designed for the scale or size of our operation. The mining operations rely on this technology to help streamline our daily system management, provide near real time reporting of faults and deliver configuration updates to the entire fleet of miners. We have also adapted these technologies to leverage cloud computing in order to offer access to these tools across a global footprint of mining sites. Our costs to date in such development activities have been nominal.

Employees

As of March 10, 2020, we had six full-time employees. We believe our employee relations to be good. Currently, our activities rely on the services of three individual consultants under support agreements to manage and maintain our miners.

Corporate Information

Our principal executive office is located at 202 6th Street, Suite 401, Castle Rock, CO 80104, which is where our records are kept and the principal business address for our Chief Executive Officer and accounting staff. Our principal operating location which was leased in 2018 is a 107,000-square foot data center facility in Oklahoma City, Oklahoma. Our Florida office is a leased 1,700 square foot office space which opened in 2018 and is located at One Financial Plaza, 100 SE 3rd Ave., Fort Lauderdale, Florida 33394.

We were incorporated on July 24, 2000 in the State of Colorado under the name AspenBio, Inc., which was subsequently changed to AspenBio Pharma, Inc. We have gone through several subsequent name changes: in December 2012, we changed our name to Venaxis, Inc.; in 2016 we changed our name to Bioptix, Inc.; and, effective October 19, 2017 we adopted our present corporate name, Riot Blockchain, Inc. and changed our state of incorporation to Nevada. Our website address is www.riotblockchain.com. Our telephone number is (303) 794-2000.

Available Information

You can access, free of charge, our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to these reports as filed with the SEC under the Securities Exchange Act of 1934, as amended on the SEC's website www.sec.gov. These documents may also be accessed on our website: www.riotblockchain.com. These documents are placed on our website as soon as is reasonably practicable after their filing with the SEC. The information contained in, or that can be accessed through, the website is not part of this Annual Report on Form 10-K.

ITEM 1A. — RISK FACTORS

An investment in the Company's common stock involves a high degree of risk, and an investor should only purchase the Company's securities if he or she can afford to suffer the loss of his or her entire investment. In determining whether to purchase the Company's common stock, an investor should carefully consider all of the material risks described below, together with the other information contained in this report and the Company's other public filings before making a decision to purchase the Company's securities. In addition to the risks discussed below, other risks not presently known to us or that we currently believe to be immaterial may materially and adversely affect our business, financial condition and results of operations, perhaps materially. The risks discussed below also include forward-looking statements, and actual results and events may differ substantially from those discussed or highlighted in those forward-looking statements. See also the Section entitled "Forward-Looking Statements" on Page 3 of this Annual Report of Form 10-K.

General Risks

We have a history of operating losses, and we may not be able to achieve or sustain profitability; we have recently shifted our focus to our blockchain and cryptocurrency mining business, and we may not be successful in this business.

We are not profitable and have incurred losses since our inception. We expect to continue to incur losses for the foreseeable future, and these losses could increase as we continue to work to develop our business. We were previously engaged in animal health and life science-oriented businesses and were not successful in those businesses. In late 2017, we determined to instead pursue a blockchain and cryptocurrency related business, initially through investments in existing companies. Currently, our primary operations are focused on our cryptocurrency mining business located at our cryptocurrency mining facility in Oklahoma City, Oklahoma. Our current strategy is new and unproven, is in an industry that is itself new and evolving and is subject to the risks discussed below. This strategy, like our prior ones, may not be successful, and we may never become profitable. Even if we achieve profitability in the future, we may not be able to sustain profitability in subsequent periods.

We have a history of operating losses, and we may not be able to achieve or sustain profitability.

We have experienced recurring losses and negative cash flows from operations. As of December 31, 2019, we had approximate balances of cash and cash equivalents of \$7.4 million, working capital of \$9.3 million, total stockholders' equity of \$26.2 million and an accumulated deficit of \$217.2 million. To date, we have, in large part, relied on equity financings to fund our operations.

Our primary focus is on our digital currency mining operation located in Oklahoma City, Oklahoma, along with our investments in Coinsquare, Verady and Tess. Our current strategy will continue to expose us to the numerous risks and volatility associated within this sector.

We expect to continue to incur losses from operations for the near-term and these losses could be significant as we incur costs and expenses associated with recent investments and potential future acquisitions, as well as public company, legal and administrative related expenses. We are closely monitoring our cash balances, cash needs and expense

Our mining operating costs outpace our mining revenues, which could seriously harm our business or increase our losses.

Our mining operations are costly and our expenses may increase in the future. This expense increase may not be offset by a corresponding increase in revenue. Our expenses may be greater than we anticipate, and our investments to make our business more efficient may not succeed and may outpace monetization efforts. Increases in our costs without a corresponding increase in our revenue would increase our losses and could seriously harm our business and financial performance.

If we are unable to successfully renew our lease for our Oklahoma City, Oklahoma cryptocurrency mining facility on acceptable terms or otherwise relocate to a replacement facility, our operations may be disrupted, and our business results may suffer.

On May 15, 2020, the current term of the existing lease of our cryptocurrency mining facility in Oklahoma City, Oklahoma (our "mine") expires. We cannot guarantee that we will be able to successfully renew the lease on terms acceptable to the Company. Although we have been successful in renewing the lease in the past, there can be no assurances that our landlord will permit us to renew or that we will be able to negotiate terms acceptable to both our management team and the landlord. If we are unable to successfully negotiate an extension of our existing lease, we may be forced to relocate our mine to another facility.

If we are forced to relocate our mine, we may not be successful in identifying adequate replacement facilities to house our miners. And even if we do identify such facilities, we may not be successful in leasing those facilities at rates that are economically viable to support our mining activities. Relocating our mine will require us to incur costs to transition to a new facility including, but not limited to, transportation expenses and insurance, downtime while we are unable to mine, legal fees to negotiate the new lease, deinstallation at our current facility and, ultimately, installation at any new facility we identify. These costs may be substantial, and we cannot guarantee that we will be successful in transitioning our miners to a new facility. If we are required to move our mine, or if negotiations to renew our existing lease on our Oklahoma City, Oklahoma facility result in unfavorable terms for our mine, our business may suffer and the results of our operations may be adversely affected.

We may be unable to raise additional capital needed to grow our business.

We will likely continue to operate at a loss, at least until our business becomes established, or if cryptocurrency prices decline, and we expect to need to raise additional capital to expand our operations and pursue our growth strategies, including potential acquisitions of complementary businesses, and to respond to competitive pressures or unanticipated working capital requirements. We may not be able to obtain additional debt or equity financing on favorable terms, if at all, which could impair our growth and adversely affect our existing operations. If we raise additional equity financing, our stockholders may experience significant dilution of their ownership interests, and the per value of our common stock could decline. Furthermore, if we engage in additional debt financing, the holders of debt likely would have priority over the holders of common stock on order of payment preference. We may be required to accept terms that restrict our ability to incur additional indebtedness, take other actions including terms that require us to maintain specified liquidity or other ratios that could otherwise not be in the interests of our stockholders.

We have an evolving business model which is subject to various uncertainties.

As cryptocurrency assets and blockchain technologies become more widely available, we expect the services and products associated with them to evolve. In order to stay current with the industry, our business model may need to evolve as well. From time to time, we may modify aspects of our business model relating to our strategy. We cannot offer any assurance that these or any other modifications will be successful or will not result in harm to our business. We may not be able to manage growth effectively, which could damage our reputation, limit our growth and negatively affect our operating results. Further, we cannot provide any assurance that we will successfully identify all emerging trends and growth opportunities in this business sector and we may lose out on those opportunities. Such circumstances could have a material adverse effect on our business, prospects or operations.

We may acquire other businesses, form joint ventures or acquire other companies or businesses that could negatively affect our operating results, dilute our stockholders' ownership, increase our debt or cause us to incur significant expense; notwithstanding the foregoing, our growth may depend on our success in uncovering and completing such transactions.

We are actively considering strategic opportunities with the support of our external advisors, however, we cannot offer any assurance that acquisitions of businesses, assets and/or entering into strategic alliances or joint ventures will be successful. We may not be able to find suitable partners or acquisition candidates and may not be able to complete such transactions on favorable terms, if at all. If we make any acquisitions, we may not be able to integrate these acquisitions successfully into the existing business and could assume unknown or contingent liabilities.

Any future acquisitions also could result in the issuance of stock, incurrence of debt, contingent liabilities or future write-offs of intangible assets or goodwill, any of which could have a negative impact on our cash flows, financial condition and results of operations. Integration of an acquired company may also disrupt ongoing operations and require management resources that otherwise would be focused on developing and expanding our existing business. We may experience losses related to potential investments in other companies, which could harm our financial condition and results of operations. Further, we may not realize the anticipated benefits of any acquisition, strategic alliance or joint venture if such investments do not materialize.

To finance any acquisitions or joint ventures, we may choose to issue shares of common stock, preferred stock or a combination of debt and equity as consideration, which could significantly dilute the ownership of our existing stockholders or provide rights to such preferred stock holders in priority over our common stock holders. Additional funds may not be available on terms that are favorable to us, or at all. If the price of our common stock is low or volatile, we may not be able to acquire other companies or fund a joint venture project using stock as consideration.

We may not be able to compete with other companies, some of whom have greater resources and experience.

We may not be able to compete successfully against present or future competitors. We do not have the resources to compete with larger providers of similar services at this time. The cryptocurrency industry has attracted various high-profile and well-established operators, some of which have substantially greater liquidity and financial resources than we do. With the limited resources we have available, we may experience great difficulties in expanding and improving our network of computers to remain competitive. Competition from existing and future competitors, particularly Facebook, Inc. and the many Canadian companies that have access to more competitively priced energy, could result in our inability to secure acquisitions and partnerships that we may need to expand our business in the future. This competition from other entities with greater resources, experience and reputations may result in our failure to maintain or expand our business, as we may never be able to successfully execute our business plan. If we are unable to expand and remain competitive, our business could be negatively affected which would have an adverse effect on the trading price of our securities, which would harm investors in our Company.

Facebook's development of a cryptocurrency may adversely affect the value of bitcoin and other cryptocurrencies.

In May 2019, Facebook announced its plans for a cryptocurrency called Libra, which faced significant government intervention. The massive social network and 27 other partners are estimating that the Libra digital coin and Facebook's corresponding digital wallet, Calibra, would be a way to make sending payments around the world as easy as it is to send a photo. Facebook's significant resources and ability to engage the world via social media may enable it to bring Libra to market rapidly and to deploy it across industries more rapidly and successfully than previous cryptocurrencies. Facebook's size and market share may cause its cryptocurrency to succeed to the detriment and potential exclusion of existing cryptocurrencies, such as our primary cryptocurrency asset, bitcoin.

The properties included in our mining network may experience damages, including damages that are not covered by insurance.

Our current mining operation in Oklahoma City, Oklahoma is, and any future mines we establish will be, subject to a variety of risks relating to physical condition and operation, including:

- · the presence of construction or repair defects or other structural or building damage;
- any noncompliance with or liabilities under applicable environmental, health or safety regulations or requirements or building permit requirements;
- · any damage resulting from natural disasters, such as hurricanes, earthquakes, fires, floods and windstorms; and
- claims by employees and others for injuries sustained at our properties.

For example, our mine could be rendered inoperable, temporarily or permanently, as a result of a fire or other natural disaster or by a terrorist or other attack on the mine. The security and other measures we take to protect against these risks may not be sufficient. Additionally, our mine could be materially adversely affected by a power outage or loss of access to the electrical grid or loss by the grid of cost-effective sources of electrical power generating capacity. Given the power requirement, it would not be feasible to run miners on back-up power generators in the event of a power outage. Our insurance covers the replacement cost of any lost or damaged miners, but does not cover any interruption of our mining activities; our insurance therefore may not be adequate to cover the losses we suffer as a result of any of these events. In the event of an uninsured loss, including a loss in excess of insured limits, at any of the mines in our network, such mines may not be adequately repaired in a timely manner or at all and we may lose some or all of the future revenues anticipated to be derived from such mines. The potential impact on our business is currently magnified because we are only operating a single mine.

Our loss of any of our management team, our inability to execute an effective succession plan, or our inability to attract and retain qualified personnel, could adversely affect our business.

Our success and future growth will depend to a significant degree on the skills and services of our management, including our Chief Executive Officer and Chief Financial Officer. We will need to continue to grow our management in order to alleviate pressure on our existing team and in order to continue to develop our business. If our management, including any new hires that we may make, fails to work together effectively and to execute our plans and strategies on a timely basis, our business could be harmed. Furthermore, if we fail to execute an effective contingency or succession plan with the loss of any member of management, the loss of such management personnel may significantly disrupt our business.

The loss of key members of management could inhibit our growth prospects. Our future success also depends in large part on our ability to attract, retain and motivate key management and operating personnel. As we continue to develop and expand our operations, we may require personnel with different skills and experiences, and who have a sound understanding of our business and the cryptocurrency industry. The market for highly qualified personnel in this industry is very competitive and we may be unable to attract such personnel. If we are unable to attract such personnel, our business could be harmed.

We, and some of our current officers and directors, have been named as parties to various lawsuits arising out of, or related to, allegedly false and misleading statements made in prior securities filings, and those lawsuits could adversely affect us, require significant management time and attention, result in significant legal expenses or damages, and cause our business, financial condition, results of operations and cash flows to suffer.

A number of securities class action complaints and a stockholder derivative action have been filed against us and certain of our current officers and directors, as described more fully in Item 3, Legal Proceedings. Stockholders have filed three class action complaints against us in three states, accusing us of violations of the federal securities laws based on purported material misrepresentations or omissions allegedly made by the Company. Each class action complaint seeks unspecified money damages and other relief on behalf of a putative class of persons who purchased or otherwise acquired our common stock between November 13, 2017 and February 15, 2018. The stockholder derivative case alleges similar disclosure violations and seeks unspecified monetary damages and corporate governance reforms. If these matters cannot be resolved expeditiously, management's attention may be diverted to this matter and there can be no assurance that the litigation would be settled. If the current litigation proceeds or if additional claims are filed, the legal and other costs associated with the defense of these actions and their ultimate outcomes could have a material adverse effect on our business, financial condition and results of operations. While we expect insurance to cover many of the costs associated with defending such litigation, including claims for indemnification made by our existing and former management team and members of our Board of Directors, insurance coverage may be insufficient and could require a diversion of our resources. There also may be adverse publicity associated with litigation that could negatively affect customer perception of our business, regardless of whether the allegations are valid or whether we are ultimately found liable.

We incur significant costs and demands upon management and accounting and finance resources as a result of complying with the laws and regulations affecting public companies; if we fail to maintain proper and effective internal controls, our ability to produce accurate and timely financial statements could be impaired, which could harm our operating results, our ability to operate our business and our reputation.

As a public reporting company, we are required to, among other things, maintain a system of effective internal control over financial reporting. Ensuring that we have adequate internal financial and accounting controls and procedures in place so that we can produce accurate financial statements on a timely basis is a costly and time-consuming effort that needs to be re-evaluated frequently. Substantial work will continue to be required to further implement, document, assess, test and remediate our system of internal controls.

If our internal control over financial reporting is not effective, we may be unable to issue our financial statements in a timely manner, we may be unable to obtain the required audit or review of our financial statements by our independent registered public accounting firm in a timely manner or we may be otherwise unable to comply with the periodic reporting requirements of the SEC, our common stock listing on the NASDAQ could be suspended or terminated and our stock price could materially suffer. In addition, we or members of our management could be subject to investigation and sanction by the SEC and other regulatory authorities and to stockholder lawsuits, which could impose significant additional costs on us and divert management attention.

We identified material weaknesses in our internal control over financial reporting in the prior year and may identify additional material weaknesses in the future or otherwise fail to maintain an effective system of internal controls, which may result in material misstatements of our financial statements or cause us to fail to meet our periodic reporting obligations.

We are required to comply with certain provisions of Section 404 of the Sarbanes-Oxley Act of 2002 ("Sarbanes-Oxley Act"). Section 404 requires that we document and test our internal control over financial reporting and issue management's assessment of our internal control over financial reporting. Management assessed the effectiveness of our internal control over financial reporting as of December 31, 2019. In making this assessment, we used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in Internal Control — Integrated Framework. A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of our annual or interim financial statements will not be prevented or detected on a timely basis. Based on our assessment, as of December 31, 2019, we concluded that our internal control over financial reporting contained material weaknesses. To remediate these material weaknesses, our management has been implementing and continues to implement measures designed to ensure that control deficiencies contributing to the material weakness are remediated, such that these controls are designed, implemented, and operating effectively.

We believe that these actions will remediate the material weakness. The weakness will not be considered remediated, however, until the applicable controls operate for a sufficient period of time and our management has concluded, through testing, that these controls are operating effectively. We expect that the remediation of this material weakness will be completed prior to the end of our next fiscal year on December 31, 2020.

If we fail to comply with the requirements of Section 404 of the Sarbanes-Oxley Act, the accuracy and timeliness of the filing of our annual and quarterly reports may be materially adversely affected and could cause investors to lose confidence in our reported financial information, which could have a negative effect on the trading price of our common stock. In addition, a material weakness in the effectiveness of our internal control over financial reporting could result in an increased chance of fraud and the loss of customers, reduce our ability to obtain financing and require additional expenditures to comply with these requirements, each of which could have a material adverse effect on our business, results of operations and financial condition.

Because cryptocurrencies may be determined to be investment securities, we may inadvertently violate the Investment Company Act and incur large losses as a result and potentially be required to register as an investment company or terminate operations and we may incur third party liabilities.

We believe that we are not engaged in the business of investing, reinvesting, or trading in securities, and we do not hold ourselves out as being engaged in those activities. However, under the Investment Company Act a company may be deemed an investment company under section 3(a)(1)(C) thereof if the value of its investment securities is more than 40% of its total assets (exclusive of government securities and cash items) on an unconsolidated basis.

As a result of our investments and our mining activities, including investments in which we do not have a controlling interest, the investment securities we hold could exceed 40% of our total assets, exclusive of cash items and, accordingly, we could determine that we have become an inadvertent investment company. The cryptocurrency we own, acquire or mine may be deemed an investment security by the SEC, although we do not believe any of the cryptocurrencies we own, acquire or mine are securities. An inadvertent investment company can avoid being classified as an investment company if it can rely on one of the exclusions under the Investment Company Act. One such exclusion, Rule 3a-2 under the Investment Company Act, allows an inadvertent investment company a grace period of one year from the earlier of (a) the date on which an issuer owns securities and/or cash having a value exceeding 50% of the issuer's total assets on either a consolidated or unconsolidated basis and (b) the date on which an issuer owns or proposes to acquire investment securities having a value exceeding 40% of the value of such issuer's total assets (exclusive of government securities and cash items) on an unconsolidated basis. As of December 31, 2018, we do not believe we are an inadvertent investment company, however resolution of pending comments received from the SEC have not been concluded and this issue has not been resolved by SEC rules or regulations. For us, any grace period would be unknown until these issues are resolved or the SEC issues rules and regulations concerning cryptocurrency treatment. We may take actions to cause the investment securities held by us to be less than 40% of our total assets, which may include acquiring assets with our cash and cryptocurrency on hand or liquidating our investment securities or cryptocurrency or seeking a no-action letter from the SEC if we are unable to acquire sufficient assets or liquidate sufficient investment securities in a timely manner.

As the Rule 3a-2 exception is available to a company no more than once every three years, and assuming no other exclusion were available to us, we would have to keep within the 40% limit for at least three years after we cease being an inadvertent investment company. This may limit our ability to make certain investments or enter into joint ventures that could otherwise have a positive impact on our earnings. In any event, we do not intend to become an investment company engaged in the business of investing and trading securities.

Classification as an investment company under the Investment Company Act requires registration with the SEC. If an investment company fails to register, it would have to stop doing almost all business, and its contracts would become voidable. Registration is time consuming and restrictive and would require a restructuring of our operations, and we would be very constrained in the kind of business we could do as a registered investment company. Further, we would become subject to substantial regulation concerning management, operations, transactions with affiliated persons and portfolio composition, and would need to file reports under the Investment Company Act regime. The cost of such compliance would result in the Company incurring substantial additional expenses, and the failure to register if required would have a materially adverse impact to conduct our operations.

The Company previously received a subpoena from the SEC, the costs of which may not be covered, in whole or in part by director and officer insurance.

On April 9, 2018, the Company received a subpoena from the SEC requesting certain information from the Company. The Company fully cooperated with the SEC request. The Company notified its insurance carrier and is in a dispute regarding potential coverage, although there can be no assurance that the costs of compliance with the subpoena or any related matters will be eligible for insurance coverage. Nevertheless, the circumstances involving that subpoena may continue to entail cost and management's attention.

As reported on its Current Report on Form 8-K filed on February 3, 2020, on January 29, 2020, the Company received written notice from the Division of Enforcement of the SEC that it had concluded its investigation of Riot. According to the notice, the SEC has concluded its investigation of Riot and, based on the information available to the SEC as of the date of the notice, the SEC does not intend to recommend an enforcement action against Riot with respect to the matters investigated by the SEC. Any investigation of the Company in the future by the SEC could have a materially adverse effect on the Company, its business or operations.

Our insurance may by inadequate to cover existing and future claims against the Company and our ability to pay for such claims may be limited, which may adversely affect our business.

As discussed under Item 3, "Legal Proceedings," hereof, we currently face several stockholder derivative cases and we may face additional claims in the future, all of which may result in claims for indemnification by our officers and directors (both present and past) named in such claims. If our existing insurance policies expire or are otherwise inadequate to cover such liabilities and claims for indemnification, we may be required to pay for such liabilities directly, which could negatively affect our liquidity. To the extent we are required to pay for such liabilities directly, our available cash reserves will be affected, which may affect our ability to respond to market conditions and to pay for other emergent expenses, which could negatively affect the results of our operations and our business.

Cryptocurrency-Related Risks

Regulatory changes or actions may alter the nature of an investment in us or restrict the use of cryptocurrencies in a manner that adversely affects our business, prospects or operations.

As cryptocurrencies have grown in both popularity and market size, governments around the world have reacted differently to cryptocurrencies; certain governments have deemed them illegal, and others have allowed their use and trade without restriction, while in some jurisdictions, such as in the U.S., subject to extensive, and in some cases overlapping, unclear and evolving regulatory requirements. Ongoing and future regulatory actions may impact our ability to continue to operate, and such actions could affect our ability to continue as a going concern or to pursue our new strategy at all, which could have a material adverse effect on our business, prospects or operations.

The development and acceptance of cryptographic and algorithmic protocols governing the issuance of and transactions in cryptocurrencies is subject to a variety of factors that are difficult to evaluate.

The use of cryptocurrencies to, among other things, buy and sell goods and services and complete transactions, is part of a new and rapidly evolving industry that employs cryptocurrency assets based upon a computer-generated mathematical and/or cryptographic protocol. Large-scale acceptance of cryptocurrencies as a means of payment has not, and may never, occur. The growth of this industry in general, and the use of cryptocurrencies in particular, is subject to a high degree of uncertainty, and the slowing or stopping of the development or acceptance of developing protocols may occur unpredictably. The factors include, but are not limited to:

- · continued worldwide growth in the adoption and use of cryptocurrencies as a medium to exchange;
- governmental and quasi-governmental regulation of cryptocurrencies and their use, or restrictions on or regulation of access to and operation of the network or similar cryptocurrency systems;
- \cdot $\;$ changes in consumer demographics and public tastes and preferences;
- · the maintenance and development of the open-source software protocol of the network;
- · the increased consolidation of contributors to the bitcoin blockchain through mining pools;

- · the availability and popularity of other forms or methods of buying and selling goods and services, including new means of using fiat currencies;
- the use of the networks supporting cryptocurrencies for developing smart contracts and distributed applications;
- · general economic conditions and the regulatory environment relating to cryptocurrencies; and
- · negative consumer sentiment and perception of bitcoin specifically and cryptocurrencies generally.

The outcome of these factors could have negative effects on our ability to continue as a going concern or to pursue our business strategy at all, which could have a material adverse effect on our business, prospects or operations as well as potentially negative effect on the value of any bitcoin or other cryptocurrencies we mine or otherwise acquire or hold for our own account, which would harm investors in our securities.

Banks and financial institutions may not provide banking services, or may cut off services, to businesses that engage in cryptocurrency-related activities or that accept cryptocurrencies as payment, including financial institutions of investors in our securities.

A number of companies that engage in bitcoin and/or other cryptocurrency-related activities have been unable to find banks or financial institutions that are willing to provide them with bank accounts and other services. Similarly, a number of companies and individuals or businesses associated with cryptocurrencies may have had and may continue to have their existing bank accounts closed or services discontinued with financial institutions in response to government action, particularly in China, where regulatory response to cryptocurrencies has been to exclude their use for ordinary consumer transactions within China. We also may be unable to obtain or maintain these services for our business. The difficulty that many businesses that provide bitcoin and/or derivatives on other cryptocurrency-related activities have and may continue to have in finding banks and financial institutions willing to provide them services may be decreasing the usefulness of cryptocurrencies as a payment system and harming public perception of cryptocurrencies, and could decrease their usefulness and harm their public perception in the future.

The usefulness of cryptocurrencies as a payment system and the public perception of cryptocurrencies could be damaged if banks or financial institutions were to close the accounts of businesses engaging in bitcoin and/or other cryptocurrency-related activities. This could occur as a result of compliance risk, cost, government regulation or public pressure. The risk applies to securities firms, clearance and settlement firms, national stock and derivatives on commodities exchanges, the over-the-counter market, and the Depository Trust Company, which, if any of such entities adopts or implements similar policies, rules or regulations, could negatively affect our relationships with financial institutions and impede our ability to convert cryptocurrencies to fiat currencies. Such factors could have a material adverse effect on our ability to continue as a going concern or to pursue our new strategy at all, which could have a material adverse effect on our business, prospects or operations and harm investors.

We may face risks of Internet disruptions, which could have an adverse effect on the price of cryptocurrencies.

A disruption of the Internet may affect the use of cryptocurrencies and subsequently the value of our securities. Generally, cryptocurrencies and our business of mining cryptocurrencies is dependent upon the Internet. A significant disruption in Internet connectivity could disrupt a currency's network operations until the disruption is resolved and have an adverse effect on the price of cryptocurrencies and our ability to mine cryptocurrencies.

The impact of geopolitical and economic events on the supply and demand for cryptocurrencies is uncertain.

Geopolitical crises may motivate large-scale purchases of bitcoin and other cryptocurrencies, which could increase the price of bitcoin and other cryptocurrencies rapidly. This may increase the likelihood of a subsequent price decrease as crisis-driven purchasing behavior dissipates, adversely affecting the value of our inventory following such downward adjustment. Such risks are similar to the risks of purchasing commodities in general uncertain times, such as the risk of purchasing, holding or selling gold. Alternatively, as an emerging asset class with limited acceptance as a payment system or commodity, global crises and general economic downturn may discourage investment in cryptocurrencies as investors focus their investment on less volatile asset classes as a means of hedging their investment risk.

As an alternative to fiat currencies that are backed by central governments, cryptocurrencies, which are relatively new, are subject to supply and demand forces. How such supply and demand will be impacted by geopolitical events is largely uncertain but could be harmful to us and investors in our common stock. Political or economic crises may motivate large-scale acquisitions or sales of cryptocurrencies either globally or locally. Such events could have a material adverse effect on our ability to continue as a going concern or to pursue our new strategy at all, which could have a material adverse effect on our business, prospects or operations and potentially the value of any bitcoin or any other cryptocurrencies we mine or otherwise acquire or hold for our own account.

We face risks related to the novel Coronavirus (COVID-19) outbreak, which could significantly disrupt our operations and financial results.

Our business will be adversely impacted by the effects of the novel Coronavirus (COVID-19). In addition to global macroeconomic effects, the novel Coronavirus (COVID-19) outbreak and any other related adverse public health developments will cause disruption to the activities of our international suppliers and, potentially, our mining activities.

The novel Coronavirus (COVID-19) or other disease outbreak will in the short-term, and may over the longer term, adversely affect the economies and financial markets of many countries, resulting in an economic downturn that may adversely affect demand for bitcoin and impact our operating results. Although the magnitude of the movel Coronavirus (COVID-19) outbreak on our business and operations remains uncertain, the continued spread of the novel Coronavirus (COVID-19) or the occurrence of other epidemics and the imposition of related public health measures and travel and business restrictions will adversely impact our business, financial condition, operating results and cash flows. In addition, we have experienced and will experience disruptions to our business operations resulting from quarantines, self-isolations, or other movement and restrictions on the ability of our employees to perform their jobs. If we are unable to effectively service our miners, our ability to mine bitcoin will be adversely affected as miners go offline, which would have an adverse effect on our business and the results of our operations.

China has also limited the shipment of products in and out of its borders, which could negatively impact our ability to receive mining equipment from our China-based suppliers. Our third-party manufacturers, suppliers, sub-contractors and customers have been and will continue to be disrupted by worker absenteeism, quarantines, restrictions on employees' ability to work, office and factory closures, disruptions to ports and other shipping infrastructure, border closures, or other travel or health-related restrictions. Depending on the magnitude of such effects on our supply chain, shipments of parts for our existing miners, as well as any new miners we purchase, may be delayed. As our miners require repair or become obsolete and require replacement, our ability to obtain adequate replacements or repair parts from their manufacturer may therefore be hampered. Supply chain disruptions could therefore negatively impact our operations. If not resolved quickly, the impact of the novel Coronavirus (COVID-19) global pandemic could have a material adverse effect on our business.

The coronavirus pandemic is an emerging serious threat to health and economic wellbeing affecting our employees, investors and our sources of supply.

On March 11, 2020, the World Health Organization announced that infections of the novel Coronavirus (COVID-19) had become pandemic, and on March 13, the U.S. President announced a National Emergency relating to the disease. There is a possibility of widespread infection in the United States and abroad, with the potential for catastrophic impact. National, state and local authorities have recommended social distancing and imposed or are considering quarantine and isolation measures on large portions of the population, including mandatory business closures. These measures, while intended to protect human life, are expected to have serious adverse impacts on domestic and foreign economies of uncertain severity and duration. The effectiveness of economic stabilization efforts, including proposed government payments to affected citizens and industries, is uncertain. Some economists are predicting the United States will soon enter a recession.

The sweeping nature of the novel Coronavirus (COVID-19) pandemic makes it extremely difficult to predict how the company's business and operations will be affected in the longer run. However, the likely overall economic impact of the pandemic is viewed as highly negative to the general economy. We have not been classified as an essential business in the jurisdictions that have decided that issue to date, and we may not be allowed to access our mine or offices. We may also be forced to close for other reasons such as the health of our associates or because of disruptions in the continued operation of our supply chain and sources of supply.

Any of the foregoing factors, or other cascading effects of the novel Coronavirus (COVID-19) pandemic that are not currently foreseeable, could materially increase our costs, negatively impact our sales and damage the company's results of operations and its liquidity position, possibly to a significant degree. The duration of any such impacts cannot be predicted.

Acceptance and/or widespread use of cryptocurrency is uncertain.

Currently, there is a relatively limited use of any cryptocurrency in the retail and commercial marketplace, thus contributing to price volatility that could adversely affect an investment in our securities. Banks and other established financial institutions may refuse to process funds for cryptocurrency transactions, process wire transfers to or from cryptocurrency exchanges, cryptocurrency-related companies or service providers, or maintain accounts for persons or entities transacting in cryptocurrency. Conversely, a significant portion of cryptocurrency demand is generated by investors seeking a long-term store of value or speculators seeking to profit from the short- or long-term holding of the asset. Price volatility undermines any cryptocurrency's role as a medium of exchange, as retailers are much less likely to accept it as a form of payment. Market capitalization for a cryptocurrency as a medium of exchange and payment method may always be low.

The relative lack of acceptance of cryptocurrencies in the retail and commercial marketplace, or a reduction of such use, limits the ability of end users to use them to pay for goods and services. Such lack of acceptance or decline in acceptances could have a material adverse effect on our ability to continue as a going concern or to pursue our new strategy at all, which could have a material adverse effect on our business, prospects or operations and potentially the value of bitcoin or any other cryptocurrencies we mine or otherwise acquire or hold for our own account.

Transactional fees may decrease demand for bitcoin and prevent expansion.

As the number of bitcoins currency rewards awarded for solving a block in a blockchain decreases, the incentive for miners to continue to contribute to the bitcoin network may transition from a set reward to transaction fees.

In order to incentivize miners to continue to contribute to the bitcoin network, the bitcoin network may either formally or informally transition from a set reward to transaction fees earned upon solving a block. This transition could be accomplished by miners independently electing to record in the blocks they solve only those transactions that include payment of a transaction fee. If transaction fees paid for bitcoin transactions become too high, the marketplace may be reluctant to accept bitcoin as a means of payment and existing users may be motivated to switch from bitcoin to another cryptocurrency or to fiat currency. Either the requirement from miners of higher transaction fees in exchange for recording transactions in a blockchain or a software upgrade that automatically charges fees for all transactions may decrease demand for bitcoin and prevent the expansion of the bitcoin network to retail merchants and commercial businesses, resulting in a reduction in the price of bitcoin that could adversely impact an investment in our securities. Decreased use and demand for bitcoin may adversely affect its value and result in a reduction in the price of bitcoin and the value of our common stock.

The decentralized nature of cryptocurrency systems may lead to slow or inadequate responses to crises, which may negatively affect our business

The decentralized nature of the governance of cryptocurrency systems may lead to ineffective decision making that slows development or prevents a network from overcoming emergent obstacles. Governance of many cryptocurrency systems is by voluntary consensus and open competition with no clear leadership structure or authority. To the extent lack of clarity in corporate governance of cryptocurrency systems leads to ineffective decision making that slows development and growth of such cryptocurrencies, the value of our common stock may be adversely affected.

It may be illegal now, or in the future, to acquire, own, hold, sell or use bitcoin, ether, or other cryptocurrencies, participate in blockchains or utilize similar cryptocurrency assets in one or more countries, the ruling of which would adversely affect us.

Although currently cryptocurrencies generally are not regulated or are lightly regulated in most countries, one or more countries such as China and Russia, which have taken harsh regulatory action in recent months, may take regulatory actions in the future that could severely restrict the right to acquire, own, hold, sell or use these cryptocurrency assets or to exchange for fiat currency. In many nations, particularly in China and Russia, it is illegal to accept payment in bitcoin and other cryptocurrencies for consumer transactions and banking institutions are barred from accepting deposits of cryptocurrencies. Such restrictions may adversely affect us as the large-scale use of cryptocurrencies as a means of exchange is presently confined to certain regions globally. Such circumstances could have a material adverse effect on our ability to continue as a going concern or to pursue our new strategy at all, which could have a material adverse effect on our business, prospects or operations and potentially the value of any bitcoin or other cryptocurrencies we mine or otherwise acquire or hold for our own account, and harm investors.

There is a lack of liquid markets, and possible manipulation of blockchain/cryptocurrency-based assets.

Cryptocurrencies that are represented and trade on a ledger-based platform may not necessarily benefit from viable trading markets. Stock exchanges have listing requirements and vet issuers; requiring them to be subjected to rigorous listing standards and rules, and monitor investors transacting on such platform for fraud and other improprieties. These conditions may not necessarily be replicated on a distributed ledger platform, depending on the platform's controls and other policies. The laxer a distributed ledger platform is about vetting issuers of cryptocurrency assets or users that transact on the platform, the higher the potential risk for fraud or the manipulation of the ledger due to a control event. These factors may decrease liquidity or volume or may otherwise increase volatility of investment securities or other assets trading on a ledger-based system, which may adversely affect us. Such circumstances could have a material adverse effect on our ability to continue as a going concern or to pursue our new strategy at all, which could have a material adverse effect on our business, prospects or operations and potentially the value of any bitcoin or other cryptocurrencies we mine or otherwise acquire or hold for our own account, and harm investors.

Our operations, investment strategies and profitability may be adversely affected by competition from other methods of investing in cryptocurrencies.

We compete with other users and/or companies that are mining cryptocurrencies and other potential financial vehicles, including securities backed by or linked to cryptocurrencies through entities similar to us. Market and financial conditions, and other conditions beyond our control, may make it more attractive to invest in other financial vehicles, or to invest in cryptocurrencies directly, which could limit the market for our shares and reduce their liquidity. The emergence of other financial vehicles and exchange-traded funds have been scrutinized by regulators and such scrutiny and the negative impressions or conclusions resulting from such scrutiny could be applicable to us and impact our ability to successfully pursue our new strategy or operate at all, or to establish or maintain a public market for our securities. Such circumstances could have a material adverse effect on our ability to continue as a going concern or to pursue our new strategy at all, which could have a material adverse effect on our business, prospects or operations and potentially the value of any bitcoin or other cryptocurrencies we mine or otherwise acquire or hold for our own account, and harm investors.

The development and acceptance of competing blockchain platforms or technologies may cause consumers to use alternative distributed ledgers or other alternatives.

The development and acceptance of competing blockchain platforms or technologies may cause consumers to use alternative distributed ledgers or an alternative to distributed ledgers altogether. Our business utilizes presently existent digital ledgers and blockchains and we could face difficulty adapting to emergent digital ledgers, blockchains, or alternatives thereto. This may adversely affect us and our exposure to various blockchain technologies and prevent us from realizing the anticipated profits from our investments. Such circumstances could have a material adverse effect on our ability to continue as a going concern or to pursue our new strategy at all, which could have a material adverse effect on our business, prospects or operations and potentially the value of any bitcoin or other cryptocurrencies we mine or otherwise acquire or hold for our own account, and harm investors.

Our cryptocurrencies may be subject to loss, theft or restriction on access.

There is a risk that some or all of our cryptocurrencies could be lost or stolen. Cryptocurrencies are stored in cryptocurrency sites commonly referred to as "wallets" by holders of cryptocurrencies which may be accessed to exchange a holder's cryptocurrency assets. Access to our cryptocurrency assets could also be restricted by cybercrime (such as a denial of service attack) against a service at which we maintain a hosted hot wallet. A hot wallet refers to any cryptocurrency wallet that is connected to the Internet. Generally, hot wallets are easier to set up and access then wallets in cold storage, but they are also more susceptible to hackers and other technical vulnerabilities. Cold storage refers to any cryptocurrency wallet that is not connected to the Internet. Cold storage is generally more secure than hot storage, but is not ideal for quick or regular transactions and we may experience lag time in our ability to respond to market fluctuations in the price of our cryptocurrency assets. We hold all of our cryptocurrencies in cold storage to reduce the risk of malfeasance, but the risk of loss of our cryptocurrency assets cannot be wholly eliminated.

Hackers or malicious actors may launch attacks to steal, compromise or secure cryptocurrencies, such as by attacking the cryptocurrency network source code, exchange miners, third-party platforms, cold and hot storage locations or software, or by other means. We may be in control and possession of one of the more substantial holdings of cryptocurrency. As we increase in size, we may become a more appealing target of hackers, malware, cyber-attacks or other security threats. Any of these events may adversely affect our operations and, consequently, our investments and profitability. The loss or destruction of a private key required to access our digital wallets may be irreversible and we may be denied access for all time to our cryptocurrency holdings or the holdings of others held in those compromised wallets. Our loss of access to our private keys or our experience of a data loss relating to our digital wallets could adversely affect our investments and assets.

Cryptocurrencies are controllable only by the possessor of both the unique public and private keys relating to the local or online digital wallet in which they are held, which wallet's public key or address is reflected in the network's public blockchain. We will publish the public key relating to digital wallets in use when we verify the receipt of transfers and disseminate such information into the network, but we will need to safeguard the private keys relating to such digital wallets. To the extent such private keys are lost, destroyed or otherwise compromised, we will be unable to access our cryptocurrency rewards and such private keys may not be capable of being restored by any network. Any loss of private keys relating to digital wallets used to store our cryptocurrencies could have a material adverse effect on our ability to continue as a going concern or to pursue our new strategy at all, which could have a material adverse effect on our business, prospects or operations and potentially the value of any bitcoin or other cryptocurrencies we mine or otherwise acquire or hold for our own account.

Risks due to hacking or adverse software event.

In order to minimize risk, Riot has established processes to manage wallets that are associated with our cryptocurrency holdings. There can be no assurances that any processes we have adopted or will adopt in the future are or will be secure or effective, and we would suffer significant and immediate adverse effects if we suffered a loss of our cryptocurrency due to an adverse software or cybersecurity event. Riot utilizes several layers of threat reduction techniques, including: (i) the use of hardware wallets to store sensitive private key information; (ii) performance of transactions offline; and (iii) offline generation storage and use of private keys.

At present, the Company is evaluating several third-party custodial wallet alternatives, but there can be no assurance Riot will utilize such services, as other new options may develop in the future, and if a custodial wallet is used there can be no assurance that such services will be more secure than those the Company presently employs. Human error and the constantly evolving state of cybercrime and hacking techniques may render present security protocols and procedures ineffective in ways which we cannot predict. If our security procedures and protocols are ineffectual and our cryptocurrency assets are compromised by cybercriminals, we may not have adequate recourse to recover our losses stemming from such compromise and we may lose much of the accumulated value of our cryptocurrency mining activities. This would have a negative impact on our business and operations.

Incorrect or fraudulent cryptocurrency transactions may be irreversible.

Cryptocurrency transactions are irrevocable and stolen or incorrectly transferred cryptocurrencies may be irretrievable. As a result, any incorrectly executed or fraudulent cryptocurrency transactions could adversely affect our investments and assets.

Cryptocurrency transactions are not, from an administrative perspective, reversible without the consent and active participation of the recipient of the cryptocurrencies from the transaction. In theory, cryptocurrency transactions may be reversible with the control or consent of a majority of processing power on the network, however, we do not now, nor is it feasible that we could in the future, possess sufficient processing power to effect this reversal. Once a transaction has been verified and recorded in a block that is added to a blockchain, an incorrect transfer of a cryptocurrency or a theft thereof generally will not be reversible and we may not have sufficient recourse to recover our losses from any such transfer or theft. It is possible that, through computer or human error, or through theft or criminal action, our cryptocurrency rewards could be transferred in incorrect amounts or to unauthorized third parties, or to uncontrolled accounts. Further, according to the SEC, at this time, there is no specifically enumerated U.S. or foreign governmental, regulatory, investigative or prosecutorial authority or mechanism through which to bring an action or complaint regarding missing or stolen cryptocurrency. We are, therefore, presently reliant on existing private investigative entities, such as Chainanalysis and Kroll to investigate any potential loss of our cryptocurrency assets. These third-party service providers rely on data analysis and compliance of ISPs with traditional court orders to reveal information such as the IP addresses of any attackers who may have target us. To the extent that we are unable to recover our losses from such action, error or theft, such events could have a material adverse effect on our ability to continue as a going concern or to pursue our new strategy at all, which could have a material adverse effect on our business, prospects or operations of and potentially the value of any bitcoin or other cryptocurrencies we mine or otherwise acquire or hold for our own account.

Our interactions with a blockchain may expose us to SDN or blocked persons or cause us to violate provisions of law that did not contemplate distribute ledger technology.

The Office of Financial Assets Control of the US Department of Treasury requires us to comply with its sanction program and not conduct business with persons named on its specially designated nationals ("SDN") list. However, because of the pseudonymous nature of blockchain transactions we may inadvertently and without our knowledge engage in transactions with persons named on OFAC's SDN list. Our Company's policy prohibits any transactions with such SDN individuals, but we may not be adequately capable of determining the ultimate identity of the individual with whom we transact with respect to selling cryptocurrency assets. Moreover, federal law prohibits any US person from knowingly or unknowingly possessing any visual depiction commonly known as child pornography. Recent media reports have suggested that persons have imbedded such depictions on one or more blockchains. Because our business requires us to download and retain one or more blockchains to effectuate our ongoing business, it is possible that such digital ledgers contain prohibited depictions without our knowledge or consent. To the extent government enforcement authorities literally enforce these and other laws and regulations that are impacted by decentralized distributed ledger technology, we may be subject to investigation, administrative or court proceedings, and civil or criminal monetary fines and penalties, all of which could harm our reputation and affect the value of our common stock.

Cryptocurrencies face significant scaling obstacles that can lead to high fees or slow transaction settlement times.

Cryptocurrencies face significant scaling obstacles that can lead to high fees or slow transaction settlement times, and attempts to increase the volume of transactions may not be effective. Scaling cryptocurrencies is essential to the widespread acceptance of cryptocurrencies as a means of payment, which widespread acceptance is necessary to the continued growth and development of our business. Many cryptocurrency networks face significant scaling challenges. For example, cryptocurrencies are limited with respect to how many transactions can occur per second. Participants in the cryptocurrency ecosystem debate potential approaches to increasing the average number of transactions per second that the network can handle and have implemented mechanisms or are researching ways to increase scale, such as increasing the allowable sizes of blocks, and therefore the number of transactions per block, and sharding (a horizontal partition of data in a database or search engine), which would not require every single transaction to be included in every single miner's or validator's block. However, there is no guarantee that any of the mechanisms in place or being explored for increasing the scale of settlement of cryptocurrency transactions will be effective, or how long they will take to become effective, which could adversely affect an investment in our securities.

The price of cryptocurrencies may be affected by the sale of such cryptocurrencies by other vehicles investing in cryptocurrencies or tracking cryptocurrency markets.

The global market for cryptocurrency is characterized by supply constraints that differ from those present in the markets for commodities or other assets such as gold and silver. The mathematical protocols under which certain cryptocurrencies are mined permit the creation of a limited, predetermined amount of currency, while others have no limit established on total supply. To the extent that other vehicles investing in cryptocurrencies or tracking cryptocurrency markets form and come to represent a significant proportion of the demand for cryptocurrencies, large redemptions of the securities of those vehicles and the subsequent sale of cryptocurrencies by such vehicles could negatively affect cryptocurrency prices and therefore affect the value of the cryptocurrency inventory we hold. Such events could have a material adverse effect on our ability to continue as a going concern or to pursue our new strategy at all, which could have a material adverse effect on our business, prospects or operations and potentially the value of any bitcoin or other cryptocurrencies we mine or otherwise acquire or hold for our own account.

Because there has been limited precedent set for financial accounting of bitcoin and other cryptocurrency assets, the determination that we have made for how to account for cryptocurrency assets transactions may be subject to change.

Because there has been limited precedent set for the financial accounting of cryptocurrencies and related revenue recognition and no official guidance has yet been provided by the Financial Accounting Standards Board or the SEC, it is unclear how companies may in the future be required to account for cryptocurrency transactions and assets and related revenue recognition. A change in regulatory or financial accounting standards could result in the necessity to change our accounting methods and restate our financial statements. Such a restatement could adversely affect the accounting for our newly mined cryptocurrency rewards and more generally negatively impact our business, prospects, financial condition and results of operation. Such circumstances would have a material adverse effect on our ability to continue as a going concern or to pursue our new strategy at all, which would have a material adverse effect on our business, prospects or operations as well as and potentially the value of any cryptocurrencies we hold or expects to acquire for our own account and harm investors.

Cryptocurrency Mining-Related Risks

There are risks related to technological obsolescence, the vulnerability of the global supply chain for cryptocurrency hardware disruption, and difficulty in obtaining new hardware which may have a negative effect on our business.

Our mining operations can only be successful and ultimately profitable if the costs, including hardware and electricity costs, associated with mining cryptocurrencies are lower than the price of a bitcoin. As our mining facility operates, our miners experience ordinary wear and tear, and may also face more significant malfunctions caused by a number of extraneous factors beyond our control. The degradation of our miners will require us to, over time, replace those miners which are no longer functional. Additionally, as the technology evolves, we may be required to acquire newer models of miners to remain competitive in the market. Reports have been released which indicate that Bitmain adjusts the prices of its miners according to bitcoin prices, so the cost of new machines is unpredictable but could be extremely high. As a result, at times, we may obtain Bitmain miners and other hardware from third parties at premium prices, to the extent they are available. For example, in November 2017, in order to facilitate the launch of our mining operations without the potential delay associated with acquiring miners directly from Bitmain, we purchased Bitmain miners at substantially above Bitmain's list prices. Additionally in December of 2019, in order to keep pace with technological advances and competition from other mining companies, we purchased 4,000 new Bitmain S17 Pro Antminers, which will eventually need to be repaired or replaced along with other equipment from time to time to stay competitive. This upgrading process requires substantial capital investment, and we may face challenges in doing so on a timely and cost-effective basis.

Also, because we expect to depreciate our new Bitmain S17 Pro Antminers over a two-year period for financial reporting purposes, our reported operating results will be negatively affected. Further, the global supply chain for cryptocurrency miners is presently heavily dependent on China, which has been severely affected by the emergence of the COVID-19 coronavirus global pandemic. The global reliance on China as a main supplier of cryptocurrency miners has been called into question in the wake of the COVID-19 pandemic. Should similar outbreaks or other disruptions to the China-based global supply chain for cryptocurrency hardware occur, we may not be able to obtain adequate replacement parts for our existing miners or to obtain additional miners from the manufacturer on a timely basis. Such events could have a material adverse effect on our ability to pursue our new strategy, which could have a material adverse effect on our business and the value of our common stock.

Our reliance primarily on a single model of miner may subject our operations to increased risk of mine failure.

The performance and reliability of our miners and our technology is critical to our reputation and our operations. Because we currently only use Bitmain miners, if there are issues with those machines, our entire system could be affected. Any system error or failure may significantly delay response times or even cause our system to fail. Any disruption in our ability to continue mining could result in lower yields and harm our reputation and business. Any exploitable weakness, flaw, or error common to Bitmain miners affects all our miners, if a defect other flaw is exploited, our entire mine could go offline simultaneously. Any interruption, delay or system failure could result in financial losses, a decrease in the trading price of our common stock and damage to our reputation.

The Company's reliance on a third-party mining pool service provider for our mining revenue payouts may have a negative impact on the Company operations.

We use third-party mining pools to receive our mining rewards from the network. Mining pools allow miners to combine their processing power, increasing their chances of solving a block and getting paid by the network. The rewards are distributed by the pool operator, proportionally to our contribution to the pool's overall mining power, used to generate each block. Should the pool operator's system suffer downtime due to a cyber-attack, software malfunction or other similar issues, it will negatively impact our ability to mine and receive revenue. Furthermore, we are dependent on the accuracy of the mining pool operator's record keeping to accurately record the total processing power provided to the pool for a given bitcoin mining application in order to assess the proportion of that total processing power we provided. While we have internal methods of tracking both our power provided and the total used by the pool, the mining pool operator uses its own record-keeping to determine our proportion of a given reward. We have little means of recourse against the mining pool operator if we determine the proportion of the reward paid out to us by the mining pool operator is incorrect, other than leaving the pool. If we are unable to consistently obtain accurate proportionate rewards from our mining pool operators, we may experience reduced reward for our efforts, which would have an adverse effect on our business and operations.

The primary cryptocurrencies for which we mine, bitcoin and litecoin, are subject to halving; the cryptocurrency reward for successfully uncovering a block will halve several times in the future and their value may not adjust to compensate us for the reduction in the rewards we receive from our mining efforts.

Halving is a process designed to control the overall supply and reduce the risk of inflation in cryptocurrencies using a Proof-of-Work consensus algorithm. At a predetermined block, the mining reward is cut in half, hence the term "halving." For bitcoin, the reward was initially set at 50 bitcoin currency rewards per block and this was cut in half to 25 in November 28, 2012 at block 210,000 and again to 12.5 on July 9, 2016 at block 420,000. The next halving for bitcoin is expected in May 2020 at block 630,000 when the reward will reduce to 6.25. This process will reoccur until the total amount of bitcoin currency rewards issued reaches 21 million, which is expected around 2140. Similarly, litecoin first halved on August 25, 2015 at block 840,000 from 50 to 25 and the second halving occurred on August 5, 2019 at block 1,680,000 from 25 to 12.5. The next halving for litecoin is expected in August 2023 at block 2,520,000 when the reward will reduce to 6.25. While bitcoin and litecoin prices have had a history of price fluctuations around the halving of their respective cryptocurrency rewards, there is no guarantee that the price change will be favorable or would compensate for the reduction in mining reward. If a corresponding and proportionate increase in the trading price of these cryptocurrencies does not follow these anticipated halving events, the revenue we earn from our mining operations would see a corresponding decrease, which would have a material adverse effect on our business and operations.

Our future success will depend in large part upon the value of bitcoin; the value of bitcoin and other cryptocurrencies may be subject to pricing risk and has historically been subject to wide swings.

Our operating results will depend in large part upon the value of bitcoin because it's the primary cryptocurrency we currently mine. Specifically, our revenues from our bitcoin mining operations are based upon two factors: (1) the number of bitcoin rewards we successfully mine and (2) the value of bitcoin. In addition, our operating results are directly impacted by changes in the value of bitcoin, because under the value measurement model, both realized and unrealized changes will be reflected in our statement of operations (i.e., we will be marking bitcoin to fair value each quarter). This means that our operating results will be subject to swings based upon increases or decreases in the value of bitcoin. Furthermore, our new strategy initially focuses almost entirely on bitcoin (as opposed to other cryptocurrencies). Further, our current application-specific integrated circuit ("ASIC") machines (which we refer to as "miners") are principally utilized for mining bitcoin and bitcoin cash and cannot mine other cryptocurrencies, such as ether, that are not mined utilizing the "SHA-256 algorithm." If other cryptocurrencies were to achieve acceptance at the expense of bitcoin or bitcoin cash causing the value of bitcoin or ash to decline, or if bitcoin were to switch its proof of work algorithm from SHA-256 to another algorithm for which our miners are not specialized, or the value of bitcoin or bitcoin cash were to decline for other reasons, particularly if such decline were significant or over an extended period of time, our operating results would be adversely affected, and there could be a material adverse effect on our ability to continue as a going concern or to pursue our new strategy at all, which could have a material adverse effect on our business, prospects or operations, and harm investors.

Bitcoin and other cryptocurrency market prices, which have historically been volatile and are impacted by a variety of factors (including those discussed below), are determined primarily using data from various exchanges, over-the-counter markets and derivative platforms. Furthermore, such prices may be subject to factors such as those that impact commodities, more so than business activities, which could be subjected to additional influence from fraudulent or illegitimate actors, real or perceived scarcity, and political, economic, regulatory or other conditions. Pricing may be the result of, and may continue to result in, speculation regarding future appreciation in the value of cryptocurrencies, or our share price, inflating and making their market prices more volatile or creating "bubble" type risks for both bitcoin and shares of our common stock.

We may not be able to realize the benefits of forks.

To the extent that a significant majority of users and miners on a cryptocurrency network install software that changes the cryptocurrency network or properties of a cryptocurrency, including the irreversibility of transactions and limitations on the mining of new cryptocurrency, the cryptocurrency network would be subject to new protocols and software. However, if less than a significant majority of users and miners on the cryptocurrency network consent to the proposed modification, and the modification is not compatible with the software prior to its modification, the consequence would be what is known as a "fork" of the network, with one prong running the pre-modified software and the other running the modified software. The effect of such a fork would be the existence of two versions of the cryptocurrency running in parallel, yet lacking interchangeability and necessitating exchange-type transaction to convert currencies between the two forks. Additionally, it may be unclear following a fork which fork represents the original asset and which is the new asset. Different metrics adopted by industry participants to determine which is the original asset include: referring to the wishes of the core developers of a cryptocurrency, blockchains with the greatest amount of hashing power contributed by miners or validators; or blockchains with the longest chain. A fork in the network of a particular cryptocurrency could adversely affect an investment in our securities or our ability to operate.

We may not be able to realize the economic benefit of a fork, either immediately or ever, which could adversely affect an investment in our securities. If we hold a cryptocurrency at the time of a hard fork into two cryptocurrencies, industry standards would dictate that we would be expected to hold an equivalent amount of the old and new assets following the fork. However, we may not be able, or it may not be practical, to secure or realize the economic benefit of the new asset for various reasons. For instance, we may determine that there is no safe or practical way to custody the new asset, that trying to do so may pose an unacceptable risk to our holdings in the old asset, or that the costs of taking possession and/or maintaining ownership of the new cryptocurrency exceed the benefits of owning the new cryptocurrency. Additionally, laws, regulation or other factors may prevent us from benefitting from the new asset even if there is a safe and practical way to custody and secure the new asset.

There is a possibility of cryptocurrency mining algorithms transitioning to proof of stake validation and other mining related risks, which could make us less competitive and ultimately adversely affect our business and the value of our stock.

Proof of stake is an alternative method in validating cryptocurrency transactions. Should the algorithm shift from a proof of work validation method to a proof of stake method, mining would require less energy and may render any company that maintains advantages in the current climate (for example, from lower priced electricity, processing, real estate, or hosting) less competitive. We, as a result of our efforts to optimize and improve the efficiency of our cryptocurrency mining operations, may be exposed to the risk in the future of losing the benefit of our capital investments and the competitive advantage we hope to gain form this as a result, and may be negatively impacted if a switch to proof of stake validation were to occur. This may additionally have an impact on other various investments of ours, including how it may potentially affect transactional volume on Coinsquare. Such events could have a material adverse effect on our ability to continue as a going concern or to pursue our new strategy at all, which could have a material adverse effect on our business, prospects or operations and potentially the value of any bitcoin or other cryptocurrencies we mine or otherwise acquire or hold for our own account.

To the extent that the profit margins of bitcoin mining operations are not high, operators of bitcoin mining operations are more likely to immediately sell bitcoin rewards earned by mining in the market, thereby constraining growth of the price of bitcoin that could adversely impact us, and similar actions could affect other cryptocurrencies.

Over the past two years, bitcoin mining operations have evolved from individual users mining with computer processors, graphics processing units and first-generation ASIC servers. Currently, new processing power is predominantly added by incorporated and unincorporated "professionalized" mining operations. Professionalized mining operations may use proprietary hardware or sophisticated ASIC machines acquired from ASIC manufacturers. They require the investment of significant capital for the acquisition of this hardware, the leasing of operating space (often in data centers or warehousing facilities), incurring of electricity costs and the employment of technicians to operate the mining farms. As a result, professionalized mining operations are of a greater scale than prior miners and have more defined and regular expenses and liabilities. These regular expenses and liabilities require professionalized mining operations to maintain profit margins on the sale of bitcoin. To the extent the price of bitcoin declines and such profit margin is constrained, professionalized miners are incentivized to more immediately sell bitcoin earned from mining operations, whereas it is believed that individual miners in past years were more likely to hold newly mined bitcoin for more extended periods. The immediate selling of newly mined bitcoin greatly increases the trading volume of bitcoin, creating downward pressure on the market price of bitcoin rewards.

The extent to which the value of bitcoin mined by a professionalized mining operation exceeds the allocable capital and operating costs determines the profit margin of such operation. A professionalized mining operation may be more likely to sell a higher percentage of its newly mined bitcoin rapidly if it is operating at a low profit margin and it may partially or completely cease operations if its profit margin is negative. In a low profit margin environment, a higher percentage could be sold more rapidly, thereby potentially depressing bitcoin prices. Lower bitcoin prices could result in further tightening of profit margins for professionalized mining operations creating a network effect that may further reduce the price of bitcoin until mining operations with higher operating costs become unprofitable forcing them to reduce mining power or cease mining operations temporarily.

The foregoing risks associated with bitcoin could be equally applicable to other cryptocurrencies, whether existing now or introduced in the future. Such circumstances could have a material adverse effect on our ability to continue as a going concern or to pursue our new strategy at all, which could have a material adverse effect on our business, prospects or operations and potentially the value of bitcoin and any other cryptocurrencies we mine or otherwise acquire or hold for our own account, and harm investors.

If a malicious actor or botnet obtains control of more than 50% of the processing power on a cryptocurrency network, such actor or botnet could manipulate blockchains to adversely affect us, which would adversely affect an investment in us or our ability to operate.

If a malicious actor or botnet (a volunteer or hacked collection of computers controlled by networked software coordinating the actions of the computers) obtains a majority of the processing power dedicated to mining a cryptocurrency, it may be able to alter blockchains on which transactions of cryptocurrency reside and rely by constructing fraudulent blocks or preventing certain transactions from completing in a timely manner, or at all. The malicious actor or botnet could control, exclude or modify the ordering of transactions, though it could not generate new units or transactions using such control. The malicious actor could "double-spend" its own cryptocurrency (i.e., spend the same bitcoin in more than one transaction) and prevent the confirmation of other users' transactions for as long as it maintained control. To the extent that such malicious actor or botnet does not yield its control of the processing power on the network or the cryptocurrency community does not reject the fraudulent blocks as malicious, reversing any changes made to blockchains may not be possible. The foregoing description is not the only means by which the entirety of blockchains or cryptocurrencies may be compromised but is only an example.

Although there are no known reports of malicious activity or control of blockchains achieved through controlling over 50% of the processing power on the network, it is believed that certain mining pools may have exceeded the 50% threshold in bitcoin. The possible crossing of the 50% threshold indicates a greater risk that a single mining pool could exert authority over the validation of bitcoin transactions. To the extent that the bitcoin ecosystem, and the administrators of mining pools, do not act to ensure greater decentralization of bitcoin mining processing power, the feasibility of a malicious actor obtaining control of the processing power will increase because the botnet or malicious actor could compromise more than 50% mining pool and thereby gain control of blockchain, whereas if the blockchain remains decentralized it is inherently more difficult for the botnet of malicious actor to aggregate enough processing power to gain control of the blockchain, may adversely affect an investment in our common stock. Such lack of controls and responses to such circumstances could have a material adverse effect on our ability to continue as a going concern or to pursue our new strategy at all, which could have a material adverse effect on our business, prospects or operations and potentially the value of any bitcoin or other cryptocurrencies we mine or otherwise acquire or hold for our own account, and harm investors.

Cryptocurrencies, including those maintained by or for us, may be exposed to cybersecurity threats and hacks.

As with any computer code generally, flaws in cryptocurrency codes may be exposed by malicious actors. Several errors and defects have been found previously, including those that disabled some functionality for users and exposed users' information. Exploitations of flaws in the source code that allow malicious actors to take or create money have previously occurred. Despite our efforts and processes to prevent breaches, our devices, as well as our miners, computer systems and those of third parties that we use in our operations, are vulnerable to cyber security risks, including cyber-attacks such as viruses and worms, phishing attacks, denial-of-service attacks, physical or electronic break-ins, employee theft or misuse, and similar disruptions from unauthorized tampering with our miners and computer systems or those of third parties that we use in our operations. Such events could have a material adverse effect on our ability to continue as a going concern or to pursue our new strategy at all, which could have a material adverse effect on our business, prospects or operations and potentially the value of any bitcoin or other cryptocurrencies we mine or otherwise acquire or hold for our own account.

We are subject to risks associated with our need for significant electrical power. Government regulators may potentially restrict the ability of electricity suppliers to provide electricity to mining operations, such as ours.

The operation of a bitcoin or other cryptocurrency mine can require massive amounts of electrical power. Further, our mining operations can only be successful and ultimately profitable if the costs, including electrical power costs, associated with mining a bitcoin are lower than the price of a bitcoin. As a result, any mine we establish can only be successful if we can obtain sufficient electrical power for that mine on a cost-effective basis, and our establishment of new mines requires us to find locations where that is the case. There may be significant competition for suitable mine locations, and government regulators may potentially restrict the ability of electricity suppliers to provide electricity to mining operations in times of electricity shortage, or may otherwise potentially restrict or prohibit the provision or electricity to mining operations. For example, the board of commissioners of Chelan County Public Utility District in Washington voted to stop reviewing applications for mining facilities following a review of the impact of existing operations. Additionally, our mines could be materially adversely affected by a power outage. Given the power requirement, it would not be feasible to run miners on back-up power generators in the event of a government restriction on electricity or a power outage. If we are unable to receive adequate power supply and are forced to reduce our operations due to the availability or cost of electrical power, our business would experience materially negative impacts.

If the award of cryptocurrency rewards, for us primarily bitcoin for solving blocks and transaction fees are not sufficiently high, we may not have an adequate incentive to continue mining and may cease mining operations, which will likely lead to our failure to achieve profitability.

As the number of cryptocurrency rewards awarded for solving a block in a blockchain decreases, our ability to achieve profitability worsens. Decreased use and demand for bitcoin rewards may adversely affect our incentive to expend processing power to solve blocks. If the award of bitcoin rewards for solving blocks and transaction fees are not sufficiently high, we may not have an adequate incentive to continue mining and may cease our mining operations. For instance, the current fixed reward for solving a new block on the bitcoin blockchain is twelve and a half bitcoin currency rewards per block, which decreased from 25 bitcoin in July 2016. It is estimated that it will halve again in about one year. This reduction may result in a reduction in the aggregate hash rate of the bitcoin network as the incentive for miners decreases. Miners ceasing operations would reduce the collective processing power on the network, which would adversely affect the confirmation process for transactions (i.e., temporarily decreasing the speed at which blocks are added to a blockchain until the next scheduled adjustment in difficulty for block solutions) and make cryptocurrency networks more vulnerable to a malicious actor or botnet obtaining control in excess of 50 percent of the processing power active on a blockchain, potentially permitting such actor or botnet to manipulate a blockchain in a manner that adversely affects our activities. A reduction in confidence in the confirmation process or processing power of the network could result and be irreversible. Such events could have a material adverse effect on our ability to continue to pursue our new strategy at all, which could have a material adverse effect on our business, prospects or operations and potentially the value of any bitcoin or other cryptocurrencies we mine or otherwise acquire or hold for our own account.

We may not adequately respond to price fluctuations and rapidly changing technology, which may negatively affect our business.

Competitive conditions within the cryptocurrency industry require that we use sophisticated technology in the operation of our business. The industry for blockchain technology is characterized by rapid technological changes, new product introductions, enhancements and evolving industry standards. New technologies, techniques or products could emerge that might offer better performance than the software and other technologies we currently utilize, and we may have to manage transitions to these new technologies to remain competitive. We may not be successful, generally or relative to our competitors in the cryptocurrency industry, in timely implementing new technology into our systems, or doing so in a cost-effective manner. During the course of implementing any such new technology into our operations, we may experience system interruptions and failures during such implementation. Furthermore, there can be no assurances that we will recognize, in a timely manner or at all, the benefits that we may expect as a result of our implementing new technology into our operations. As a result, our business and operations may suffer, and there may be adverse effects on the price of our common stock.

Risks Related to Intellectual Property

If we are unable to protect the confidentiality of our trade secrets, our business and competitive position could be harmed.

We plan to rely upon trademarks, copyright and trade secret protection (and possibly also patents in the future), as well as non-disclosure agreements and invention assignment agreements with employees, consultants and third parties, to protect all confidential and proprietary information. Significant elements of our intended products and services are based on unpatented trade secrets and know-how that are not publicly disclosed. In addition to contractual measures, we try to protect the confidential nature of our proprietary information using physical and technological security measures. Such measures may not, for example, in the case of misappropriation of a trade secret by an employee or third party with authorized access, provide adequate protection for our proprietary information. The security measures may not prevent an employee or consultant from misappropriating our trade secrets and providing them to a competitor, and the recourse we take against such misconduct may not provide an adequate remedy to protect our interests fully. Enforcing a claim that a party illegally disclosed or misappropriated a trade secret can be difficult, expensive and time consuming, and the outcome is unpredictable. In addition, trade secrets may be independently developed by others in a manner that could prevent legal recourse by us. If any of our confidential or proprietary information, such as our trade secrets, were to be disclosed or misappropriated, or if any such information was independently developed by a competitor, our competitive position could be harmed.

We may infringe the intellectual property rights of others, which may prevent or delay our product development efforts and stop us from commercializing or increase the costs of commercializing the intended products and services.

Our commercial success depends significantly on our ability to operate without infringing the patents and other intellectual property rights of third parties however, due to the open-source and constantly evolving nature of our business, we may not always be able to determine that we are using or accessing protected information or software. For example, there could be issued patents of which we are not aware that our products infringe. There also could be patents that we believe we do not infringe, but that we may ultimately be found to infringe. Moreover, patent applications are in some cases maintained in secrecy until patents are issued. The publication of discoveries in scientific or patent literature frequently occurs substantially later than the date on which the underlying discoveries were made and patent applications were filed. Because patents can take many years to issue, there may be currently pending applications of which we are unaware that may later result in issued patents that our products infringe.

Accordingly, we could expend significant resources defending against patent infringement and other intellectual property right claims; which could require us to divert resources away from operations. Any damages we are required to pay or injunctions against our continued use of such intellectual property in resolution of such claims may cause a material adverse effect to our business and operations, which could adversely affect the trading price of our securities and harm our investors.

Risks Related to Ownership of Our Common Stock

The trading price of our common stock has been, and is likely to continue to be, volatile; you might not be able to sell your shares at or above the price that you paid for them and we may not be able to stop the decline of our stock price.

The trading price of our common stock has been, and is likely to continue to be, volatile, and may be influenced by numerous factors, some of which are beyond our control; you might not be able to sell your shares at or above the price that you paid for them. In addition, the trading prices of bitcoin have been highly unpredictable, and the trading prices of our common stock has generally been highly and directly correlated with the trading prices of bitcoin. Specifically, we have experienced adverse effects on our stock price when the value of bitcoin has fallen, and we anticipate similar outcomes as our stock price tracks the general status of that cryptocurrency. Furthermore, if the market for bitcoin company stocks or the stock market in general experiences a loss of investor confidence, the trading price of our stock could decline for reasons unrelated to our business, operating results or financial condition. That is, the trading price of our common stock is subject to arbitrary pricing factors that are not necessarily associated with traditional factors that influence stock prices or the value of non-cryptocurrency assets such as revenue, cash flows, profitability, growth prospects or business activity levels since the value and price, as determined by the investing public, may be influenced by future anticipated adoption or appreciation in value of cryptocurrencies or blockchains generally, factors over which we have little or no influence or control.

Other factors which could cause volatility in the market price of our common stock include, but are not limited to:

- · actual or anticipated fluctuations in our financial condition and operating results or those of companies perceived to be similar to us;
- · actual or anticipated changes in our growth rate relative to our competitors;
- · commercial success and market acceptance of blockchain and bitcoin and other cryptocurrencies;
- actions by our competitors, such as new business initiatives, acquisitions and divestitures;
- · strategic transactions undertaken by us;
- · additions or departures of key personnel;
- prevailing economic conditions;
- · disputes concerning our intellectual property or other proprietary rights;
- · sales of our common stock by our officers, directors or significant stockholders;
- · other actions taken by our stockholders;
- · future sales or issuances of equity or debt securities by us;
- · business disruptions caused by earthquakes, tornadoes or other natural disasters;
- · issuance of new or changed securities analysts' reports or recommendations regarding us;
- · legal proceedings involving our company, our industry or both;
- · changes in market valuations of companies similar to ours;
- · the prospects of the industry in which we operate;
- speculation or reports by the press or investment community with respect to us or our industry in general;
- · the level of short interest in our stock; and
- · other risks, uncertainties and factors described in this annual report.

In addition, the stock markets in general have experienced extreme volatility that has often been unrelated to the operating performance of the issuer. These broad market fluctuations may negatively impact the price or liquidity of our common stock. When the price of a stock has been volatile, holders of that stock have sometimes instituted securities class action litigation against the issuer, and we have been impacted in that way. See Item 3 – Legal Proceedings, "We, and some of our current and former officers and directors, have been named as parties to various lawsuits arising out of, or related to, allegedly false and misleading statements made in prior securities filings, and those lawsuits could adversely affect us, require significant management time and attention, result in significant legal expenses or damages, and cause our business, financial condition, results of operations and cash flows to suffer."

We may be unable to comply with the applicable continued listing requirements of the Nasdaq Capital Market, which may adversely impact our access to capital markets and may cause us to default certain of our agreements.

Our common stock is currently traded on the Nasdaq Capital Market. Nasdaq rules require us to maintain a minimum closing bid price of \$1.00 per share of our common stock. The closing bid price of our common stock has fluctuated below \$1.00 per share in 2020. If the closing bid price of our common stock were to remain below \$1.00 per share for 30 consecutive trading days, or we do not meet other listing requirements, we would not be in compliance with Nasdaq's rules for listing standards. There can be no assurance that we will continue to meet the minimum bid price requirement, or any other requirement in the future. If we fail to meet the minimum bid price requirement, Nasdaq may initiate the delisting process with a notification letter. If we were to receive such a notification, we would be afforded a grace period of 180 calendar days to regain compliance with the minimum bid price requirement. In order to regain compliance, shares of our common stock would need to maintain a minimum closing bid price of at least \$1.00 per share for a minimum of 10 consecutive trading days. In addition, we may be unable to meet other applicable Nasdaq listing requirements, including maintaining minimum levels of stockholders' equity or market values of our common stock, in which case our common stock could be delisted.

In the event that our common stock is delisted from Nasdaq and is not eligible for quotation or listing on another market or exchange, trading of our common stock could be conducted only in the over-the-counter market or on an electronic bulletin board established for unlisted securities such as the OTC. In such event, it could become more difficult to dispose of, or obtain accurate price quotations for our common stock and there would likely also be a reduction in our coverage by securities analysts and the news media, which could cause the price of our common stock to decline further. In addition, the delisting of our common stock from the Nasdaq Capital Market may result in us defaulting under our Sales Agreement with H.C. Wainwright & Co. and our ability to raise additional capital may be severely impacted, which may negatively affect our plans and the results of our operations.

Our Bylaws contain a forum selection clause requiring stockholder suits against us to be brought in Nevada; our stockholders may be prejudiced by this clause.

In general, Nevada has traditionally been a favorable jurisdiction for companies in stockholder disputes. Our Bylaws require our stockholders to bring their derivative suits against us in Nevada. Accordingly, our stockholders may incur increased expense in bringing their own claims and may be prejudiced in such claims by judicial deference shown to corporate defendants in our chosen forum, Nevada.

Nevada law contains provisions that could discourage, delay or prevent a change in control of our company, prevent attempts to replace or remove current management and reduce the market price of our stock.

Provisions in Nevada corporate law may discourage, delay or prevent a merger or acquisition involving us that our stockholders may consider favorable. For example, Nevada corporate law contains strong "anti-takeover" provisions, which prohibit us from entering into a business combination with an "interested stockholder" or their affiliates for a period of two years after they become an "interested stockholder" unless certain provisions are met. As a result, a proposed merger favored by our stockholders could be blocked by operation of Nevada law.

If securities or industry analysts do not publish research or publish unfavorable research about our business, our stock price and trading volume could decline

The trading market for our common stock will be influenced by whether industry or securities analysts publish research and reports about us, our business, our market or our competitors and, if any analysts do publish such reports, what they publish in those reports. We may not obtain or maintain analyst coverage in the future. Any analysts that do cover us may make adverse recommendations regarding our stock, adversely change their recommendations from time to time and/or provide more favorable relative recommendations about our competitors. If analysts who may cover us in the future were to cease coverage of our company or fail to regularly publish reports on us, or if analysts fail to cover us or publish reports about us at all, we could lose (or never gain) visibility in the financial markets, which in turn could cause the stock price of our common stock or trading volume to decline. Moreover, if our operating results do not meet the expectations of the investor community, one or more of the analysts who cover our company may change their recommendations regarding our company and our stock price could decline.

The warrants issued in connection with our January 2019 private financing transactions are exercisable for shares of our common stock, which, upon exercise, will dilute the Company's current stockholders' equity value.

We issued senior secured convertible promissory notes and warrants in connection with a private financing completed on January 28, 2019, as previously reported on our current report on Form 8-K filed on February 2, 2019 and as periodically updated in our periodic reports on Form 10-Q filed in 2019. As previously disclosed, all of the notes issued in connection with the private financing have been converted into shares of our common stock; however, the warrants issued in connection thereto are exercisable for shares of our common stock. To the extent such warrants are exercised, additional shares of common stock will be issued, which will result in dilution to the holders of common stock. Because such shares have been registered for resale on the public market, the exercise of the warrants will increase the number of shares eligible for resale in the public market. Sales of substantial numbers of such shares in the public trading market could adversely affect the market trading price of the Company's common stock and would dilute our existing stockholders.

Because we do not intend to pay any cash dividends on our common stock, our stockholders will not be able to receive a return on their shares unless they sell them.

We intend to retain any future earnings to finance the development and expansion of our business. We do not anticipate paying any cash dividends on our common stock in the foreseeable future. Unless we pay dividends, our stockholders will not be able to receive a return on their shares unless they sell them. There is no assurance that stockholders will be able to sell shares when desired.

ITEM 1B. UNRESOLVED STAFF COMMENTS.

None

ITEM 2. PROPERTIES.

Office Leases

As of December 31, 2019, the Company rents certain limited office and storage space under short-term arrangements, including office space were its accounting and financial reporting activities are located at 202 6th Street, Suite 401, Castle Rock, CO 80104.

On April 9, 2018, the Company entered into a commercial lease agreement (the "Florida Lease") with W-Crocker Fin Place Owner VII, LLC, a Delaware limited liability company, pursuant to which the Company leases approximately 1,700 rentable square feet of office and common area space in Fort Lauderdale, Florida. Pursuant to the terms of the Florida Lease, the initial term is for thirty-nine (39) months expiring on August 9, 2021, with one, five-year option to renew. The initial base rent is \$4,658.50 per month (or \$2.75 per sq. ft.) for the first year and shall escalate at the rate of 3.0% per annum thereafter. Additionally, common operating expenses are prorated and charged monthly as additional rent.

Mining Facility Lease

On February 27, 2018, Kairos entered into a lease agreement (the "OKC Lease") with 7725 Reno #1, LLC ("7725 Reno"), pursuant to which Kairos leases approximately 107,600 square foot warehouse located in Oklahoma City, Oklahoma. Pursuant to the terms of the OKC Lease, the initial term of one year terminates on February 15, 2019, unless terminated earlier pursuant to the terms of the OKC Lease. Kairos has the right to operate from the premises on a 24 hour/seven day a week basis.

Base rent for the premises during the initial term of the OKC Lease was equal to \$55.95/kW per month for a total of 4 Megawatts (MW) of available electrical power, or \$223,800 per month.

On March 26, 2018, Kairos entered into a first amendment to the above OKC Lease, whereby 7725 Reno agreed to increase the electrical power available for Kairos's use from 6MW to 12MW, and the base rent under the lease was increased to approximately \$664,760 per month, effective as of the date when such additional power is available.

Effective November 29, 2018, Kairos entered into the second amendment to the OKC Lease which provides the following:

- extended the initial term of the lease through August 19, 2019;
- monthly base rent of \$235,000 for December 2018, \$230,000 for January and \$190,000 per month thereafter for the duration of the OKC Lease, including any renewals.
- · changes the monthly electricity usage charges and
- granting Kairos the option to renew the OKC Lease for up to two, three-month periods after expiration of the initial term of the second amendment to the OKC Lease.

On May 15, 2019, Kairos renewed the OKC Lease for the first renewal term of three months, extending the OKC Lease through November 15, 2019.

On August 15, 2019, Kairos renewed the OKC Lease for the second renewal term of three months, extending the lease through February 15, 2020.

On January 8, 2020, Kairos entered into a third amendment to the OKC Lease to extend the lease term through May 15, 2020, with all other terms remaining substantially the same as the second amendment to the OKC Lease.

Management believes its leased facilities are adequate for the Company's near-term needs.

ITEM 3. LEGAL PROCEEDINGS.

The Company, and its subsidiaries, are subject at times to various claims, lawsuits and governmental proceedings relating to the Company's business and transactions arising in the ordinary course of business. The Company cannot predict the final outcome of such proceedings. Where appropriate, the Company vigorously defends such claims, lawsuits and proceedings. Some of these claims, lawsuits and proceedings seek damages, including, consequential, exemplary or punitive damages, in amounts that could, if awarded, be significant. Certain of the claims, lawsuits and proceedings arising in ordinary course of business are covered by the Company's insurance program. The Company maintains property, and various types of liability insurance in an effort to protect the Company from such claims. In terms of any matters where there is no insurance coverage available to the Company, or where coverage is available and the Company maintains a retention or deductible associated with such insurance, the Company may establish an accrual for such loss, retention or deductible based on current available information. In accordance with accounting guidance, if it is probable that an asset has been impaired or a liability has been incurred as of the date of the financial statements, and the amount of loss is reasonably possible that an asset may be impaired as of the date of the financial statement, then the Company discloses the range of possible loss. Paid expenses related to the defense of such claims are recorded by the Company as incurred and paid and included in the accompanying consolidated statements of operations. Management, with the assistance of outside counsel, may from time to time adjust such accruals according to new developments in the matter, court rulings, or changes in the strategy affecting the Company's defense of such matters. On the basis of current information, the Company does not believe there is a reasonable possibility that, other than with regard to the Class Action described below, any material loss, if

Class Action and Related Claims

On February 17, 2018, Creighton Takata filed an action asserting putative class action claims on behalf of the Company's shareholders in the United District Court for the District of New Jersey, *Takata v. Riot Blockchain Inc.*, et al., Case No. 3: 18-cv-02293. The complaint asserts violations of federal securities laws under Section 10(b) and Section 20(a) of the Securities Exchange Act of 1934 on behalf of a putative class of shareholders that purchased stock from November 13, 2017 through February 15, 2018. The complaint alleges that the Company and certain of its officers and directors made, caused to be made, or failed to correct false and/or misleading statements in press releases and public filings regarding its business plan in connection with its cryptocurrency business. The complaint requests damages in unspecified amounts, costs and fees of bringing the action, and other unspecified relief.

Two additional, nearly identical complaints were subsequently filed by Richard Roys and Bruce Greenawalt in the United District States Court for the Southern District of Florida (*Roys v. Riot Blockchain Inc., et al.*, Case No. 9:18-cv-80225) and the United States District Court for the District of Colorado *Greenawalt v. Riot Blockchain Inc., et al.*, Case No. 1:18-cv-00440), respectively. On March 27, 2018, the court closed the Roys case for administrative purposes. On April 2, 2018, Mr. Greenawalt filed a notice of voluntary dismissal of his action, which the court entered on the same date.

On April 18, 2018, Joseph J. Klapper, Jr., filed a complaint against Riot Blockchain, Inc., and certain of its officers and directors in the United District Court for the District of New Jersey (*Klapper v. Riot Blockchain Inc., et al.*, Case No. 3: 18-cv-8031). The complaint contained substantially similar allegations and the same claims as those filed by Mr. Takata, and requests damages in unspecified amounts, costs and fees of bringing the action, and other unspecified relief. On November 6, 2018, the court in the Takata action issued an order consolidating Takata with Klapper into a single putative class action. The court also appointed Dr. Golovac as Lead Plaintiff and Motely Rice as Lead Counsel of the consolidated class action.

Lead Plaintiff filed a consolidated complaint on January 15, 2019. Defendants filed motions to dismiss on March 18, 2019. In lieu of opposing defendants' motions to dismiss, Lead Plaintiff filed another amended complaint on May 9, 2019. Defendants filed multiple motions to dismiss the amended complaint starting on September 3, 2019. Briefing on the motions to dismiss has been completed. Subject to the outcome of the pending motions, defendants intend to continue to vigorously contest Lead Plaintiff's allegations. Because this litigation is still at this early stage, we cannot reasonably estimate the likelihood of an unfavorable outcome or the magnitude of such an outcome, if any.

Shareholder Derivative Cases

On April 5, 2018, Michael Jackson filed a shareholder derivative complaint on behalf of the Company in the Supreme Court of the State of New York, County of Nassau, against certain of the Company's officers and directors, as well as against an investor (*Jackson v. Riot Blockchain, Inc., et al.*, Case No. 604520/18). The complaint contains similar allegations to those contained in the shareholder class action complaints and seeks recovery for alleged breaches of fiduciary duty, unjust enrichment, waste of corporate assets, abuse of control and gross mismanagement. The complaint seeks unspecified monetary damages and corporate governance changes. At the preliminary conference, the court adjourned the conference until March 9, 2020 in lieu of staying the action. Defendants do not anticipate any other activity on this case until the next preliminary conference.

On May 22, 2018, two additional shareholder derivative complaints were filed on behalf of the Company in the Eighth Judicial District Court of the State of Nevada in and for the County of Clark (Kish v. O'Rourke, et al., Case No. A-18-774890-B & Gaft v. O'Rourke, et al., Case No. A-18-774896-8). The two complaints make identical allegations, which are similar to the allegations contained in the shareholder class action complaints. The shareholder derivative plaintiffs also seek recovery for alleged breaches of fiduciary duty, unjust enrichment, waste of corporate assets, and aiding abetting a breach of fiduciary duty. The complaints seek unspecific monetary damages and corporate governance changes.

On September 24, 2018, the court entered an order consolidating the *Gaft* and *Kish* actions, which is now styled as *In re Riot BlockChain, Inc. Shareholder Derivative Litigation*, Case No. A-18-774890-B. The plaintiffs filed a consolidated complaint on March 15, 2019. The consolidated action has been temporarily stayed until the resolution of the motion(s) to dismiss in the securities class action pending in the United District Court for the District of New Jersey.

On October 9, 2018, another shareholder derivative complaint was filed on behalf of the Company in the United District Court for the Eastern District of New York (*Cotkowitz v. O'Rourke, et al., Case No. 2:18-cv-05632). As with the other shareholder derivative actions, the shareholder plaintiff alleges breach of fiduciary duty, waste of corporate assets, and unjust enrichment against certain of the Company's officers, directors, and an investor. The complaint's allegations are substantially similar to those made in the other securities class action and shareholder derivative complaints filed in 2018. The complaint seeks unspecific monetary damages and corporate governance changes. The parties filed a motion with the court to temporarily stay this action until the resolution of the motion(s) to dismiss in the securities class action pending in the United District Court for the District of New Jersey. In response, the court dismissed the action without prejudice with leave to refile a complaint following the resolution of the motion(s) to dismiss in the securities class action pending in the United District Court for the District of New Jersey.

On October 22, 2018, a fifth shareholder derivative complaint was filed on behalf of the Company in the United District Court for the Southern District of New York *Finitz v. O'Rourke, et al.*, Case No. 1: 18-cv-09640). The shareholder plaintiffs allege breach of fiduciary duty, waste of corporate assets, and unjust enrichment against certain of the Company's officers, directors, and an investor. The complaint's allegations are substantially similar to those made in the other securities class action and shareholder derivative complaints filed in 2018. The complaint seeks unspecific monetary damages and corporate governance changes. Upon the parties' stipulation, the court issued an order temporarily staying this action until the resolution of the motion(s) to dismiss in the securities class action pending in the United District Court for the District of New Jersey.

Defendants intend to vigorously contest plaintiffs' allegations in the shareholder derivative actions and plaintiffs' right to bring the action in the name of Riot Blockchain. But because the above litigation is still in the early stages, we cannot reasonably estimate the likelihood of unfavorable outcomes or the magnitude of such an outcomes, if any.

SEC Subpoena and Other Matters

On April 9, 2018, the Company received a subpoena from the SEC, requesting documents and information. The Company fully cooperated with the SEC in that investigation. On January 29, 2020, the SEC notified the Company that it had concluded its investigation as to Riot and based on the information the SEC has as of the date of the letter, it does not intend to recommend an enforcement action against Riot.

Beneficial Ownership

Pursuant to the rules of the Securities and Exchange Commission (the "SEC"), the Company has consistently reported its beneficial ownership positions in its proxy and other filings where beneficial ownership disclosures are presented, for certain beneficial owners with respect to any person (including any "group" as that term is used in section 13(d) (3) of the Securities and Exchange Act of 1934 (the "Exchange Act") who is known to the Company to be the beneficial owner of more than 5% of the Company's common stock. The Company has relied on each person who has reported to the SEC beneficial ownership of more than 5% of our common stock to provide complete and accurate information regarding their ownership, based on the reports filed by these persons.

Each of Barry Honig (together with other group members) and Catherine Johanna DeFrancesco during a portion of 2017 beneficially owned greater than 10% of the dispositive and voting power of the Company's common stock. Mr. Honig reported beneficial ownership of approximately 11.2% of the Company's common stock as of January 5, 2017 and Ms. DeFrancesco reported beneficial ownership of approximately 11.45% of the Company's common stock as of January 10, 2017. Mr. Honig invested approximately \$1.8 million in the Company's March 2017 Convertible Note Private Placement. GRQ Consultants, Inc., a related party of Mr. Honig, received a cash payment of \$50,000 for diligence services in connection with the Company's September 2017 investment in Coinsquare. Each of Mr. Honig and Ms. DeFrancesco was a shareholder of Kairos at the time of its acquisition by the Company, with Mr. Honig having owned approximately 8.6% of Kairos and Ms. DeFrancesco having owned approximately 6.3% of Kairos. Each of Mr. Honig and Ms. DeFrancesco invested in the December 2017 Common Share Private Placement, with Mr. Honig investing \$0.5 million and Ms. DeFrancesco investing approximately \$0.4 million.

On September 7, 2018, a complaint was filed by the SEC (Case 1:18-cv-08175) (the "Complaint") against, among others, a number of individuals and entities some of whom the Company has previously disclosed as its beneficial owners, as well as, Mr. John O'Rourke III, the Company's former chairman of the board of directors and chief executive officer who resigned from the Company on September 8, 2018, as disclosed in the Current Periodic Report on Form 8-K filed September 10, 2018. Other persons named in the Complaint have previously reported that they were beneficial owners of the Company's common stock, however, the Company has no basis to determine whether any such persons may have operated as a control group, collectively beneficially owning more than 5% of the Company's common stock.

ITEM 4. MINE SAFETY DISCLOSURES.

Not applicable.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES.

Market Information

Our common stock trades on the Nasdaq Capital Market under the symbol "RIOT" (previously traded under the symbol "BIOP" from December 13, 2016 to October 18, 2017 and under the symbol "APPY" from August 28, 2007 to December 12, 2016).

As of March 24, 2020, we had approximately 970 holders of record of our common stock.

The closing price of our common stock on March 24, 2020 was \$0.80 per share.

Securities Authorized under Equity Compensation Plans Information

The Company currently has one equity compensation plan, The Riot Blockchain, Inc. 2019 Equity Incentive Plan (the "2019 Plan"). The Company currently provides stockbased compensation to employees, directors and consultants, under the 2019 Plan, as approved by the Company's shareholders on October 23, 2019. The Company's previous 2017 Stock Incentive Plan, as amended (the "2017 Plan"), was replaced by the 2019 Plan, with the 2017 Plan continuing to govern the then outstanding grants and awards for 12,000 options and 185,103 shares of restricted common stock. No additional grants can be made under the 2017 Plan. The Company has reserved 3,600,000 common shares for issuance under the 2019 Plan.

The following table provides information as of December 31, 2019, about the shares of common stock that may be issued upon the exercise of options or the vesting of restricted common stock under the 2019 Plan:

Plan Category	Number of securities to be issued upon exercise of outstanding options and restricted common stock		nted average cise price of ading options	Number of securities remaining available for future issuance	
Equity compensation plans approved by security holders (1)	1,690,935	\$	4.09	2,106,168	
Equity compensation plans not approved by security holders					
Total	1,690,935	\$	4.09	2,106,168	

⁽¹⁾ Consists of 12,000 stock options with a weighted average exercise price of \$4.09 and 1,678,935 shares of restricted stock.

Recent Sales of Unregistered Securities

None.

ITEM 6. SELECTED FINANCIAL DATA.

Not applicable.

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS.

The discussion and analysis below includes certain forward-looking statements that are subject to risks, uncertainties and other factors, as described in "Risk Factors" and elsewhere in this Annual Report on Form 10-K, that could cause our actual growth, results of operations, performance, financial position and business prospects and opportunities for this fiscal year and the periods that follow to differ materially from those expressed in, or implied by, those forward-looking statements. See also "Forward-Looking Statements" on page 8 of this report.

RESULTS OF OPERATIONS

Management's plans and basis of presentation:

The Company has experienced recurring losses and negative cash flows from operations. At December 31, 2019, the Company had approximate balances of cash and cash equivalents of \$7.4 million, working capital of \$9.3 million, total stockholders' equity of \$26.2 million and an accumulated deficit of \$217.2 million. To date, the Company has in large part relied on debt and equity financing to fund its operations.

The Company's current focus is on its cryptocurrency mining operation, which has recently been upgraded with the purchase of 4,000 S17 Pro Antminers from Bitmain. The Company's current strategy will continue to expose the Company to the numerous risks and volatility associated within this sector.

The Company expects to continue to incur losses from operations for the near-term and these losses could be significant as the Company incurs costs and expenses associated with potential future acquisitions, as well as public company, legal and administrative related expenses being incurred. The Company is closely monitoring its cash balances, cash needs and expense levels.

Management's strategic plans include the following:

- continuing expansion of cryptocurrency mining operations relative to the price of cryptocurrencies;
- continuing to evaluate opportunities for acquisitions in the blockchain and cryptocurrency sector;
- exploring other possible strategic options and financing opportunities available to the Company;
- · evaluating options to monetize, partner or license the Company's assets; and
- continuing to implement cost control initiatives to conserve cash.

2019 Compared to 2018

Revenues

Cryptocurrency mining revenues for the years ended December 31, 2019 and 2018, totaled approximately \$6.7 million and \$7.7 million, respectively. Other revenue consisted of license payments of approximately \$0.1 million in each period. Revenues from cryptocurrency mining are impacted significantly from period to period changes in cryptocurrency prices as well as, the system wide quantity of miners working to solve current algorithm (hash rates) and the difficulty index currently associated with the algorithm as they are being solved.

From early 2018 to the end of 2019 the system wide hash rate increased over 600% which is attributable to factors such as increased number of miners on the bitcoin network, combined with efficiency improvements of new ASIC miners. For years ended December 31, 2019 and 2018, the system wide hash rate was 98.67 EH/s and 40.16 EH/s, respectively. Further, the difficulty index increased over 200% in the past two fiscal years. The cumulative difficulty index increase for each of years ended December 31, 2019 and 2018, is 97.67% and 109.47%, respectfully.

Cost of Revenues

Cost of revenue for the year ended December 31, 2019 of approximately \$6.1 million consisted primarily of direct production costs of the mining operations, including rent and utilities, but excluding depreciation and amortization which are separately stated. The cost of revenue for the year ended December 31, 2018 was approximately \$5.8 million. The approximate increase of \$0.3 million arose primarily from increases in mining compensation in 2019 as compared to 2018.

Selling, General and Administrative Expenses

Selling, general and administrative expenses for the year ended December 31, 2019 totaled approximately \$9.2 million, which is an approximately \$11.7 million, or a 56.1% decrease, as compared to \$20.9 million in the 2018 period. Compensation related expense decreased by approximately \$0.6 million due primarily to staff reductions during 2019, net of severance costs. Stock-based compensation decreased by approximately \$4.5 million for the year ended December 31, 2019, as compared to the 2018 period due to no equity awards in 2019 until those granted in December 2019. Consulting fees decreased approximately \$3.9 million due to the final expense recognized in 2018 for the consulting fees paid in early 2018 for services related to our miners. Investor, public relations and public company expenses reduced by \$0.4 million for the year ended December 31, 2019 following the termination of the majority of such service agreements during 2018. Legal fees decreased by approximately \$2.2 million due to legal matters associated primarily with the fees for the class action and derivative suits and special SEC related matters being higher in the 2018 period when such activities commenced. Audit fees increased approximately \$0.4 million due to the increased level of financial activities and the audit of internal controls over financial reporting for the year ended December 31, 2018, which were primarily incurred in the 2019 period.

Depreciation and Amortization

Depreciation and amortization expenses in the year ended December 31, 2019 totaled approximately \$0.1 million, which is a decrease of approximately \$5.2 million, compared to \$5.3 million during the year ended December 31, 2018. The decrease is primarily due to, lower depreciation expenses recognized for our cryptocurrency mining equipment which was substantially impaired during 2018.

Asset Impairment Charges

Asset impairment charges of \$1.5 million were recognized during the year ended December 31, 2019 and were related to \$0.8 million for the impairment of our cryptocurrencies accounted for as intangible assets and \$0.7 million related to our intangible assets acquired in connection with our RiotX / Logical Brokerage business. The impairment charges during the year ended December 31, 2018 consisted of approximately \$29.2 million related to impairments of our cryptocurrency mining equipment, \$3.5 million related to the impairment of our cryptocurrencies accounted for as intangible assets, \$2.1 million consisting of the impairment charges of \$0.8 million of goodwill and \$1.3 million for the impairment of intangible rights acquired of associated with the Tess Investment, and impairment charges of \$0.4 million of goodwill related to our original acquisition of the legacy business.

Other Income and Expense

During the year ended December 31, 2019, we recognized losses related to the fair value of the issuance of our Senior Secured Convertible Notes (the "Notes") of approximately \$6.2 million. We also recognized expenses totaling approximately \$6.8 million to revalue the Notes and the related warrant liability to fair value during the year ended December 31, 2019.

During the year ended December 31, 2019, we recorded a gain of approximately \$1.1 million on the deconsolidation of Tess, due to our reduced ownership interest from 50.2% to 8.8%.

Interest expense totaled approximately \$0.1 million for the years ended December 31, 2019 and 2018, respectively.

For the year ended December 31, 2018, the Company recorded a loss of \$0.3 million related to the amendment of the Blockchain Mining Supply & Services Ltd.("BMSS") deferred purchase price which was recorded as a loss on extinguishment of debt.

Other income was approximately \$0.9 million for the year ended December 31, 2019, due to a \$0.4 million gain on forgiveness of our payable and interest in connection with our agreement with BMSS, and a \$0.5 million gain on forgiveness of various accounts payable balances. There was no other income recognized for the year ended December 31, 2018.

For the year ended December 31, 2019 we recorded a gain on sale of cryptocurrencies of approximately \$0.7 million. For the year ended December 31, 2018 the gain on sale of cryptocurrencies was nominal.

For the year ended December 31, 2019 our investment income was nominal. For the year ended December 31, 2018 we recorded investment income of approximately \$0.1 million

For the year ended December 31, 2018, the Company recorded other expenses of approximately \$1.4 million, which is primarily related to the penalty accrual for our registration rights agreement associated with our private placement on December 19, 2017. The agreement provided that the Company register our securities by the effectiveness date of March 5, 2018. The registration rights were not registered by the effectiveness date and the Company recognized a contingency.

Income Taxes

For the year ended December 31, 2019, the Company recorded an income tax benefit of \$0.1 million in connection with our decision not to pursue our Logical Brokerage business. For the year ended December 31, 2018, the Company recorded an income tax benefit of \$0.7 million resulting from the difference in book and tax basis of the Kairos mining equipment and its deprecation and impairment expense.

LIQUIDITY AND CAPITAL RESOURCES

At December 31, 2019, we had working capital of approximately \$9.3 million, which included cash and cash equivalents of \$7.4 million. We reported a net loss of \$20.3 million during the year ended December 31, 2019. The net loss included \$14.7 million in non-cash items consisting of, a loss on the issuance of our convertible notes of \$6.2 million, the change in fair value of our convertible notes and the related warrant liability of \$6.8 million, amortization of our right of use assets of \$2.3 million, stock-based compensation totaling \$0.7 million, impairment to our cryptocurrencies of \$0.8 million, an impairment of intangible assets acquired of \$0.7 million related to our decision not to pursue our Logical Brokerage business, and depreciation and amortization totaling \$0.1 million, offset by a \$1.1 million gain recognized on the deconsolidation of Tess, a \$0.9 million gain on the extinguishment of notes, interest and accounts payable, other income of approximately \$0.1 million, primarily related to the amortization of our deferred revenue related to our legacy animal health business and a \$0.7 million related to the gain from the sale of cryptocurrencies.

Effective November 29, 2018, Kairos entered into the second amendment to the lease agreement for the approximate 107,600 square foot warehouse located in Oklahoma City, Oklahoma, including improvements thereon. The amendment extended the lease term to August 2019, provided renewal options to February 15, 2020 (which were executed in 2019), revises the monthly rent to a base rent, currently \$190,000 per month and includes an electrical cost based upon actual usage. On January 8, 2020, the Company entered into the third amendment to the lease which extends the lease term to May 15, 2020, with all other terms remaining substantially the same in the second amendment.

During December 2019, the Company purchased 4,000 next generation Bitmain S17 Pro Antminers for approximately \$6.4 million from BitmainTech PTE. LTD. ("Bitmain"). In December 2019, 3,000 miners were received at the Company's Oklahoma City facility, and the remaining 1,000 were received in January 2020.

Subsequent to December 31, 2019, in connection with the Company's Sales Agreement with H.C. Wainwright, the Company received gross proceeds of approximately \$9.5 million from the sale of 5,995,559 shares of common stock.

We expect to continue to incur losses from operations for the near-term and these losses could be significant as we incur costs and expenses associated with recent and potential future acquisitions, as well as public company, legal and administrative related expenses being incurred. We are closely monitoring our cash balances, cash needs and expense levels.

Funding our operations on a go-forward basis will rely significantly on our ability to continue to mine cryptocurrency and the spot or market price of the cryptocurrency we mine. We expect to generate ongoing revenues from the production of cryptocurrencies, primarily bitcoin currency rewards, for example, in our mining facilities and our ability to liquidate bitcoin currency rewards at future values will be evaluated from time to time to generate cash for operations. Generating bitcoin currency rewards, for example, which exceed our production and overhead costs will determine our ability to report profit margins related to such mining operations, although accounting for our reported profitability is significantly complex. Furthermore, regardless of our ability to generate revenue from the sale of our cryptocurrency assets, we will need to raise additional capital in the form of equity or debt to fund our operations and pursue our business strategy.

The ability to raise funds as equity, debt or conversion of cryptocurrency to maintain our operations is subject to many risks and uncertainties and, even if we were successful, future equity issuances would result in dilution to our existing stockholders and any future debt or debt securities may contain covenants that limit our operations or ability to enter into certain transactions. Our ability to realize revenue through bitcoin production and successfully convert bitcoin into cash or fund overhead with bitcoin is subject to a number of risks, including regulatory, financial and business risks, many of which are beyond our control. Additionally, the value of bitcoin currency rewards has been extremely volatile recently and such volatility has recently been lower and future prices cannot be predicted.

If we are unable to generate sufficient revenue from our bitcoin production when needed or secure additional sources of funding, it may be necessary to significantly reduce our current rate of spending or explore other strategic alternatives.

The Company has been named a defendant in several class action and other investor related lawsuits as more fully described in Part II – Item 1. Legal Proceedings, of this report. While the Company maintains policies of insurance, such policies may not cover all of the costs or expenses associated with responding to such matters or any liability or settlement associated with any lawsuits and are subject to significant deductible or retention amounts.

The Company's registration statement on Form S-3 (SEC File No. 333-226111), including the accompanying prospectus and any related prospectus supplement (the "ATM Offering"), is subject to the provisions of General Instruction I.B.6 of Form S-3, which provides that the Company may not sell securities in a public primary offering with a value exceeding one-third of its public float in any twelve-month period unless its public float is at least \$75 million. As of March 24, 2020, the Company's public float (i.e., the aggregate market value of its outstanding equity securities held by non-affiliates) was approximately \$24.5 million, based on the closing price per share of the Company's common stock, no par value, as reported on the Nasdaq Capital Market on March 20, 2020, as calculated in accordance with General Instruction I.B.6 of Form S-3. The Company has not sold any securities pursuant to General Instruction I.B.6 of Form S-3 during the twelve calendar months immediately prior to the date of this Annual Report on Form 10-K. If the Company's public float meets or exceeds \$75 million at any time, the Company will no longer be subject to the restrictions set forth in General Instruction I.B.6 of Form S-3, at least until the filing of its next Section 10(a)(3) update as required under the Securities Act.

Operating Activities

Net cash consumed by operating activities was \$16.9 million during the year ended December 31, 2019. Cash was consumed from the net loss of \$2.3 million, less non-cash items of \$14.7 million, including a loss on the issuance of our convertible notes of \$6.2 million, the change in fair value of our convertible notes and the related warrant liability of \$6.8 million, amortization of our right of use assets of \$2.3 million, stock-based compensation totaling \$0.7 million, impairment to our cryptocurrencies of \$0.8 million, an impairment of intangible assets acquired of \$0.7 million related to our decision not to pursue our Logical Brokerage business, net of deferred income tax benefit of \$0.1 million, and depreciation and amortization totaling \$0.1 million, offset by a \$1.1 million gain recognized on the deconsolidation of Tess, a \$0.9 million gain on the extinguishment of notes, interest and accounts payable, other income of approximately \$0.1 million, primarily related to the amortization of our deferred revenue related to our legacy animal health business and a \$0.7 million related to the gain from the sale of cryptocurrencies. Cryptocurrencies increased by \$6.6 million and deposits increased \$1.4 million for the purchase of our cryptocurrency miners not yet received, offset by, a decrease in our lease liability of \$2.3 million and a decrease in accounts payable and accrued expenses of \$0.8 million.

Net cash consumed by operating activities was \$19.1 million, consisting of \$19.0 million from continuing operations and \$0.1 million from discontinued operations during the year ended December 31, 2018. Cash was consumed from continuing operations by the loss of \$60.3 million, less non-cash items of \$35.3 million consisting of an asset impairment for the Company's miners of \$29.2 million, impairment of our cryptocurrencies of \$3.5 million, impairment of acquired intangible rights of \$1.3 million, the write-off ogoodwill of \$1.2 million, depreciation and amortization totaling \$5.3 million, stock-based compensation totaling \$4.7 million, stock issued for the extinguishment of the BMSS payable of \$0.3 million and common stock issued for services totaling \$0.4 million, net of deferred income tax benefit of \$0.7 million, amortization of license fee revenue totaling \$0.1 million and the realized gain on sale of cryptocurrencies of \$26,000. Prepaid expenses and other current assets increased \$0.8 million due primarily to increases in prepaid insurance premiums, cryptocurrencies increased \$7.7 million and accounts payable and accrued expenses increased \$4.7 million related to the significant expansion of the Company's operating activities in 2018.

Investing Activities

Net cash consumed by investing activities during the year ended December 31, 2019 was \$1.8 million, consisting of proceeds from the sale of cryptocurrencies of \$3.2 million, offset by \$5.0 million for the purchase of our next generation Bitmain S17 Pro Antminers and \$37,000 for the amortization of patent costs.

Net cash consumed by investing activities during the year ended December 31, 2018 was \$24.9 million primarily consisting of purchases of cryptocurrencies of \$5.6 million, purchases of property and equipment of \$20.2 million related to the Company's cryptocurrency miners, an additional investment in Coinsquare of \$6.4 million, security deposits of \$0.7 million, purchases of patent and trademark application costs of \$60,000, an investment in Logical Brokerage of \$0.5 million and a purchase of developed technology of \$0.6 million, offset by proceeds from the sale of cryptocurrencies of \$9.2 million.

Financing Activities

Net cash inflows from financing activities was \$25.9 million during the year ended December 31, 2019, which consisted of net proceeds from the issuance of our common stock pursuant to General Instruction I.B.1 of Form S-3 in connection with our ATM Offering of \$23.8 million, the proceeds received from the issuance of our Notes and Warrants of \$3.0 million, offset by the repayment of the principal balance related to our agreement with BMSS of \$0.9 million, net of the \$0.4 million gain recorded on extinguishment of the BMSS balance.

Net cash inflows from financing activities was \$2.5 million during the year ended December 31, 2018, primarily consisting of \$1.7 million of proceeds from a convertible demand note issued by Tess, \$0.4 million from the exercise of warrants, \$0.5 million from the sale of the Company's shares of common stock held by Tess, \$0.2 million from the sale of common shares by Tess, \$0.1 million from the exercise of stock options and \$0.1 million from a refund of previously escrowed dividend, offset by \$0.3 million for payments made related to our BMSS Agreement and \$0.1 million used in scheduled payments under debt agreements.

Critical Accounting Policies

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America (GAAP) requires management to make estimates and assumptions about future events that affect the amounts reported in the financial statements and accompanying notes. Future events and their effects cannot be determined with absolute certainty. Therefore, the determination of estimates requires the exercise of judgment. Actual results inevitably will differ from those estimates, and such differences may be material to the financial statements. The most significant accounting estimates inherent in the preparation of our financial statements include estimates associated with revenue recognition, investments, intangible assets, stock-based compensation and business combinations.

The Company's financial position, results of operations and cash flows are impacted by the accounting policies the Company has adopted. In order to get a full understanding of the Company's financial statements, one must have a clear understanding of the accounting policies employed. A summary of the Company's critical accounting policies follows:

Long Term Investments

As described in our consolidated financial statements, effective January 1, 2018, the Company adopted Accounting Standards Update ("ASU") 2016-01 and related ASU 2018-03 concerning recognition and measurement of financial assets and financial liabilities. In adopting this new guidance, the Company has made an accounting policy election to adopt a new measurement alternative for investments in equity securities without readily determinable fair values.

For equity investments that qualify to use the measurement alternative, the Company initially records such equity investments at cost but will be required to adjust the carrying value through earnings when there is an observable transaction involving the same or a similar investment with the same issuer or upon an impairment.

Cryptocurrencies

Cryptocurrencies, (including bitcoin, bitcoin cash and litecoin) are included in current assets in the consolidated balance sheets as intangible assets with indefinite useful lives. Cryptocurrencies are recorded at cost less impairment.

An intangible asset with an indefinite useful life is not amortized but assessed for impairment annually, or more frequently, when events or changes in circumstances occur indicating that it is more likely than not that the indefinite-lived asset is impaired. Impairment exists when the carrying amount exceeds its fair value, which is measured using the quoted price of the cryptocurrency at the time its fair value is being measured. In testing for impairment, the Company has the option to first perform a qualitative assessment to determine whether it is more likely than not that an impairment exists. If it is determined that it is not more likely than not that an impairment exists, a quantitative impairment test is not necessary. If the Company concludes otherwise, it is required to perform a quantitative impairment test. To the extent an impairment loss is recognized, the loss establishes the new cost basis of the asset. Subsequent reversal of impairment losses is not permitted.

Impairment of long-lived assets

Management reviews long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to undiscounted expected future cash flows expected to be generated by the asset. If such assets are considered to be impaired, the impairment to be recognized is measured by comparing the amount by which the carrying amount of the assets to their fair value. Based on its reviews, management determined that its cryptocurrency miners were impaired by a total of \$29.3 million based upon an assessment as of December 31, 2018, including consideration of the decline in bitcoin values which occurred commencing in late December 2017 and into 2018.

Intangible assets acquired in the Tess business combination consist primarily of in-process research and development ("IPR&D") assets. The value attributable to IPR&D projects at the time of acquisition was capitalized as an indefinite-lived intangible asset and tested for impairment until the project is completed or abandoned. Upon completion of the project, the indefinite-lived intangible asset will be accounted for as a finite-lived intangible asset and amortized on a straight-line basis over its estimated useful life. If the project is abandoned, the indefinite-lived intangible asset will be charged to expense. During the year ended December 31, 2018, management determined based upon an assessment of the operations and cash needs of Tess, that the intangible assets related to the Tess Investment were impaired and recorded an impairment charge of \$1.3 million as of December 31, 2018.

The Company made the decision, effective as of December 31, 2019 not to pursue its RiotX / Logical Brokerage business development plan, and recorded an impairment of intangible assets acquired of approximately \$0.7 million.

Sequencing

On January 28, 2019, the Company adopted a sequencing policy under Accounting Standards Codification ("ASC") 815-40-35 Derivatives and Hedging ("ASC 815") whereby in the event that reclassification of contracts from equity to assets or liabilities is necessary pursuant to ASC 815 due to the Company's inability to demonstrate it has sufficient authorized shares as a result of certain securities convertible or exchangeable for a potentially indeterminable number of shares, shares will be allocated on the basis of the earliest issuance date of potentially dilutive instruments, with the earliest grants receiving the first allocation of shares. Pursuant to ASC 815, issuances of securities to the Company's employees or directors are not subject to the sequencing policy.

Notes Payable Fair Value Option

In January 2019, the Company issued Senior Secured Promissory Notes (the "Notes") to Oasis Capital, LLC, Harbor Gates Capital, LLC and SG3 Capital, LLC (each an "Investor" and collectively, the "Investors") in the aggregate principal amount of \$3.4 million. The Company has elected the fair value option to account for these Notes due to the complexity and number of embedded features. The fair value of the Notes is classified within Level 3 of the fair value hierarchy because the fair values were estimated utilizing a Monte Carlo simulation model. Accordingly, the Company recorded these Notes at fair value with changes in fair value recorded in the statement of operations. As a result of applying the fair value option, direct costs and fees related to the Notes were recognized in earnings as incurred and were not deferred. The change in fair value of the Notes has been presented as change in value of convertible notes payable on the unaudited condensed interim consolidated statements of operations.

As of September 30, 2019, all of the Notes were converted into 1,813,500 shares of the Company's common stock valued at their estimated fair value at the time of conversion totaling approximately \$10.2 million.

Warrant Liability

The Company issued Warrants to purchase 1,908,144 shares of its common stock in connection with the Notes issued to the Investors in January 2019, and recorded these outstanding Warrants as a liability at fair value utilizing a Monte Carlo simulation model. This liability is subject to re-measurement at each balance sheet date, and any change in fair value is recognized in the Company's condensed interim consolidated statements of operations. As of June 25, 2019, the Company's Notes had been converted in their entirety and the warrant liability was revalued and reclassified to equity, because the Warrants are no longer subject to the Company's sequencing policy as described above.

Leases

Effective January 1, 2019, the Company accounts for its leases under ASC 842, Leases ("ASC 842"). Under this guidance, arrangements meeting the definition of a lease are classified as operating or financing leases, and are recorded on the consolidated balance sheet as both a right of use asset and lease liability, calculated by discounting fixed lease payments over the lease term at the rate implicit in the lease or the Company's incremental borrowing rate. Lease liabilities are increased by interest and reduced by payments each period, and the right of use asset is amortized over the lease term. For operating leases, interest on the lease liability and the amortization of the right of use asset result in straight-line rent expense over the lease term.

In calculating the right of use asset and lease liability, the Company elects to combine lease and non-lease components as permitted under ASC 842. The Company excludes short-term leases having initial terms of 12 months or less from the new guidance as an accounting policy election and recognizes rent expense on a straight-line basis over the lease term

The Company continues to account for leases in the prior period financial statements under ASC Topic 840.

Revenue Recognition

The Company recognizes revenue under ASC 606, Revenue from Contracts with Customers. The core principle of the new revenue standard is that a company should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the company expects to be entitled in exchange for those goods or services. The following five steps are applied to achieve that core principle:

- · Step 1: Identify the contract with the customer
- · Step 2: Identify the performance obligations in the contract
- · Step 3: Determine the transaction price
- · Step 4: Allocate the transaction price to the performance obligations in the contract
- · Step 5: Recognize revenue when the Company satisfies a performance obligation

In order to identify the performance obligations in a contract with a customer, a company must assess the promised goods or services in the contract and identify each promised good or service that is distinct. A performance obligation meets ASC 606's definition of a "distinct" good or service (or bundle of goods or services) if both of the following criteria are met: The customer can benefit from the good or service either on its own or together with other resources that are readily available to the customer (i.e., the good or service is capable of being distinct), and the entity's promise to transfer the good or service to the customer is separately identifiable from other promises in the contract (i.e., the promise to transfer the good or service is distinct within the context of the contract).

If a good or service is not distinct, the good or service is combined with other promised goods or services until a bundle of goods or services is identified that is distinct.

The transaction price is the amount of consideration to which an entity expects to be entitled in exchange for transferring promised goods or services to a customer. The consideration promised in a contract with a customer may include fixed amounts, variable amounts, or both. When determining the transaction price, an entity must consider the effects of all of the following:

- · Variable consideration
- Constraining estimates of variable consideration
- The existence of a significant financing component in the contract
- Noncash consideration
- · Consideration payable to a customer

Variable consideration is included in the transaction price only to the extent that it is probable that a significant reversal in the amount of cumulative revenue recognized will not occur when the uncertainty associated with the variable consideration is subsequently resolved. The transaction price is allocated to each performance obligation on a relative standalone selling price basis. The transaction price allocated to each performance obligation is recognized when that performance obligation is satisfied, at a point in time or over time as appropriate.

The Company has entered into digital asset mining pools by executing contracts with the mining pool operators to provide computing power to the mining pool. The contracts are terminable at any time by either party and the Company's enforceable right to compensation only begins when the Company provides computing power to the mining pool operator. In exchange for providing computing power, the Company is entitled to a fractional share of the fixed cryptocurrency award the mining pool operator receives (less digital asset transaction fees to the mining pool operator which are recorded as a component of cost of revenues), for successfully adding a block to the blockchain. The Company's factional share is based on the proportion of computing power the Company contributed to the mining pool operator to the total computing power contributed by all mining pool participants in solving the current algorithm.

Providing computing power in digital asset transaction verification services is an output of the Company's ordinary activities. The provision of providing such computing power is the only performance obligation in the Company's contracts with mining pool operators. The transaction consideration the Company receives, if any, is noncash consideration, which the Company measures at fair value on the date received, which is not materially different than the fair value at contract inception or the time the Company has earned the award from the pools. The consideration is all variable. Because it is not probable that a significant reversal of cumulative revenue will not occur, the consideration is constrained until the mining pool operator successfully places a block (by being the first to solve an algorithm) and the Company receives confirmation of the consideration it will receive, at which time revenue is recognized. There is no significant financing component in these transactions.

Fair value of the cryptocurrency award received is determined using the market rate of the related cryptocurrency at the time of receipt.

There is currently no specific definitive guidance under GAAP or alternative accounting framework for the accounting for cryptocurrencies recognized as revenue or held, and management has exercised significant judgment in determining the appropriate accounting treatment. In the event authoritative guidance is enacted by the FASB, the Company may be required to change its policies, which could have an effect on the Company's consolidated financial position and results from operations.

Stock-based Compensation

The Company accounts for share-based payment awards exchanged for services at the estimated grant date fair value of the award. Stock options issued under the Company's long-term incentive plans are granted with an exercise price equal to no less than the market price of the Company's stock at the date of grant and expire up to ten years from the date of grant. These options generally vest on the grant date or over a one- year period.

The Company estimates the fair value of stock option grants using the Black-Scholes option pricing model and the assumptions used in calculating the fair value of stock-based awards represent management's best estimates and involve inherent uncertainties and the application of management's judgment.

Expected Term - The expected term of options represents the period that the Company's stock-based awards are expected to be outstanding based on the simplified method, which is the half-life from vesting to the end of its contractual term.

Expected Volatility - The Company computes stock price volatility over expected terms based on its historical common stock trading prices.

Risk-Free Interest Rate - The Company bases the risk-free interest rate on the implied yield available on U. S. Treasury zero-coupon issues with an equivalent remaining term.

Expected Dividend - The Company has never declared or paid any cash dividends on its common shares and does not plan to pay cash dividends in the foreseeable future, and, therefore, uses an expected dividend yield of zero in its valuation models.

Effective January 1, 2017, the Company elected to account for forfeited awards as they occur, as permitted by Accounting Standards Update ("ASU") 2016-09. Ultimately, the actual expenses recognized over the vesting period will be for those shares that vested. Prior to making this election, the Company estimated a forfeiture rate for awards at 0%, as the Company did not have a significant history of forfeitures.

Loss per share

Basic net loss per share ("EPS") of common stock is computed by dividing net loss by the weighted average number of shares of common stock outstanding during the period. Diluted EPS reflects the potential dilution that could occur if securities or other contracts to issue common stock were exercised or converted into common stock or resulted in the issuance of common stock that then shared in the earnings of the entity. The Company excludes its unvested restricted shares and escrow shares from the net loss per share calculation. The escrow shares are excluded due to their related contingencies, the inclusion of which would result in anti-dilution.

Rusiness Combinations

The Company applies the provisions of ASC 805 in the accounting for acquisitions. ASC 805 requires us to recognize separately from goodwill the assets acquired and the liabilities assumed at their acquisition date fair values. Goodwill as of the acquisition date is measured as the excess of consideration transferred over the net of the acquisition date fair values of the assets acquired and the liabilities assumed. While we use our best estimates and assumptions to accurately apply preliminary value to assets acquired and liabilities assumed at the acquisition date as well as contingent consideration, where applicable, these estimates are inherently uncertain and subject to refinement. As a result, during the measurement period, which may be up to one year from the acquisition date, we record adjustments to the assets and acquired liabilities assumed with the corresponding offset to goodwill in the current period, rather than a revision to a prior period. Upon the conclusion of the measurement period or final determination of the values of the assets acquired or liabilities assumed, whichever comes first, any subsequent adjustments are recorded in our Consolidated Statements of Operations. Accounting for business combinations requires management to make significant estimates and assumptions, especially at the acquisition date, including estimates for intangible assets, contractual obligations assumed, restructuring liabilities, pre-acquisition contingencies, and contingent consideration, where applicable. Although we believe the assumptions and estimates we have made have been reasonable and appropriate, they are based in part on historical experience and information obtained from management of the acquired companies and are inherently uncertain. Critical estimates in valuing certain of the intangible assets we have acquired include; future expected cash flows from product sales; customer contracts and acquired technologies; expected costs to develop in-process research and development into commercially viable

Recently issued and adopted accounting pronouncements

The Company continually assesses any new accounting pronouncements to determine their applicability. When it is determined that a new accounting pronouncement affects the Company's financial reporting, the Company undertakes a review to determine the consequences of the change to its financial statements and believes that there are proper controls in place to ascertain that the Company's financial statements properly reflect the change.

We have considered recently issued accounting pronouncements and do not believe the adoption of such pronouncements will have a material impact on our consolidated financial statements.

See Note 3 to our financial statements beginning on page F-1 of this Form 10-K for a description of recent accounting pronouncements applicable to our financial statements.

Off-Balance Sheet Arrangements

We do not have any off-balance sheet arrangements.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK.

Not required for Smaller Reporting Company.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA.

Report of Independent Registered Public Accounting Firm	F-1
Consolidated Balance Sheets at December 31, 2019 and 2018	F-2
Consolidated Statements of Operations for the years ended December 31, 2019 and 2018	F-3
Consolidated Statements of Changes in Stockholders' Equity for the years ended December 31, 2019 and 2018	F-4
Consolidated Statements of Cash Flows for the years ended December 31, 2019 and 2018	F-5
Notes to Consolidated Financial Statements	F-6

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and Board of Directors of Riot Blockchain, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Riot Blockchain, Inc. and Subsidiaries (the "Company") as of December 31, 2019 and 2018, the related consolidated statements of operations, stockholders' equity and cash flows for each of the two years in the period endedDecember 31, 2019, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2019 and 2018, and the results of its operations and its cash flows for each of the two years in the period endedDecember 31, 2019, in conformity with accounting principles generally accepted in the United States of America.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) ("PCAOB"), the Company's internal control over financial reporting as of December 31, 2019, based on the criteria established in Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in 2013 and our report dated March 25, 2020, expressed an adverse opinion on the effectiveness of the Company's internal control over financial reporting because of the existence of material weaknesses.

Change in Accounting Principle

As discussed in Note 3 to the consolidated financial statements, the Company has changed its method of accounting for leases in 2019 due to the adoption of the guidance in ASC Topic 842, Leases.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ Marcum llp

Marcum llp

We have served as the Company's auditor since 2019.

New York, NY March 25, 2020

	Dece	ember 31, 2019	D	ecember 31, 2018
ASSETS				
Current assets				
Cash and cash equivalents	\$	7,440	\$	225
Prepaid expenses and other current assets		1,349		1,379
Cryptocurrencies		3,839		707
Total current assets		12,628		2,311
Property and equipment, net		5,051		26
Right of use assets		367		_
Intangible rights acquired		_		700
Deposits on equipment		1,449		_
Long-term investments		9,723		9,413
Security deposits		703		703
Patents, net		459		507
Convertible note and accrued interest		_		200
Total assets	\$	30,380	\$	13,860
	-		-	
LIABILITIES AND STOCKHOLDERS' EQUITY				
Current liabilities				
Accounts payable	\$	717	\$	3,829
Accrued expenses		2,187		1,532
Deferred purchase price - BMSS		_		1,200
Operating lease liability		368		_
Deferred revenue, current portion		97		97
Total current liabilities		3,369		6,658
Natas manahla				1,696
Notes payable Deferred revenue, less current portion		— 776		872
Deferred income tax liability		//0		
				143
Total liabilities		4,145		9,369
Commitments and contingencies - Note 15				
Stockholders' equity				
Preferred stock, no par value, 15,000,000 shares authorized:				
2% Series A Convertible stock, 2,000,000 shares authorized; no shares issued and outstanding as of December 31, 2019 and 2018		_		_
0% Series B Convertible stock, 1,750,001 shares authorized; 4,199 and 13,000 shares issued and outstanding as of December 31, 2019 and 2018, respectively,				
liquidation preference over common stock, equal to carrying value		22		69
Common stock, no par value; 170,000,000 shares authorized; 25,082,872 and 14,519,058 shares issued and				
outstanding as of December 31, 2019 and 2018, respectively		243,458		202,917
Accumulated deficit		(217,238)		(197,199)
Total Riot Blockchain stockholders' equity		26,242		5,787
Non-controlling interest		(7)		(1,296)
Total stockholders' equity		26,235		4,491
Total liabilities and stockholders' equity	\$	30,380	\$	13,860
	Φ	30,380	Φ	13,000

See Accompanying Notes to Consolidated Financial Statements.

Riot Blockchain, Inc. and Subsidiaries Consolidated Statements of Operations (in thousands, except for share and per share amounts)

	Years Ended December 31,			ber 31,
		2019		2018
Revenue:				
Revenue - cryptocurrency mining	\$	6,741	\$	7,749
License fees		96		96
Total Revenue		6,837		7,845
Costs and expenses:				
Cost of revenues (exclusive of depreciation and				
amortization shown below)		6,097		5,820
Selling, general and administrative		9,159		20,858
Depreciation and amortization		119		5,267
Impairment of property and equipment		_		29,238
Impairment of goodwill				1,186
Impairment of intangible rights acquired		700		1,341
Impairment of cryptocurrencies	_	844		3,501
Total costs and expenses		16,919		67,211
Operating loss from continuing operations		(10,082)		(59,366)
Other income (expense):				
Loss on issuance of convertible notes, common stock and warrants		(6,155)		_
Change in fair value of warrant liability		(2,869)		_
Change in fair value of convertible notes		(3,896)		_
Gain on deconsolidation of Tess		1,139		(1.250)
Non-compliance penalty for SEC registration requirement		(122)		(1,350)
Interest expense Gain on extinguishment of accounts payable, other liabilities and accrued interest		(122) 854		(123)
Investment income		37		70
Loss on extinguishment of BMSS payable		_		(265)
Realized gain on sale of cryptocurrencies		665		26
Other expense		(17)		
Total other expense		(10,364)		(1,642)
Loss from continuing operations before income taxes		(20,446)		(61,008)
Deferred income tax benefit		1.42		600
Defended income tax benefit		143		699
Loss from continuing operations		(20,303)		(60,309)
		(1,7- 1-7	-	(,,
Discontinued operations				
Income from operations				96
Income from discontinued operations			-	96
Net loss		(20,303)		(60,213)
Not loss attributable to non controlling interest		264		2 205
Net loss attributable to non-controlling interest		264	-	2,205
Net loss attributable to Riot Blockchain	\$	(20,039)	\$	(58,008)
Basic and diluted net loss per share:				
Continuing operations attributable to Riot Blockchain	\$	(1.02)	\$	(4.34)
Discontinued operations attributable to Riot Blockchain	Ψ	(1.02)	Ψ	0.01
Net loss per share	\$	(1.02)	\$	(4.33)
		,		·
Basic and diluted weighted average number of shares outstanding		19,597,977		13,403,846

See Accompanying Notes to Consolidated Financial Statements.

Riot Blockchain, Inc. and Subsidiaries Consolidated Statement of Stockholders' Equity Years Ended December 31, 2019 and 2018 (in thousands, except for share and per share amounts)

						Total Riot Blockchain	Non-	Total
	Preferre	ed Stock	Commo	on Stock	Accumulated	stockholders'	controlling	stockholders'
	Shares	Amount	Shares	Amount	deficit	equity	interest	equity
Balance as of January 1, 2018	1,458,001	\$ 7,745	11,622,112	\$ 180,387	\$ (139,263)	\$ 48,869	\$ 758	\$ 49,627
Common stock issued for asset purchase - Prive	_	_	800,000	8,480	_	8,480	_	8,480
Common stock escrow shares issued for asset								
purchase - Prive	_	_	200,000	_	_	_	_	_
Preferred stock converted to common stock	(1,353,505)	(7,190)	1,353,505	7,190	_	_	_	_
Preferred stock canceled	(91,496)	(486)	_	486	_	_	_	_
Exercise of warrants	_	_	100,000	350	_	350	_	350
Stock-based compensation	_	_	_	4,660	_	4,660	_	4,660
Exercise of stock options	_	_	19,533	79	_	79	_	79
Common stock issued for services	_	_	43,277	403	_	403	_	403
Refund of escrow dividend	_	_	_	_	72	72	_	72
Sale of Riot shares held by 1172767 B.C. Ltd.	_	_	_	506	_	506	_	506
Stock issued for the extinguishment of the								
BMSS payable	_	_	50,000	265	_	265	_	265
Cashless exercise of stock purchase warrants	_	_	3,215	_	_	_	_	_
Delivery of common stock underlying restricted								
stock units	_	_	327,416	_	_	_	_	_
Non-controlling interest - Logical Brokerage	_	_	_	_	_	_	41	41
Net loss attributable to non-controlling interest	_	_	_	_	_	_	(2,205)	(2,205)
Sale of common shares by 1172767 B.C. Ltd.	_	_	_	111	_	111	110	221
Net loss	_	_	_	_	(58,008)	(58,008)	_	(58,008)
Balance as of December 31, 2018	13,000	\$ 69	14,519,058	\$ 202,917	\$ (197,199)	\$ 5,787	\$ (1,296)	\$ 4,491
Delivery of common stock underlying restricted	,		, ,	,		,		,
stock units	_	_	239,751	_	_	_	_	_
Common stock issued with convertible notes	_	_	150,000	255	_	255	_	255
Common stock issued in connection with			,					
conversion of notes payable	_	_	1,813,500	10,226	_	10,226	_	10,226
Reclassification of warrant liability to equity	_	_		5,439	_	5,439	_	5,439
Preferred stock converted to common stock	(0.001)	(47)	0.001	47		,		, in the second
0, 11, 1, ,,	(8,801)	(47)	8,801	47		745		745
Stock-based compensation	_	_	_	745	_	/45	_	745
Issuance of common stock, net of offering			0.251.762	22.020		22.020		22.020
costs/At-the-market offering			8,351,762	23,829		23,829	(2(4)	23,829
Net loss attributable to non-controlling interest Deconsolidation of Tess		_	_	_	_	_	(264)	(264)
				_	(20,020)	(20,020)	1,553	1,553
Net loss					(20,039)	(20,039)		(20,039)
Balance as of December 31, 2019	4,199	\$ 22	25,082,872	\$ 243,458	\$ (217,238)	\$ 26,242	<u>\$ (7)</u>	\$ 26,235

See Accompanying Notes to Consolidated Financial Statements

Riot Blockchain, Inc. and Subsidiaries Consolidated Statements of Cash Flows (in thousands)

Years Ended December 31,

	2019	2018
Cash flows from operating activities	2019	2018
Net loss	\$ (20,303)	\$ (60,213)
Income from discontinued operations		96
Loss from continuing operations	(20,303)	(60,309)
Adjustments to reconcile net loss from continuing operations to net cash used in operating activities of continuing		
operations: Stock-based compensation	745	4,660
Depreciation and amortization	119	5,267
Deferred income tax benefit	(143)	(699)
Amortization of license fee revenue	(96)	(96)
Non-cash lease expense	2,297	<u> </u>
Common stock issued for services	_	403
Common stock issued for the extinguishment of the BMSS payable		265
Loss on issuance of convertible notes, common stock and warrants	6,155	_
Change in fair value of convertible notes Change in fair value of warrant liability	3,896 2,869	
Gain on deconsolidation of Tess	(1,139)	
Gain on extinguishment of accounts payable, other liabilities and accrued interest	(854)	_
Impairment of property and equipment	(65.1)	29,238
Impairment of cryptocurrencies	844	3,501
Goodwill impairment charge	_	1,186
Impairment of intangible rights acquired	700	1,341
Realized gain on sale of cryptocurrencies	(665)	(26)
Accrued interest on Verady investment	(20)	_
Changes in assets and liabilities:	(101)	(0.0.0)
Prepaid expenses and other current assets	(101)	(839)
Cryptocurrencies - mining, net of mining pool operating fees	(6,606)	(7,593)
Deposits on equipment Accounts payable	(1,449) (1,886)	3,419
Accrued expenses	1,069	1,230
Lease liability	(2,296)	
Net cash used in operating activities	(16,864)	(19,052)
i C	(30,000)	(32,332)
Cash flows from investing activities - continuing operations:		
Proceeds from sale of cryptocurrencies	3,196	9,237
Purchase of cryptocurrencies	_	(5,625)
Purchases of equipment	(4,958)	(20,195)
Purchases of other investments	_	(6,413)
Security deposits	(28)	(703)
Patent costs incurred Investment in Logical Brokerage, net of cash acquired	(38)	(59) (517)
Purchase of developed technology by Tess Pay, Inc.		(587)
Net cash used in investing activities	(1,800)	(24,862)
The cush used in investing weavities	(1,000)	(24,002)
Cash flows from financing activities - continuing operations:		
Proceeds from issuance of convertible notes	3,000	_
Proceeds from notes payable	<u> </u>	1,696
Payments on BMSS purchase agreement	_	(300)
Repayment of notes payable and other obligations	(950)	(136)
Proceeds from the issuance of common stock / At-the-market offering	24,825	_
Offering costs for the issuance of common stock / At-the-market offering	(996)	
Proceeds from exercise of warrants Proceeds from exercise of stock options	_	350 79
Proceeds from sale of Riot shares held by Tess Pay, Inc.		506
1 roccus from saic of Riot shales field by 1 css 1 ay, file.	_	220
Proceeds form the sale of common shares sold by Tess Pay, Inc.		220
Refund of escrow dividend	_	72
Net cash provided by financing activities	25,879	2,487
Net increase (decrease) in cash and cash equivalents	7,215	(41,427)
Cash and cash equivalents at beginning of period		41,652
Cash and cash equivalents at end of period	\$ 7,440	\$ 225
	_	
Supplemental disclosure of cash flow information:		
Cash paid for interest	<u> </u>	\$ 7
Cash paid for taxes	\$	\$ —
Supplemental disclosure of noncash investing and financing activities:		
Conversion of notes payable to common stock	\$ 10,226	\$
Reclassification of warrant liability to equity	\$ 5,439	\$ —
Value of shares issued for Prive asset acquisition	\$	\$ 8,480
Conversion of preferred stock to common stock	\$ 47	\$ 7,190
Deferred purchase price for BMSS	\$ -	\$ 1,500
	Ψ	Ψ 1,500

Preferred stock canceled	\$ 	\$ \$ 486
Deferred tax liability for Logical Brokerage	\$ _	\$ 143
Cryptocurrencies used to purchase miners	\$ 99	\$ -

See Accompanying Notes to Consolidated Financial Statements

Note 1. Organization

Riot Blockchain, Inc. (the "Company" or "Riot Blockchain") was originally organized on July 24, 2000, as a Colorado corporation. Effective October 19, 2017, the Company's name was changed to Riot Blockchain, Inc., from Bioptix, Inc. Effective October 19, 2017, the Company changed its state of incorporation to Nevada from Colorado.

The Company operates a cryptocurrency mining operation, which utilizes specialized computers (also known as "miners") that generate cryptocurrency (primarily bitcoin) from the Blockchain. The Company acquired approximately 8,000 miners through its acquisition of Kairos Global Technology, Inc., ("Kairos") in November 2017, and from Prive Technologies, Inc. ("Prive") Blockchain Mining Supply & Services Ltd. ("BMSS") in February 2018. During December 2019, the Company purchased 4,000 next generation Bitmain S17 Pro Antminers for approximately \$6.3 million from BitmainTech PTE. LTD. ("Bitmain"). In December 2019, 3,000 miners were received at the Company's Oklahoma City facility, and the remaining 1,000 miners were received in early 2020. During February 2020, all of the new generation miners were installed and operational. As part of this upgrade, due to power and infrastructure considerations, virtually all of the previously acquired miners were taken offline and their future use is being evaluated.

Note 2. Liquidity and Financial Condition

The Company has experienced recurring losses and negative cash flows from operations. At December 31, 2019, the Company had approximate balances of cash and cash equivalents of \$7.4 million, working capital of \$9.3 million, total stockholders' equity of \$26.2 million and an accumulated deficit of \$217.2 million. To date, the Company has, in large part, relied on equity financings to fund its operations.

The Company expects to continue to incur losses from operations for the near-term and these losses could be significant as the Company incurs costs and expenses associated with recent and potential future acquisitions, as well as public company, legal and administrative related expenses being incurred. As disclosed in Note 10, during January 2019, the Company issued a series of Senior Secured Convertible Promissory Notes (the "Notes"), to investors for an aggregate principal amount of approximately \$3.4 million and an equal value of warrants for the purchase of shares of the Company's common stock (the "Warrants") in exchange for a total investment of \$3.0 million. During the year ended December 31, 2019, all of the Notes were converted into common stock and have been satisfied in full. The Company is closely monitoring its cash balances, cash needs and expense levels.

As disclosed in Note 11, the Company entered into a Sales Agreement with H.C. Wainwright & Co., LLC ("H.C. Wainwright") dated May 24, 2019 (the "Sales Agreement"), pursuant to which the Company may, from time to time, sell up to \$100.0 million in shares of the Company's common stock through H.C. Wainwright, acting as the Company's sales agent and/or principal, in an at-the-market offering ("ATM Offering"). All sales of the shares in connection with the ATM Offering have been made pursuant to an effective shelf registration statement on Form S-3 filed with the U.S. Securities and Exchange Commission ("SEC"). The Company pays H.C. Wainwright a commission of approximately 3.0% of the aggregate gross proceeds the Company received from all sales of the Company's common stock under the Sales Agreement. The Company received net proceeds on sales under the Sales Agreement of approximately \$23.8 million at a weighted average sales price of \$2.97 during the year ended December 31, 2019. Subsequent to December 31, 2019, in connection with the Sales Agreement, the Company received gross proceeds of approximately \$9.5 million from the sale of 5,995,559 shares of common stock.

The Company believes its current cash on hand is sufficient to meet its operating and capital requirements for at least the next twelve months from the date these financial statements are issued.

Note 3. Basis of Presentation, Summary of Significant Accounting Policies and Recent Accounting Pronouncements

Principles of consolidation

The accompanying consolidated financial statements of the Company include the accounts of the Company and its wholly or majority owned and controlled subsidiaries. Consolidated subsidiaries results are included from the date the subsidiary was formed or acquired. Intercompany investments, balances and transactions have been eliminated in consolidation. Non–controlling interests represents the minority equity investment in the Company's subsidiaries, plus the minority investors' share of the net operating results and other components of equity relating to the non–controlling interest. The Company's consolidated operating subsidiaries and (percentage owned at December 31, 2019) consisted of; Kairos Global Technology, Inc., (100%) and Logical Brokerage Corp. (92.5%).

Use of estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America ("GAAP") requires management to make estimates and assumptions that affect reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the balance sheet and the reported amounts of revenue and expenses during the reporting periods. Actual results could differ significantly from those estimates. The most significant accounting estimates inherent in the preparation of the Company's financial statements include estimates associated with revenue recognition, asset valuations, the useful lives and recoverability of long-lived assets, impairment analysis of intangibles and goodwill, stock-based compensation, and the valuation allowance associated with the Company's deferred tax assets.

Long-term investments

As described in Note 6 to these consolidated financial statements, effective January 1, 2018, the Company adopted Accounting Standards Update ("ASU") 2016-01 and related ASU 2018-03 concerning recognition and measurement of financial assets and financial liabilities. In adopting this new guidance, the Company has made an accounting policy election to adopt an adjusted cost method measurement alternative for investments in equity securities without readily determinable fair values.

For equity investments that are accounted for using the measurement alternative, the Company initially records equity investments at cost but is required to adjust the carrying value of such equity investments through earnings when there is an observable transaction involving the same or a similar investment with the same issuer or upon an impairment.

As of December 31, 2019, the Company's long-term investments consist of its investments in Coinsquare Ltd., ("Coinsquare"), TessPay Inc. (formerly 1172767 B.C. Ltd) ("Tess") and Verady, LLC ("Verady").

Cash, cash equivalents and short-term investments

The Company considers all highly liquid investments with an original maturity of three months or less at the date of acquisition to be cash equivalents. From time to time, the Company's cash account balances exceed the balances as covered by the Federal Deposit Insurance System. The Company has never suffered a loss due to such excess balances. As of December 31, 2019 and 2018, the Company had no cash equivalents or short-term investments.

Fair value of financial instruments

The Company accounts for financial instruments under Financial Accounting Standards Board ("FASB") ASC 820, Fair Value Measurements. This statement defines fair value, establishes a framework for measuring fair value in generally accepted accounting principles, and expands disclosures about fair value measurements. To increase consistency and comparability in fair value measurements, ASC 820 establishes a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value into three levels as follows:

Level 1 — quoted prices (unadjusted) in active markets for identical assets or liabilities;

Level 2 — observable inputs other than Level 1, quoted prices for similar assets or liabilities in active markets, quoted prices for identical or similar assets and liabilities in markets that are not active, and model-derived prices whose inputs are observable or whose significant value drivers are observable; and

Level 3 — assets and liabilities whose significant value drivers are unobservable.

Observable inputs are based on market data obtained from independent sources, while unobservable inputs are based on the Company's market assumptions. Unobservable inputs require significant management judgment or estimation. In some cases, the inputs used to measure an asset or liability may fall into different levels of the fair value hierarchy. In those instances, the fair value measurement is required to be classified using the lowest level of input that is significant to the fair value measurement. Such determination requires significant management judgment. As of December 31, 2019 there were no financial assets or liabilities measured at fair value. The carrying amounts of the Company's financial assets and liabilities, such as cash and cash equivalents, and accounts payable, approximate fair value due to the short-term nature of these instruments. During the year ended December 31, 2019, the Company issued convertible notes and warrants in connection with the notes. The notes and warrants were classified as liabilities and measured at fair value on the issuance date, with changes in fair value recognized as other expense on the consolidated statements of operations and disclosed in the consolidated financial statements.

Cryptocurrencies

Cryptocurrencies, (including bitcoin, bitcoin cash and litecoin) are included in current assets in the accompanying consolidated balance sheets. Cryptocurrencies purchased are recorded at cost and cryptocurrencies awarded to the Company through its mining activities are accounted for in connection with the Company's revenue recognition policy disclosed below.

Cryptocurrencies held are accounted for as intangible assets with indefinite useful lives. An intangible asset with an indefinite useful life is not amortized but assessed for impairment annually, or more frequently, when events or changes in circumstances occur indicating that it is more likely than not that the indefinite-lived asset is impaired. Impairment exists when the carrying amount exceeds its fair value, which is measured using the quoted price of the cryptocurrency at the time its fair value is being measured. In testing for impairment, the Company has the option to first perform a qualitative assessment to determine whether it is more likely than not that an impairment exists. If it is determined that it is not more likely than not that an impairment exists, a quantitative impairment test is not necessary. If the Company concludes otherwise, it is required to perform a quantitative impairment test. To the extent an impairment loss is recognized, the loss establishes the new cost basis of the asset. Subsequent reversal of impairment losses is not permitted.

Purchases of cryptocurrencies by the Company are included within investing activities in the accompanying consolidated statements of cash flows, while cryptocurrencies awarded to the Company through its mining activities are included within operating activities on the accompanying consolidated statements of cash flows. The sales of cryptocurrencies are included within investing activities in the accompanying consolidated statements of cash flows and any realized gains or losses from such sales are included in other income (expense) in the consolidated statements of operations. The Company accounts for its gains or losses in accordance with the first in first out (FIFO) method of accounting.

Deferred revenue

The Company recognized upfront license fees from Ceva Santé Animale S.A. ("Licensee") related to its exclusive license agreement ("License Agreement"), which have been recorded as deferred revenue and are being amortized over the term of the License Agreement. Amortization of the license fees totaling approximately \$1.6 million began in July 2012. As of December 31, 2019, and 2018, each, deferred revenue of approximately \$0.1 million has been classified as a current liability and \$0.8 million and \$0.9 million, respectively, has been classified as a long-term liability. The current liability represents the next twelve months' portion of the license fees revenue. For each of the years ended December 31, 2019 and 2018, approximately \$0.1 million, was recorded as the license fee revenue.

Property and equipment

Property and equipment is stated at cost and depreciated using the straight-line method over the estimated useful lives of the assets, generally two years for cryptocurrency mining equipment and three years for computer related assets. Estimated useful lives for leasehold improvements are typically the lesser of the estimated useful life of the asset or the life of the term of the lease.

Patents and other intangible assets

The Company accounts for intangible assets under ASC 350-30. Patents costs consisting of filing and legal fees incurred are initially recorded at cost. Patents are amortized over the legal life of the patent or their estimated useful lives, using the straight-line method. Certain patents are in the legal application process and therefore are not currently being amortized.

Impairment of long-lived assets

Management reviews long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to undiscounted future cash flows expected to be generated by the asset. If such assets are considered to be impaired, the impairment to be recognized is measured by the amount by which the carrying amount of the assets exceeds the fair value of the assets. Based on its reviews, management determined that its cryptocurrency mining equipment and related improvements were impaired by a total of \$29.2 million based upon an assessment as of December 31, 2018, including consideration of the decline in bitcoin values which occurred commencing in late December 2017 and continued through December 31, 2018.

Intangible assets acquired in the Tess business combination consist primarily of in-process research and development ("IPR&D") assets. The value attributable to IPR&D projects at the time of acquisition is capitalized as an indefinite-lived intangible asset and tested for impairment until the project is completed or abandoned. Upon completion of the project, the indefinite-lived intangible asset will be accounted for as a finite-lived intangible asset and amortized on a straight-line basis over its estimated useful life. If the project is abandoned, the indefinite-lived intangible asset will be charged to expense. During the year ended December 31, 2018, management determined that its intangible assets related to the Tess Investment were impaired and recorded an impairment charge of \$1.3 million.

The Company made the decision, effective as of December 31, 2019 not to pursue its RiotX / Logical Brokerage cryptocurrency exchange development plan, and as of December 31, 2019 recorded an impairment of intangible assets acquired of approximately \$0.7 million.

Deferred tax liability

Due to certain acquisitions, temporary differences between the book fair value and the tax basis of the indefinite life intangible assets and depreciable property and equipment were recorded. The Company recognized a \$0.1 million deferred tax liability related to its Logical Brokerage acquisition during the year ended December 31, 2018. Subsequently, due to the Company's decision not to pursue its Logical Brokerage business and the impairment and depreciation of the Kairos property and equipment, the Company recorded a \$0.1 million and \$0.7 million income tax benefit during the years ended December 31, 2019 and 2018, respectively, from the reduction of its existing deferred tax liability related to its acquisitions. The following is a rollforward of the Company's deferred tax liability from January 1, 2018 to December 31, 2019:

	Decembe	r 31, 2019	Decei	mber 31, 2018
Beginning Balance	\$	143	\$	699
Deferred tax liability recorded on the Logical Brokerage acquisition		_		143
Impairment and depreciation on the Kairos acquisition		_		(699)
Abandonment of Logical Brokerage		(143)		_
Ending Balance	\$		\$	143

Sequencing

On January 28, 2019, the Company adopted a sequencing policy under Accounting Standards Codification ("ASC") 815-40-35Derivatives and Hedging ("ASC 815") whereby in the event that reclassification of contracts from equity to assets or liabilities is necessary pursuant to ASC 815 due to the Company's inability to demonstrate it has sufficient authorized shares as a result of certain securities convertible or exchangeable for a potentially indeterminable number of shares, shares will be allocated on the basis of the earliest issuance date of potentially dilutive instruments, with the earliest grants receiving the first allocation of shares. Pursuant to ASC 815, issuances of securities to the Company's employees or directors are not subject to the sequencing policy.

Notes payable fair value option

As described further in Note 10 -Notes and Other Obligations, in January 2019, the Company issued Senior Secured Promissory Notes (the "Notes") to Oasis Capital, LLC, Harbor Gates Capital, LLC and SG3 Capital, LLC (each an "Investor" and collectively, the "Investors") in the aggregate principal amount of approximately \$3.4 million. The Company has elected the fair value option to account for these Notes due to the complexity and number of embedded features. The fair value of the Notes is classified within Level 3 of the fair value hierarchy because the fair values were estimated utilizing a Monte Carlo simulation model. Accordingly, the Company recorded these Notes at fair value with changes in fair value recorded in the statement of operations. As a result of applying the fair value option, direct costs and fees related to the Notes were recognized in earnings as incurred and were not deferred. The change in fair value of the Notes has been presented as change in value of convertible notes payable on the consolidated statements of operations.

As of December 31, 2019, all of the Notes were converted into 1,813,500 shares of the Company's common stock valued at their estimated fair value at the time of conversion totaling approximately \$10.2 million.

Warrant liability

The Company issued Warrants to purchase 1,908,144 shares of its common stock in connection with the Notes issued to the Investors in January 2019, and recorded these outstanding Warrants as a liability at fair value utilizing a Monte Carlo simulation model. This liability is subject to re-measurement at each balance sheet date, and any change in fair value is recognized in the Company's consolidated statements of operations.

As of June 25, 2019, the Company's Notes had been converted in their entirety and the warrant liability was revalued and reclassified to equity, because the Warrants are no longer subject to the Company's sequencing policy as described above.

Leases

Effective January 1, 2019, the Company accounts for its leases under ASC 842, Leases ("ASC 842"). Under this guidance, arrangements meeting the definition of a lease are classified as operating or financing leases, and are recorded on the consolidated balance sheet as both a right of use asset and lease liability, calculated by discounting fixed lease payments over the lease term at the rate implicit in the lease or the Company's incremental borrowing rate. Lease liabilities are increased by interest and reduced by payments each period, and the right of use asset is amortized over the lease term. For operating leases, interest on the lease liability and the amortization of the right of use asset result in straight-line rent expense over the lease term.

In calculating the right of use asset and lease liability, the Company elects to combine lease and non-lease components as permitted under ASC 842. The Company excludes short-term leases having initial terms of 12 months or less from the new guidance as an accounting policy election and recognizes rent expense on a straight-line basis over the lease term

The Company continues to account for leases in the prior period financial statements under ASC Topic 840.

Revenue recognition

Cryptocurrency mining:

The Company recognizes revenue under ASC 606, Revenue from Contracts with Customers. The core principle of the new revenue standard is that a company should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the company expects to be entitled in exchange for those goods or services. The following five steps are applied to achieve that core principle:

- Step 1: Identify the contract with the customer
- Step 2: Identify the performance obligations in the contract
- Step 3: Determine the transaction price
- Step 4: Allocate the transaction price to the performance obligations in the contract
- Step 5: Recognize revenue when the Company satisfies a performance obligation

In order to identify the performance obligations in a contract with a customer, a company must assess the promised goods or services in the contract and identify each promised good or service that is distinct. A performance obligation meets ASC 606's definition of a "distinct" good or service (or bundle of goods or services) if both of the following criteria are met: The customer can benefit from the good or service either on its own or together with other resources that are readily available to the customer (i.e., the good or service is capable of being distinct), and the entity's promise to transfer the good or service to the customer is separately identifiable from other promises in the contract (i.e., the promise to transfer the good or service is distinct within the context of the contract).

If a good or service is not distinct, the good or service is combined with other promised goods or services until a bundle of goods or services is identified that is distinct.

The transaction price is the amount of consideration to which an entity expects to be entitled in exchange for transferring promised goods or services to a customer. The consideration promised in a contract with a customer may include fixed amounts, variable amounts, or both. When determining the transaction price, an entity must consider the effects of all of the following:

- Variable consideration
- · Constraining estimates of variable consideration
- The existence of a significant financing component in the contract
- Noncash consideration
- Consideration payable to a customer

Variable consideration is included in the transaction price only to the extent that it is probable that a significant reversal in the amount of cumulative revenue recognized will not occur when the uncertainty associated with the variable consideration is subsequently resolved. The transaction price is allocated to each performance obligation on a relative standalone selling price basis. The transaction price allocated to each performance obligation is recognized when that performance obligation is satisfied, at a point in time or over time as appropriate.

The Company has entered into digital asset mining pools by executing contracts with the mining pool operators to provide computing power to the mining pool. The contracts are terminable at any time by either party and the Company's enforceable right to compensation only begins when the Company provides computing power to the mining pool operator. In exchange for providing computing power, the Company is entitled to a fractional share of the fixed cryptocurrency award the mining pool operator receives (less digital asset transaction fees to the mining pool operator which are recorded as a component of cost of revenues), for successfully adding a block to the blockchain. The Company's fractional share is based on the proportion of computing power the Company contributed to the mining pool operator to the total computing power contributed by all mining pool participants in solving the current algorithm.

Providing computing power in digital asset transaction verification services is an output of the Company's ordinary activities. The provision of providing such computing power is the only performance obligation in the Company's contracts with mining pool operators. The transaction consideration the Company receives, if any, is noncash consideration, which the Company measures at fair value on the date received, which is not materially different than the fair value at contract inception or the time the Company has earned the award from the pools. The consideration is all variable. Because it is not probable that a significant reversal of cumulative revenue will not occur, the consideration is constrained until the mining pool operator successfully places a block (by being the first to solve an algorithm) and the Company receives confirmation of the consideration it will receive, at which time revenue is recognized. There is no significant financing component in these transactions.

Fair value of the cryptocurrency award received is determined using the quoted price of the related cryptocurrency at the time of receipt.

There is currently no specific definitive guidance under GAAP or alternative accounting framework for the accounting for cryptocurrencies recognized as revenue or held, and management has exercised significant judgment in determining the appropriate accounting treatment. In the event authoritative guidance is enacted by the FASB, the Company may be required to change its policies, which could have an effect on the Company's consolidated financial position and results from operations.

Cost of revenue

The Company's cost of revenue consists primarily of direct production costs related to mining operations, including mining pool fees, rent and utilities, but excluding depreciation and amortization, which are separately stated in the Company's consolidated statements of operations.

Business combinations

The Company applies the provisions of ASC 805 in the accounting for acquisitions. ASC 805 requires us to recognize separately from goodwill the assets acquired and the liabilities assumed at their acquisition date fair values. Goodwill as of the acquisition date is measured as the excess of consideration transferred over the net of the acquisition date fair values of the assets acquired and the liabilities assumed. While we use our best estimates and assumptions to accurately apply preliminary value to assets acquired and liabilities assumed at the acquisition date as well as contingent consideration, where applicable, these estimates are inherently uncertain and subject to refinement. As a result, during the measurement period, which may be up to one year from the acquisition date, the Company records adjustments in the current period, rather than a revision to a prior period. Upon the conclusion of the measurement period or final determination of the values of the assets acquired or liabilities assumed, whichever comes first, any subsequent adjustments are recorded in our consolidated statements of operations. Accounting for business combinations requires management to make significant estimates and assumptions, especially at the acquisition date, including estimates for intangible assets, contractual obligations assumed, restructuring liabilities, pre-acquisition contingencies, and contingent consideration, where applicable. Although we believe the assumptions and estimates we have made have been reasonable and appropriate, they are based in part on historical experience and information obtained from management of the acquired companies and are inherently uncertain. Critical estimates in valuing certain of the intangible assets we have acquired include; future expected cash flows from product sales; customer contracts and acquired technologies; expected costs to develop in-process research and development into commercially viable products and estimated cash flows from the projects when completed; and discoun

Income taxes

The Company accounts for income taxes under the asset and liability method, in which deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and operating loss and tax credit carry forwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in operations in the period that includes the enactment date. A valuation allowance is required to the extent any deferred tax assets may not be realizable.

ASC Topic 740, Income Taxes, ("ASC 740"), also clarifies the accounting for uncertainty in income taxes recognized in an enterprise's financial statements and prescribes a recognition threshold and measurement process for financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. For those benefits to be recognized, a tax position must be more-likely-than-not to be sustained upon examination by taxing authorities. ASC 740 also provides guidance on derecognition, classification, interest and penalties, accounting in interim period, disclosure and transition. Based on the Company's evaluation, it has been concluded that there are no significant uncertain tax positions requiring recognition in the Company's consolidated financial statements. The Company believes that its income tax positions and deductions would be sustained on audit and does not anticipate any adjustments that would result in material changes to its financial position.

Stock-based compensation

The Company accounts for share-based payment awards exchanged for services at the estimated grant date fair value of the award. Stock options issued under the Company's long-term incentive plans are granted with an exercise price equal to no less than the market price of the Company's stock at the date of grant and expire up to ten years from the date of grant. These options generally vest on the grant date or over a one- year period.

The Company estimates the fair value of stock option grants using the Black-Scholes option pricing model and the assumptions used in calculating the fair value of stock-based awards represent management's best estimates and involve inherent uncertainties and the application of management's judgment.

Expected Term - The expected term of options represents the period that the Company's stock-based awards are expected to be outstanding based on the simplified method, which is the half-life from vesting to the end of its contractual term.

Expected Volatility - The Company computes stock price volatility over expected terms based on its historical common stock trading prices.

Risk-Free Interest Rate - The Company bases the risk-free interest rate on the implied yield available on U. S. Treasury zero-coupon issues with an equivalent remaining term.

Expected Dividend - The Company has never declared or paid any cash dividends on its common shares and does not plan to pay cash dividends in the foreseeable future, and, therefore, uses an expected dividend yield of zero in its valuation models.

Effective January 1, 2017, the Company elected to account for forfeited awards as they occur, as permitted by Accounting Standards Update ("ASU") 2016-09. Ultimately, the actual expenses recognized over the vesting period will be for those shares that vested. Prior to making this election, the Company estimated a forfeiture rate for awards at 0%, as the Company did not have a significant history of forfeitures.

Loss per share

Basic net loss per share ("EPS") of common stock is computed by dividing net loss by the weighted average number of shares of common stock outstanding during the period. Diluted EPS reflects the potential dilution that could occur if securities or other contracts to issue common stock were exercised or converted into common stock or resulted in the issuance of common stock that then shared in the earnings of the entity. The Company excludes its unvested restricted shares and escrow shares from the net loss per share calculation. The escrow shares are excluded because of related contingencies and including them would result in anti-dilution.

Since the Company has only incurred losses, basic and diluted net loss per share is the same. Securities that could potentially dilute loss per share in the future that were not included in the computation of diluted loss per share at December 31, 2019 and 2018 because their inclusion would be anti-dilutive are as follows:

	December :	31,
	2019	2018
Warrants to purchase common stock	3,574,257	1,671,113
Options to purchase common stock	12,000	62,000
Escrow shares	200,000	200,000
Unvested restricted stock awards	1,524,499	95,939
Convertible Series B preferred shares	4,199	13,000
Total	5,314,955	2,042,052

Segment reporting

Operating segments are defined as components of an enterprise about which separate financial information is available that is evaluated regularly by the chief operating decision maker, or decision—making group in deciding how to allocate resources and in assessing performance. Our chief operating decision—making group is composed of the chief executive officer. We currently operate in one segment surrounding our cryptocurrency mining operation.

Subsequent events

The Company has evaluated all events that occurred after the balance sheet date through the date when the financial statements were issued. See Note 17.

Recently issued and adopted accounting pronouncements

The Company continually assesses any new accounting pronouncements to determine their applicability. When it is determined that a new accounting pronouncement affects the Company's financial reporting, the Company undertakes a study to determine the consequences of the change to its consolidated financial statements and assures that there are proper controls in place to ascertain that the Company's consolidated financial statements properly reflect the change.

In February 2016, the FASB issued Accounting Standards Update ("ASU") 2016-02, Leases (Topic 842) in order to increase transparency and comparability among organizations by, among other provisions, recognizing lease assets and lease liabilities on the balance sheet for those leases classified as operating leases under previous U.S. GAAP. For public companies, ASU 2016-02 is effective for fiscal years beginning after December 15, 2018 (including interim periods within those periods) using a modified retrospective approach and early adoption is permitted. In transition, entities may also elect a package of practical expedients that must be applied in its entirety to all leases commencing before the adoption date, unless the lease is modified, and permits entities to not reassess (a) the existence of a lease, (b) lease classification or (c) determination of initial direct costs, as of the adoption date, effectively allowing entities to carryforward accounting conclusions under previous U.S. GAAP. In July 2018, the FASB issued ASU 2018-11, Leases (Topic 842): Targeted Improvements, which provides entities an optional transition method to apply the guidance under Topic 842 as of the adoption date, rather than as of the earliest period presented. The Company adopted Topic 842 on January 1, 2019, using the optional transition method to apply the new guidance as of January 1, 2019, rather than as of the earliest period presented, and elected the package of practical expedients described above. Based on the analysis, on January 1, 2019, the Company recorded right of use assets and lease liabilities of approximately \$1.5 million.

In June 2018, the FASB issued ASU 2018-07, *Improvements to Nonemployee Share-Based Payment Accounting*, which simplifies the accounting for share-based payments granted to nonemployees for goods and services. Under the ASU, most of the guidance on such payments to nonemployees would be aligned with the requirements for share-based payments granted to employees. The amendments are effective for fiscal years beginning after December 15, 2019, and interim periods within fiscal years beginning after December 15, 2020. Early adoption is permitted, but no earlier than an entity's adoption date of Topic 606. The Company adopted this new standard on January 1, 2019 and the adoption did not have a material impact on its consolidated financial statements and related disclosures.

In August 2018, the FASB issued ASU No. 2018-13, "Fair Value Measurement (Topic 820): Disclosure Framework – Changes to the Disclosure Requirements for Fair Value Measurement" ("ASU 2018-13"), which makes a number of changes meant to add, modify or remove certain disclosure requirements associated with the movement amongst or hierarchy associated with Level 1, Level 2 and Level 3 fair value measurements. This guidance is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2019. Early adoption is permitted upon issuance of the update. The Company adopted ASU 2018-13 on January 1, 2020 and its adoption did not have any impact on the Company's consolidated financial statements and related disclosures.

In December 2019, the FASB issued ASU No. 2019-12, "Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes ("ASU 2019-12"), which is intended to simplify various aspects related to accounting for income taxes. ASU 2019-12 removes certain exceptions to the general principles in Topic 740 and also clarifies and amends existing guidance to improve consistent application. This guidance is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2020, with early adoption permitted. The Company is currently evaluating the impact of this standard on its consolidated financial statements and related disclosures.

Note 4. Acquisitions

Asset Purchase Agreement with Prive Technologies LLC

On February 21, 2018, the Company and Kairos, completed an asset purchase under an agreement (the "Prive Purchase Agreement") with Prive on behalf of certain persons and entities who owned certain cryptocurrency mining machines and related operating equipment (the "Prive Equipment"). Pursuant to the Prive Purchase Agreement, the aggregate consideration for the Prive Equipment consisted of (i) \$11.0 million and (ii) 1,000,000 shares of the Company's common stock (the "Prive Shares"). Upon closing of the transaction, and pursuant to the terms of the Prive Purchase Agreement, Kairos became the owner of the Prive Equipment used for the mining of cryptocurrency, including, but not limited to, 3,800 Bitmain AntMiner S9s. On February 21, 2018, the Prive Equipment was recorded for a purchase price of approximately \$19.5 million, consisting mainly of cash of \$11.0 million and 800,000 shares of the Company's common stock valued at \$10.60 per share (excluding 200,000 shares of common stock currently held in escrow).

The purchase price for the miners was recorded as follow (in thousands):

Cash consideration	\$ 11,000
Fair value of common stock	8,480
Other expenses	2
Total	\$ 19,482

The 200,000 shares held in escrow (the "Escrow Shares") were deposited into an escrow account with Corporate Stock Transfer, Inc., as escrow agent (the "Escrow Agent"), pursuant to an escrow agreement (the "Escrow Agreement"). Certificates representing the Escrow Shares were deposited and recorded with the Escrow Agent to be held in escrow and not be transferred, pledged or hypothecated except as provided in the Escrow Agreement. No value was assigned to the Escrow Shares at the time of the acquisition as they are contingent consideration. The Escrow Shares will be released to the Sellers upon the Company generating Net Cash Flow (as defined in the Prive Purchase Agreement) of at least \$10.0 million from the equipment. If the Escrow Shares are not released to the Sellers on or before the two-year anniversary (February 2020) of the Prive Purchase Agreement, the Escrow Shares shall be returned to the Company for cancellation. As of December 31, 2019 and 2018, no escrow shares have been released based upon not achieving required net cash flow (See Note 17).

Under the guidance of ASC 360, Impairment or Disposal of Long-lived Assets, a long-lived asset or asset group (including intangibles) will be tested for recoverability whenever events or changes in circumstances indicate that its carrying amount may not be recoverable. Based upon the significant decline in the price of bitcoin during the year ended December 31, 2018 and the decline in projected cash flows over the life of the miners, the Company performed an analysis to determine if the Prive Equipment was impaired. The undiscounted cash flows were less than the carrying amount of the miners and therefore, the carrying amount of the assets were compared to the fair value of the miners, and the Company determined that there were impairment charges to be recorded on the miners purchased from Prive. Impairment charges for the year ended December 31, 2018 totaled approximately \$17.7 million.

Asset Purchase Agreement with Blockchain Mining Supply & Services Ltd.

On February 21, 2018, the Company completed an asset purchase under an agreement (the "BMSS Purchase Agreement") with BMSS which owned 3,000 AntMiner S9 bitcoin mining machines (the "BMSS Equipment"). Pursuant to the BMSS Purchase Agreement, the Company purchased the BMSS Equipment for aggregate consideration of \$8.5 million. On February 21, 2018, the BMSS Equipment was recorded for purchase price of \$8.5 million paid or payable in cash. \$7.0 million of the purchase price was paid at closing and \$1.5 million was payable within six-months, as further defined in the BMSS Purchase Agreement.

On August 21, 2018, the Company and BMSS entered into a waiver letter, amending the BMSS Purchase Agreement (the "Waiver") whereby the Company and BMSS agreed to waive any and all past due amounts payable by the Company to BMSS pursuant to Section 2(b)(ii) of the BMSS Purchase Agreement. Pursuant to the Waiver, the Company agreed to pay to BMSS the remaining \$1.5 million in monthly installments plus accrued and unpaid interest calculated at a rate equal to 10% per year. In addition to the foregoing, the Company agreed to issue to BMSS 50,000 shares of the Company's restricted common stock in connection with the Waiver within seven days of the execution of the Waiver. In connection with the foregoing, the Company relied upon the exemption from registration provided by Section 4(a)(2) under the Securities Act of 1933, as amended, for transactions not involving a public offering. During the year ended December 31, 2018, a total of \$0.3 million in payments were made against the \$1.5 million deferred price and the Company recorded a loss of approximately \$0.3 million related to the computed value of the modification of the BMSS deferred purchase price which was recorded as a loss on extinguishment of debt in connection with the Waiver. All required payments under the amended BMSS agreements have not been timely made and the Company and BMSS are currently discussing plans to resolve.

Under the guidance of ASC 360, Impairment or Disposal of Long-lived Assets, a long-lived asset or asset group (including intangibles) will be tested for recoverability whenever events or changes in circumstances indicate that its carrying amount may not be recoverable. Based upon the significant decline in the price of bitcoin during the year ended December 31, 2018 and the decline in projected cash flows over the life of the miners, the Company performed an undiscounted cash flow test to determine if the miners were impaired. The undiscounted cash flows were less than the carrying amount of the BMSS Equipment and therefore, the carrying amount of the assets were compared to the fair value of the miners, and the Company determined that there were impairment charges to be recorded on the miners purchased from BMSS. Impairment charges for the year ended December 31, 2018 totaled approximately \$6.7 million.

Acquisition of Logical Brokerage Corp.

On March 26, 2018, the Company entered into and closed a stock purchase agreement (the "Logical Brokerage Purchase Agreement") between the Company and Mark Bradley Fisher (the "Logical Brokerage Seller"). Pursuant to the Logical Brokerage Purchase Agreement, the Company purchased from the Logical Brokerage Seller 9.25 shares of Logical Brokerage, representing 92.5% of the outstanding capital stock of Logical Brokerage, for a cash purchase price of \$0.6 million. Logical Brokerage, a futures introducing broker headquartered in Miami, Florida is registered with the CFTC and is a member of the NFA.

The Company considered the provisions of FASB ASU 2017-01, Business Combinations (Topic 805), and has determined that the Logical Brokerage Purchase Agreement should be accounted for as an acquisition of assets since the majority of the fair value of the assets acquired was concentrated in a single identifiable asset (CFTC License), and the acquired assets did not have outputs or employees. The asset recorded at the purchase price of \$0.6 million, net of cash received with the asset acquisition of \$0.1 million, plus any transaction costs. The CFTC license is included as intangible rights acquired, within the non-current asset section of the Company's consolidated balance sheets.

As a result of an asset acquisition through the acquisition of ownership, temporary differences may arise due to differences between the tax bases of assets acquired and liabilities assumed (determined by tax law) and the values of those assets and liabilities recognized for financial statement purposes (determined based on the provisions of ASC 805). ASC 740 requires an entity to recognize deferred tax assets and liabilities for those temporary differences and acquired operating loss or other tax credit carryforwards that arise as a result of the purchase of an asset. However, deferred taxes are not recognized for differences related to nondeductible goodwill, leveraged leases, and certain other differences for which there are specific exceptions. The deferred tax liability represents the difference between the book basis and the tax basis of Riot Blockchain's intangible assets, calculated using a 25.6% effective tax rate.

On March 26, 2018, the CFTC license was recorded as follows (in thousands):

Cash, net of cash acquired	\$ 500
Deferred tax liability	143
Non-controlling interest	40
Legal costs	17
Intangible rights acquired	\$ 700

In connection with the closing of the Logical Brokerage Purchase Agreement, on March 26, 2018, the Company entered into a stockholders' agreement (the "Stockholders Agreement") with Logical Brokerage and Mark Bradley Fisher. The Stockholders Agreement provides, among other things, that, subject to certain exceptions, the Logical Brokerage Seller may not transfer any of his remaining shares of Logical Brokerage without the written consent of the Company. The Stockholders Agreement also provides that, subject to certain exceptions, in the event the Company proposes to transfer 35% or more of Logical Brokerage's total issued and outstanding capital stock, the Logical Brokerage Seller will be entitled to certain "tag-along" rights.

The Company made the decision, effective as of December 31, 2019 not to pursue its RiotX / Logical Brokerage business development plan. Under the guidance of ASU 2014-08, Reporting Discontinued Operations and Disclosures of Disposals of Components of an Entity, the Company determined that the discontinuation of RiotX / Logical Brokerage did not represent a strategic shift that would have a major effect on the Company's operations and financial results. The Company accounted for the discontinuation as an impairment of an intangible asset acquired, and as of December 31, 2019, recorded an impairment expense of approximately \$0.7 million and recorded an income tax benefit of approximately \$0.1 million, which are reflected on the accompanying consolidated statements of operations.

Kairos Global Technology, Inc. Acquisition

On November 3, 2017, the Company closed on a business combination share exchange agreement (the "Agreement") with Kairos Global Technology, Inc., a Nevada corporation. Under the Agreement, the shareholders of Kairos agreed to exchange all outstanding shares of Kairos' common stock to the Company and the Company agreed to issue an aggregate of One Million Seven Hundred Fifty Thousand and One (1,750,001) newly-designated shares of Series B Convertible Preferred Stock (the "Series B Preferred Stock") which are convertible into an aggregate of One Million Seven Hundred Fifty Thousand and One (1,750,001) shares of the Company's common stock, no par value per share (the transaction, the "Kairos Transaction") to such shareholders. See Note 10 for further information about the Series B Preferred Stock. The 1,750,001 Series B Preferred Shares were valued at approximately \$5.31 per share based upon the then value of the Company's common shares, discounted based upon restrictions associated with the preferred shares, for a total value of approximately \$9.3 million. The shareholders of Kairos also will receive a royalty to be paid from cash flow generated from operations, as defined in the Agreement, which shall entitle such shareholders to receive 40% of the gross profits generated on a monthly basis until they have received a total of \$1.0 million, at which point the royalty is extinguished. For financial reporting purposes the royalty liability will be recorded as the contingency is resolved and obligation determined. To date no royalty amounts have been achieved. Kairos owned certain computer equipment and other assets used for the mining of cryptocurrency, specifically miners consisting of 700 AntMiner S9s and 500 AntMiner L3s, all manufactured by Bitmain. The acquisition of Kairos was accounted for as a business combination in accordance with the provisions of ASC 805.

We have completed an allocation of the purchase consideration. The following is the allocation of the purchase consideration (in thousands):

Cash	\$ 1,131
Equipment	10,333
Accounts payable and accrued expenses	(46)
Deferred income tax liability	(2,122)
Purchase price	\$ 9,296

Based upon the significant decline in the price of bitcoin during the year ended December 31, 2018 and the decline in projected cash flows over the life of the miners, the Company performed an undiscounted cash flow test to determine if the miners were impaired. The undiscounted cash flows were less than the carrying amount of the miners and therefore, the carrying amount of the assets were compared to the fair value of the miners, and the Company determined that there were impairment charges to be recorded on the miners purchased from Kairos. Impairment charges for the years ended December 31, 2019 and 2018, totaled approximately nil and \$3.0 million, respectively.

Note 5. Cryptocurrencies

The following table presents additional information about cryptocurrencies (in thousands):

	December 31, 2019	December 31, 2018
Beginning balance	707	\$ 200
Revenue recognized from cryptocurrencies mined	6,741	7,749
Mining pool operating fees	(135)	(155)
Purchase of cryptocurrencies	_	5,625
Purchase of miner equipment with cryptocurrencies	(99)	_
Sale / trade of cryptocurrencies	(3,196)	(9,237)
Realized gain on sale of cryptocurrencies	665	26
Impairment of cryptocurrencies	(844)	(3,501)
Ending balance	3,839	\$ 707

Note 6. Fair Value Measurements

On January 28, 2019 the Company issued the notes and warrants which were classified as liabilities and measured at fair value on the issuance date, with changes in fair value recognized as other expense on the consolidated statements of operations and disclosed in the unaudited condensed interim consolidated financial statements. As of June 27, 2019, in accordance with their original terms, all of the Notes were converted into a total of 1,813,500 shares of the Company's common stock by their holders. See Note 10.

A summary of weighted average (in aggregate) significant unobservable inputs (Level 3 inputs) used in measuring the Company's Notes and Warrants at the issuance date of January 28, 2019 and during the conversion of the Notes as of June 27, 2019, are as follows:

Senior Secured Promissory Notes

	January 28, 2019	As of June 27, 2019
Dividend yield	0%	0%
Expected price volatility	119.5%	122.2%-127.1%
Risk free interest rate	2.60%	2.07%-2.44%
Expected term	1 year	-

Warrants

	January 28, 2019	As of June 27, 2019
Dividend yield	0%	0%
Expected price volatility	111.6%	119.9%-120.5%
Risk free interest rate	2.58%	2.23%-2.58%
Expected term	5 years	4 years, 10 months

There were no assets or liabilities measured at fair value during the year ended December 31, 2018.

Unobservable inputs were used to determine the fair value of positions that the Company has classified within the Level 3 category.

The following table presents changes in Level 3 liabilities measured at fair value for the year ended December 31, 2019 (in thousands):

	Conver	tible Notes	1	Varrant Liability
Issuance of senior secured convertible notes	\$	6,330	\$	_
Issuance of warrants in connection with convertible notes		_		2,570
Balance at January 28, 2019		6,330		2,570
Change in fair value		3,896		2,869
Conversion of convertible notes to common stock		(10,226)		_
Reclassification of warrant liability to equity		_		(5,439)
Balance at December 31, 2019	\$	_	\$	

Note 7. Property and Equipment

Property and equipment consisted of the following as of December 31, 2019 and 2018 (in thousands):

	December 31, 2019	December 31, 2019		
Miners	\$ 5,010	\$	_	
Leasehold improvements	38		_	
Office and computer equipment	103		93	
Total cost of property and equipment	5,151		93	
Less accumulated depreciation	(100)	(67)	
Property and equipment, net	\$ 5,051	\$	26	

There were no impairment charges related to miners for the year ended December 31, 2019. The breakdown of the impairment charges recorded for the year ended December 31, 2018 are as follows (in thousands):

	Decei	mber 31, 2018
Prive miners	\$	17,691
BMSS miners		6,702
Kairos miners		3,026
Leasehold improvements		1,819
Total impairment charge	\$	29,238

During December 2019, the Company purchased 4,000 next generation Bitmain S17 Pro Antminers for approximately \$6.3 million from Bitmain. In December 2019, 3,000 miners had been received at the Company's Oklahoma City facility but not yet placed in service.

The remaining 1,000 miners were received at its Oklahoma City facility during February 2020 and the related \$1.4 million prepayment is recorded as a deposit on the accompanying consolidated balance sheet.

Depreciation and amortization expense totaled approximately \$0.1 million (including \$0.09 million of patent amortization) and \$5.2 million, for the years ended December 31, 2019 and 2018, respectively. Depreciation is computed on the straight-line basis for the periods the assets are in service.

Note 8. Investments

Coinsquare

In September 2017, the Company acquired a minority interest for \$3.0 million in Coinsquare, which operates a digital crypto currency exchange platform in Canada. During February 2018, the Company invested an additional \$6.4 million to acquire additional common stock of Coinsquare. These additional investments resulted in a current ownership in Coinsquare by the Company of approximately 11.7% ownership in Coinsquare on a fully diluted basis. The Company has evaluated the guidance in ASU 2016-01, Recognition and Measurement of Financial Assets and Financial Liabilities, and elected to account for the investment using the measurement alternative as the equity securities are without a readily determinable fair value and do not give the Company significant influence over Coinsquare. The measurement alternative at cost, less any impairment, plus or minus changes resulting from observable price changes. As of December 31, 2019 and 2018, the Company considered the cost of the investment to not exceed the fair value of the investment and did not observe price changes.

Tess

In 2017, the Company acquired approximately 52% of Tess which is developing blockchain solutions for telecommunications companies. Under the terms of the Purchase Agreement (the "Purchase Agreement") the Company invested cash of approximately \$0.3 million in Tess and issued 75,000 shares of restricted Common Stock to Tess in exchange for 2,708,333 shares of common stock of Tess. The 75,000 shares of Common Stock were valued at the \$8.49 market price as of October 20, 2017 for a total of approximately \$0.6 million. Accordingly, Tess became a majority-owned subsidiary of the Company. As part of the transaction, the Company and Tess entered into a registration rights agreement pursuant to which the Company agreed to file a registration statement to register the resale of 25,000 shares (of 75,000 shares) of Common Stock issued to Tess. The 2017 acquisition of Tess was accounted for as a business combination in accordance with the provisions of ASC 805. The allocation of purchase consideration includes \$0.7 million as in-process research and development (IPR&D) related to the TessPay project. As of December 31, 2018, the Company had \$0.6 million of intangibles related to Tess's internal technology platform.

In January 2018, following the execution of a non-binding letter of intent as of December 11, 2017, the parties executed a definitive agreement providing that Tess agreed to merge with Cresval Capital Corp. ("Cresval") (TSX-V: CRV). Assuming closing conditions are met, upon closing of the anticipated merger, Tess would be publicly traded on the TSX Venture Exchange (the "TSXV").

During the year ended December 31, 2018, Tess received approximately \$0.5 million from the sale of shares of Riot Blockchain common stock held by Tess, which has been recorded as a credit to the consolidated Common Stock of the Company. Additionally, Tess issued approximately 189,000 of its common shares in exchange for cash proceeds of approximately \$220,000 thereby reducing the investment percentage held by the Company from 52.01% to 50.2% as of December 31, 2018. Due to the termination of the Cresval Agreement on February 15, 2019, the Company recorded an impairment loss of \$2.1 million consisting of \$0.7 million of in process research and development costs, \$0.6 million related to capitalized costs of Tess's internal technology platform and \$0.8 million of goodwill during the year ended December 31, 2018.

On April 10, 2019, Tess closed on a funding agreement under which approximately 23.8 million shares of Tess were issued for CAD \$1.2 million. As a result of this and subsequent funding's, the Company's ownership in Tess was reduced to approximately 8.8%. Subsequently Tess was no longer being consolidated in the Company's consolidated financial statements.

As of December 31, 2019, the Company evaluated its remaining interest in Tess under the guidance of ASU 2016-01, Recognition and Measurement of Financial Assets and Financial Liabilities, and determined it should remeasure its retained interest at fair value upon deconsolidation to establish a new cost basis. As of December 31, 2019, the fair value of the Tess shares owned by the Company is approximately \$0.1 million, calculated based upon the April 10, 2019 funding price as follows (in thousands except for share and per share amounts):

	Ap	ril 10, 2019
Tess shares held by Riot Blockchain, Inc.		2,708,333
Per share fair value	\$	0.03
Fair value of Tess shares held by Riot Blockchain, Inc.	\$	90

The Company accounts for deconsolidation of subsidiaries in which it loses controlling interest in the financial interest of the subsidiary in accordance with Accounting Standards Codification ("ASC") 810-10-40 – "Consolidation".

The deconsolidation of Tess resulted in a gain of approximately \$1.1 million calculated as follows (in thousands) on the date of deconsolidation:

Current assets	\$ 130
Less:	
Accounts payable	761
Accrued expenses	275
Convertible notes	1,696
Net liabilities	 (2,602)
Non-controlling interest share	1,553
Sub-total	 (1,048)
Less: fair value of shares owned by Riot Blockchain	90
Gain on deconsolidation of Tess	\$ (1,139)

Verady

During November 2017, the Company made a \$0.2 million investment in a convertible note as part of a series of notes issued by Verady, LLC ("Verady"). The notes are unsecured, subordinated to other approved liabilities, mature December 31, 2022, bear interest at 6%, unless previously repaid or converted and contain other conditions and restrictions, all as defined under the subscription documents. The Verady convertible note was previously recorded at fair value (which approximates cost). The conversion rate of the convertible note is defined based upon the possible occurrence of certain defined events which may or may not occur. The Company has no other relationship or rights associated with Verady. Founded in 2016, Verady is privately held and recently launched VeraNet, a decentralized network of financial reporting and accounting tools targeted to the needs of the cryptocurrency community.

During the year ended December 31, 2019, Verady completed a financing that under the terms of the Company's original investment, resulted in the automatic conversion of the Company's convertible note plus accrued interest totaling approximately \$0.2 million, into equity of Verady. The automatic conversion resulted in a current ownership in Verady by the Company of approximately 3.2% on a fully diluted basis. The Company has evaluated the guidance in ASU 2016-01, Recognition and Measurement of Financial Assets and Financial Liabilities, and elected to account for the investment using the measurement alternative as the equity securities are without a readily determinable fair value and do not give the Company significant influence over Verady. The investment is valued at cost, less any impairment, plus or minus changes resulting from observable price changes. During the year ended December 31, 2019, there were no price changes in orderly transactions for identical or similar investments in Verady.

Note 9. Long-Term Assets

Intangible rights acquired

As of December 31, 2019, intangible rights acquired totaled zero. As of December 31, 2018, intangible rights acquired totaled \$0.7 million, which were associated with the Company's Logical Brokerage acquisition in March 2018. The Company made the decision, effective as of December 31, 2019 not to pursue its RiotX / Logical Brokerage business development plan. See Note 4.

Deposits on equipment

During December 2019, the Company purchased 1,000 next generation Bitmain S17 Pro Antminers from Bitmain for approximately \$1.4 million. As of December 31, 2019, the Company has not yet received the miners and recorded the \$1.4 million as a deposit on the accompanying consolidated balance sheet.

Patants

The Company's intangible assets with finite lives consist of its patents pertaining to its legacy animal health business, which have been out-licensed. For all periods presented, all of the Company's identifiable intangible assets were subject to amortization. The carrying amounts related to acquired intangible assets as of December 31, 2019 and 2018 were as follows (in thousands):

	December 31, 2019	D	ecember 31, 2018
Patents	\$ 1,157	\$	1,119
Accumulated amortization	(698)	(612)
Patents, net	459		507
Convertible note investment	_		200
Accrued interest convertible note	_		_
Convertible note	_		200
Total	\$ 459	\$	707

The following table represents the total estimated amortization of intangible assets for the five succeeding years and thereafter (in thousands):

For the year ended December 31,	Estimated amortizat	
	e	xpense
2020	\$	86
2021		86
2022		86
2023		86
2024 and thereafter		115
Total	\$	459

The Company capitalizes legal costs and filing fees associated with obtaining patents on its new discoveries. Once the patents have been issued, the Company amortizes these costs over the shorter of the legal life of the patent or its estimated economic life using the straight-line method. Amortization expense totaled \$86,000 and \$62,000 for the years ended December 31, 2019 and 2018, respectively. The Company tests intangible assets with finite lives upon significant changes in the Company's business environment. The testing resulted in no patent impairment charges during the years ended December 31, 2019 and 2018.

Note 10. Notes, Warrants and Other Obligations

Senior Secured Convertible Promissory Notes and Warrants

On January 28, 2019, in connection with a private financing (the "Private Financing"), the Company issued the Notes, to investors (collectively, the "Investors" and each an "Investor") for an aggregate principal amount of approximately \$3.4 million along with Warrants for the purchase of and equal value of shares of the Company's common stock in exchange for \$3.0 million of private financing. The Notes were convertible into shares of the Company's common stock at any time after the issuance date, provided that at no time would the Company be required to issue shares in excess of the aggregate number of shares of its commons stock outstanding. The Notes were set to mature twelve months from date of issuance and accrue interest at a rate of 8% per annum, with twelve months of interest guaranteed. The Notes were subject to prepayment penalties, default conditions and other terms and conditions, as further defined in the Financing Agreements (the "Financing Agreements") as disclosed in the Company's current report on Form 8-K filed with the SEC on February 1, 2019. As additional consideration for the investment, the Company issued a total of 150,000 restricted common shares to the Investors.

The Notes were convertible into shares of the common stock of the Company at a price equal to the lower of \$2.00 or 80% of the lowest volume-weighted adjusted price of shares of the Company's common stock in the twenty trading days prior to the conversion date, subject to adjustments in certain cases as defined in the Financing Agreements. Provided, however, that according to the Notes, the cumulative shares of the Company's common stock issuable upon conversion of the Notes cannot exceed 19.99% of the total number of the Company's outstanding common stock as of January 28, 2019. Pursuant to the Financing Agreements between the Company and the Investors, the Company granted the Investors a security interest in its assets to secure repayment of the Notes. Further to the Financing Agreements, the Company also reserved a number of shares of its common stock equal to 300% of the total number of shares issuable upon full conversion of the Notes.

Due to the complexity and number of embedded features within the Notes and as permitted under applicable accounting guidance, the Company elected to account for the Notes and all the embedded features under the fair value option, which records the Notes at fair value rather than at historical cost, with changes in fair value recorded in the condensed interim consolidated statements of operations. Direct costs and fees incurred to issue the Notes were recognized in earnings as incurred and were not deferred. On the initial measurement date of January 28, 2019, the fair value of the Notes was estimated at approximately \$6.3 million. Upfront costs and fees related to items for which the fair value option was elected were approximately \$0.4 million and were recorded as a component of other expenses for the year ended December 31, 2019.

In connection with the Notes, the Company entered into registration rights agreement with the Investors. The Company filed a registration statement with the SEC covering the equity rights and any other shares issuable in connection with the Notes on March 14, 2019 and the registration statement was declared effective on April 29, 2019.

During the year ended December 31, 2019, holders of the Notes issued on January 28, 2019, converted 100% of the Notes into 1,813,500 shares of the Company's common stock. The aggregate fair value of the Notes converted during the year ended December 31, 2019 was \$10.2 million, an increase in fair value of \$3.9 million, which is reflected on the consolidated statements of operations for the year ended December 31, 2019, as change in fair value of convertible note. Accordingly, having satisfied the Notes in full, the Company's obligations under the Notes have been cancelled.

In connection with this Private Financing, the Company also issued Warrants to the Investors to acquire up to an aggregate of 1,908,144 shares of the Company's common stock at an exercise price of \$1.94 per share. The Warrants are exercisable by the Investors beginning on July 29, 2019, through the fifth year anniversary of the effective date of the Private Financing; provided, however, each Investor's beneficial ownership of the Company's common stock may not exceed 4.99% of the total outstanding shares of the Company's common stock without first providing sixty days' notice to the Company, and, in any event, the ownership, including beneficial ownership, of shares of the Company's common stock by each of the Investors, shall not exceed 9.99% of the total outstanding shares of our common stock.

Tess Convertible Note

As of March 28, 2018, Tess, a subsidiary of the Company, entered into a note purchase agreement with a private investor under which a convertible promissory note was issued by Tess in the principal amount USD \$1.7 million (CAD \$2.2 million) (the "Tess Convertible Note"). The Tess Convertible Note bears interest at 5%, is unsecured and due in 2021. During the year ended December 31, 2019, the Company's ownership in Tess was reduced to 8.8% and as a result, Tess is no longer consolidated in the Company's consolidated financial statements.

BMSS and Other Liabilities Settlements

On February 21, 2018, the Company completed an asset purchase under an agreement (the "BMSS Purchase Agreement") with BMSS, to purchase the 3,000 AntMiner S9 bitcoin mining machines owned by BMSS Equipment (the "BMSS Equipment"). Pursuant to the BMSS Purchase Agreement, the Company purchased the BMSS Equipment for aggregate consideration of \$8.5 million. As of June 27, 2019, in connection with the BMSS agreement, the Company owed approximately \$1.3 million of principal and interest and the Company and BMSS agreed to a one-time settlement payment totaling \$1.0 million. The remaining \$0.4 million was recorded as a gain on extinguishment of notes and interest, and included in other income in the accompanying consolidated statement of operations for the year ended December 31, 2019.

During the year ended December 31, 2019, the Company reached agreements with certain creditors to settle the amounts of outstanding liabilities at a discount. The computed value of the modifications as compared to the liability balances were recorded as other income from the gains on extinguishment of debt. The liabilities settled excluding BMSS, during the period totaled approximately \$2.1 million in exchange for cash payments of \$1.6 million, resulting in a gain of approximately \$0.5 million recognized during the year ended December 31, 2019.

Note 11. Stockholders' Equity

Preferred Stock

Series B - Preferred Stock

On November 3, 2017, the Company designated 1,750,001 shares of preferred stock as "0% Series B Convertible Preferred Stock" in connection with the filing of the Certificate of Designation with the Secretary of State of the State of Nevada.

The shares of Series B Preferred Stock are convertible into shares of common stock based on a conversion calculation equal to the stated value of the Series B Preferred Stock, plus all accrued and unpaid dividends, if any, on such Series B Preferred Stock, as of such date of determination, divided by the conversion price. The stated value of each share of Series B Preferred Stock is \$6.80 and the initial conversion price is \$6.80 per share, each subject to adjustment for stock splits, stock dividends, recapitalizations, combinations, subdivisions or other similar events.

The holders of Series B Preferred Stock are entitled to receive dividends if and when declared by the Company's board of directors. The Series B Preferred Stock will participate on an "as converted" basis, with all dividends declared on the Company's common stock. Such dividends will be paid by the Company out of funds legally available therefor, payable, subject to the conditions and other terms hereof, in cash on the stated value of such Series B Preferred Stock.

The Company is prohibited from effecting a conversion of the Series B Preferred Stock to the extent that, as a result of such conversion, the holder would beneficially own more than 4.99% percent of the number of shares of common stock outstanding immediately after giving effect to the issuance of shares of common stock upon conversion of the Series B Preferred Stock, which beneficial ownership limitation may be increased by the holder up to, but not exceeding, 9.99% percent. Each holder is entitled to vote on all matters submitted to stockholders of the Company, and will have the number of votes equal to the number of shares of common stock issuable upon conversion of such holder's Series B Preferred Stock.

The Series B Preferred Stock contains a blocker pursuant to which, if the Company has not obtained the approval of its shareholders in accordance with NASDAQ Listing Rule 5635(d), then the Company may not issue upon conversion of the Series B Preferred Stock a number of shares of common stock, which, when aggregated with any other shares of common stock underlying the Series B Preferred Stock issued pursuant to the Agreement would exceed 19.99% of the shares of common stock issued and outstanding as of the date of the Agreement, subject to adjustment for reverse and forward stock splits, stock dividends, stock combinations and other similar transactions of the common stock that occur after the date of the Agreement.

On December 21, 2017, the Company amended the Certificate of Designation of Rights, Powers, Preferences, Privileges and Restrictions of 0% Series B Convertible Preferred Stock (the "Amendment") in order to remove the voting rights of the Series B Preferred Stock.

During the year ended December 31, 2018, holders of 1,353,505 Series B Preferred Shares elected to convert those shares to 1,353,505 shares of the Company's common stock under their original terms. On November 30, 2018, the Company canceled 91,496 shares of its Series B Preferred Stock with a value at issuance of \$5.31 per share, or approximately \$0.5 million. As of December 31, 2018, 13,000 shares of Series B Preferred Stock were outstanding.

During the year ended December 31, 2019, 8,801 shares of the Company's Series B preferred stock were converted into 8,801 shares of the Company's common stock. As of December 31, 2019, 4,199 shares of Series B Preferred Stock were outstanding.

2019 Transactions

Common Stock

As additional consideration for the January 2019 Private Financing, the Company issued a total of 150,000 restricted common shares to three investors at an average fair value of \$1.70 per share. See Note 10.

At-the-Market Equity Offering

The Company entered into a Sales Agreement with H.C. Wainwright dated May 24, 2019, pursuant to which the Company may, from time to time, sell up to \$100 million in shares of the Company's common stock through H. C. Wainwright, as the Company's sales agent and/or principal, in the ATM Offering. All sales of the shares have been made pursuant to an effective shelf registration statement on Form S-3 filed with the SEC. The Company pays H.C. Wainwright a commission of approximately 3.0% of the aggregate gross proceeds the Company received from all sales of the Company's common stock under the Sales Agreement. The Company received net proceeds on sales of 8,351,762 shares of common stock under the Sales Agreement of approximately \$23.8 million at a weighted average sales price of \$2.97 during the year ended December 31, 2019.

Restricted Common Stock

During the year ended December 31, 2019, 239,751 shares of common stock were issued, related to past fully vested restricted stock rights previously granted under the Company's 2017 Equity Incentive Plan.

During the year ended December 31, 2019, under the Company's 2019 Equity Incentive Plan, 1,493,832 restricted stock rights were awarded to advisory board members and employees of the Company, and under the Company's 2017 Equity Incentive Plan, 48,500 restricted stock rights were awarded to a consultant and advisory board members. The restricted stock rights have a grant date fair value of approximately \$2.2 million or \$1.41 per share, and vest over a period of three months to two years.

2018 Transactions

Common Stock

On January 4, 2018, the Company issued 19,533 shares of common stock upon the exercise of an employee stock-option.

On January 25, 2018, the Company issued 2,754 shares of common stock at fair value for consulting services at \$7.26 per share.

On February 14, 2018, the Company issued 100,000 shares of common stock for the exercise of 100,000 warrants issued in March 2017. The Company received \$350,000 from the exercise of the warrants.

On April 20, 2018, the Company issued 18,000 shares of the Company's common stock for consulting services at an average fair value of \$14.33 per share.

During August 2018, the Company issued 50,000 shares of the Company's common stock at an average fair value of \$5.31 per share, as consideration for the Waiver under the BMSS Purchase Agreement. See Note 4.

On December 18, 2018, the Company issued 22,523 shares of common stock at a fair value of \$5.55 per share, related to a settlement fee for consulting services.

During the year ended December 31, 2018, holders of 1,353,505 Series B preferred shares elected to convert those shares to 1,353,505 shares of the Company's common stock under its original terms.

During the year ended December 31, 2018, warrants to purchase 13,009 shares of common stock were exercised on a cashless basis for 3,215 shares of common stock.

Common Stock issued in Asset Acquisition

On February 21, 2018, the Company issued 1,000,000 shares of common stock at fair value in connection with the Prive asset purchase agreement, with 200,000 of these shares deposited into an escrow account with Corporate Stock Transfer, Inc.

Restricted Common Stock

During the year ended December 31, 2018, 327,416 shares of common stock related to fully vested shares of restricted common stock were delivered for services performed.

Note 12. Stock Options, Warrants and Restricted Common Stock

During the year ended December 31, 2019, the Company's shareholders approved its 2019 Equity Incentive Plan (the "2019 Plan"), which reserves a total of 3,600,000 shares of the Company's common stock plus the remaining shares reserved under the Company's 2017 Equity Incentive Plan. On December 5, 2019 the Company registered 3,930,603 shares of common stock under the 2019 Plan. The Company currently provides stock-based compensation to employees, directors and consultants, under the Company's 2019 Plan, as approved by the Company's shareholders and non-qualified options and warrants issued outside of the Plan.

Stock-based Compensation

The Company's stock-based compensation expenses recognized during the years ended December 31, 2019 and 2018, were attributable to selling, general and administrative expenses, which are included in the accompanying consolidated statements of operations.

The Company recognized total stock-based compensation expense during the years ended December 31, 2019 and 2018, from the following categories (in thousands):

	 Years Ended December 31,		
	2019		2018
Restricted stock awards under the Plan	\$ 687	\$	3,972
Stock option awards under the Plan	58		688
Total stock-based compensation	\$ 745	\$	4,660

Restricted common stock awards

A summary of the Company's restricted stock activity in the years ended December 31, 2019 and 2018 is as follows:

		Weighted Average Grant-Date
	Number of Shares	Fair Value
Unvested at January 1, 2018	496,152	\$ 5.97
Granted	431,000	\$ 10.46
Vested	(530,065)	\$ 7.61
Forfeited	(301,148)	\$ 7.68
Unvested at December 31, 2018	95,939	\$ 12.49
Vested	(58,772)	\$ 7.66
Granted	1,542,332	\$ 1.41
Forfeited	(55,000)	\$ 14.95
Unvested at December 31, 2019	1,524,499	\$ 1.37

The value of restricted common stock grants are measured based on their fair market value on the date of grant and amortized over their respective vesting periods. As of December 31, 2019, there was approximately \$1.8 million of unrecognized compensation cost related to unvested restricted common stock rights, which is expected to be recognized over a remaining weighted-average vesting period of approximately three months.

Stock Incentive Plan Options

The Company estimates the fair value of the share-based option awards on the date of grant using the Black-Scholes option-pricing model (the "Black-Scholes model"). Using the Black-Scholes model, the value of the award that is ultimately expected to vest is recognized over the requisite service period in the statement of operations. The Company attributes compensation to expense using the straight-line single option method for all options granted.

The Company's determination of the estimated fair value of share-based payment awards on the date of grant under the Plan is affected by the following variables and assumptions:

- The grant date exercise price the closing market price of the Company's common stock on the date of the grant;
- Expected option term based on historical experience with existing option holders estimated at 3-5 years;
- Estimated dividend rates based on historical and anticipated dividends over the life of the option;
- Legal term of the option grants have legal lives of 10 years;
- Risk-free interest rates with maturities that approximate the expected life of the options granted;
- Calculated stock price volatility calculated over the expected life of the options granted, which is calculated based on the daily closing price of the Company's common stock over the period commencing in mid-2017 when the Company changed its strategic focus; and
- Option exercise behaviors based on actual and projected employee stock option exercises and forfeitures.
- The Company accounts for forfeitures as they occur.

The Company currently provides stock-based compensation to employees, directors and consultants under the Plan. There were no stock options issued during the year ended December 31, 2019. The Company utilized assumptions in the estimation of fair value of stock-based compensation for the year ended December 31, 2018, as follows:

	December 31,
	2018
Dividend yield	0%
Expected price volatility	152% - 159%
Risk free interest rate	2.49% - 2.96%
Expected term	5 years

A summary of stock option activity under the Plan for options to employees, officers, directors and consultants, for the years ended December 31, 2019 and 2018, is presented below:

	Shares Underlying Options	Wei	ghted Average Exercise Price	Weighted Average Remaining Contractual Term (Years)	Aggregate Intrinsic Value
Outstanding at January 1,					
2018	119,533	\$	9.02		
Granted	62,000	\$	15.71		
Exercised	(19,533)	\$	4.02		
Forfeited	(100,000)	\$	10.00		
Outstanding at December					
31, 2018	62,000	\$	15.71	9.2	
Granted	_	\$	_		
Exercised	_	\$	_		
Forfeited	(50,000)	\$	18.50		
Outstanding at December					
31, 2019	12,000	\$	4.09	3.7	<u> </u>
Exercisable at December					
31, 2019	12,000	\$	4.09	3.7	<u>\$</u>

The aggregate intrinsic value in the table above represents the total intrinsic value (the difference between the Company's closing stock price on December 31, 2019 and 2018, and the exercise price, multiplied by the number of in-the-money options) that would have been received by the option holders, had all option holders been able to, and in fact had, exercised their options on December 31, 2019 and 2018, respectively.

As of December 31, 2018, total stock-based compensation expense related to unvested options not yet recognized totaled approximately \$58,000, which was fully amortized in the first quarter of 2019.

Other common stock purchase warrants

As of December 31, 2019, the Company had outstanding 3,574,257 warrants issued in connection with offerings. The following is a summary of the change in outstanding warrants during the years ended December 31, 2019 and 2018:

	Shares Underlying Options/Warrants	Weig	ghted Average Exercise Price	Weighted Average Remaining Contractual Term (Years)	Aggw	egate Intrinsic Value
Outstanding at January 1,	Options/ warrants	_	Filce	Term (Tears)	Aggi	egate intrinsic value
2018	1,944,895	\$	35.06	2.7	\$	6,135,000
Issued	_	\$	_	_		.,,
Exercised	(113,009)	\$	3.50	_		
Forfeited	(160,773)	\$	10.88	_		
Outstanding at December						
31, 2018	1,671,113	\$	39.47	2.0	\$	_
Issued	1,908,144	\$	1.94	5.2		
Forfeited	(5,000)	\$	7.90	_		
Outstanding at December			<u> </u>			
31, 2019	3,574,257	\$	19.48	2.9	\$	_
		<u> </u>				
Exercisable at December						
31, 2019	3,574,257	\$	19.48	2.9	\$	

The Company issued Warrants to purchase 1,908,144 shares of its common stock with an exercise price of \$1.94, in connection with the Notes issued on January 28, 2019. During the year ended December 31, 2018, 13,009 of the warrants issued in the May 2013 private offering were exercised on a cashless basis for the issuance of 3,215 shares of common stock, 100,000 warrants issued in March 2018, were exercised for cash proceeds of approximately \$0.4 million and 160,773 warrants were forfeited.

The aggregate intrinsic value in the table above represents the total intrinsic value (the difference between the Company's closing stock price on December 31, 2019 and the exercise price, multiplied by the number of in-the-money options) that would have been received by the option holders, had all option holders been able to, and in fact had, exercised their options on December 31, 2019.

Note 13. Animal Health License Agreements

Ceva License Agreement

In July 2012, the Company entered into an exclusive license agreement (the "License Agreement") with Ceva Santé Animale S.A. ("Licensee"), under which the Company granted the Licensee an exclusive royalty-bearing license, until December 31, 2028, to the Company's intellectual property and other assets, including both (a) the Company's patent rights and know-how, relating to recombinant single chain reproductive hormone technology for use in non-human mammals (the "Company's Animal Health Assets") and (b) the technology licensed to the Company by Washington University in St. Louis ("WU"). The License Agreement contains termination provisions as defined in the License Agreement.

Under the License Agreement, the Licensee obtained a worldwide exclusive license to develop, seek regulatory approval for and offer to sell, market, distribute, import and export luteinizing hormone ('LH') and/or follicle-stimulating hormone ("FSH") products for bovine (cattle), equine and swine in the field of the assistance and facilitation of reproduction in bovine, equine and swine animals. The Company also granted the Licensee an option and right of first refusal to develop additional animal health products outside of the licensed field of use or any diagnostic pregnancy detection tests for non-human mammals.

Under the License Agreement as of December 31, 2019, the Company would be entitled to receive future payments if Ceva achieves certain regulatory approvals as outlined in the License Agreement, summarized as follows:

- Payments, totaling up to a potential of \$0.9 million in the aggregate, based on the satisfactory conclusion of conditions as defined in the License Agreement;
- Potential for payments of up to an additional \$2 million for development and receipt of regulatory approval for additional licensed products; and
- Royalties, at low double-digit rates, based on sales of licensed products.

The upfront license fees received from the License Agreement have been recorded as deferred revenue and are amortized over the term of the License Agreement. License fees revenue totaling a net of approximately \$1.6 million commenced being amortized in July 2012. As of December 31, 2019, deferred revenue of \$0.1 million has been classified as a current liability and \$0.8 million has been classified as a long-term liability. The current liability represents the next twelve months' portion of the license fees revenue. For each of the years ended December 31, 2019 and 2018, approximately \$0.1 million, was recorded as the amortized license fee revenue.

Washington University License Agreement

During 2004 WU and Riot Blockchain entered into an exclusive license agreement which grants Riot Blockchain exclusive license and right to sublicense WU's technology (as defined under the WU License Agreement) for veterinary products worldwide, except where prohibited. The term of the WU License Agreement continues until the expiration of the last of WU's patents (as defined in the WU License Agreement). Riot Blockchain has agreed to pay minimum annual royalties, creditable against future royalties and royalties payable to WU for covered product sales by Riot Blockchain carrying a mid-single digit royalty rate and for sublicense fees received by Riot Blockchain carrying a low double-digit royalty rate. No royalty payments were made during the years ended December 31, 2019 and 2018.

Note 14. Income taxes

The components of the loss from continuing operations before income taxes for the years ended December 31, 2019 and 2018 are as follows (in thousands):

	 For the years ended December 31,		
	2019		2018
Domestic	\$ (20,446)	\$	(56,453)
Foreign	_		(4,555)
Loss from Continuing Operations before Income Taxes	\$ (20,446)	\$	(61,008)

The components of income tax benefit are as follows (in thousands):

	As of December 31,				
		2019		2018	
<u>Current:</u>			-		
US Federal	\$	_	\$	_	
US State		_		_	
Foreign		_		_	
Total current benefit	\$	_	\$		
Deferred:	·				
US Federal	\$	117	\$	495	
US State		26		112	
Foreign		_		92	
Total deferred benefit		143		699	
Total benefit for income taxes	\$	143	\$	699	

The tax effects of temporary differences and tax loss and credit carry forwards that give rise to significant portions of deferred tax assets and liabilities at December 31, 2019 and 2018 are comprised of the following (in thousands):

	As of December 31,		
	2019		2018
Deferred income tax assets:			
Net operating loss carryforwards	\$ 43,436	\$	30,745
Research and development credit carryforwards	989		989
Stock option expense	1,095		1,384
Impairment of mining related assets and other	(146)		8,779
Total deferred tax assets	45,374		41,897
Valuation allowance	(45,374)		(41,897)
Net deferred tax assets			
Deferred income tax liabilities:			
Indefinite life intangible assets	_		(143)
Net deferred tax liabilities	\$ _	\$	(143)

The Company has approximately \$168.8 million of federal and state tax Net Operating Losses ("NOL"s) that may be available to offset future taxable income, if any. The federal net operating loss carryforwards of \$100.3 million, if not utilized, will expire in 2037. The federal and state net operating loss carryforwards of \$20.1 million and \$19.1 million generated in 2019 and 2018, respectively are subject to an 80% limitation on taxable income, do not expire and will carry forward indefinitely.

Furthermore, as a result of changes in the ownership of our common stock and changes in our business operations, our ability to use our federal NOLs may be limited under Internal Revenue Code Section 382 and 383. State NOLs are subject to similar limitations in many cases. As a result, our substantial NOLs may not have any value to us.

The statute of limitations for assessment by the IRS and state tax authorities is open for tax years ending December 31, 2016 through 2019, although carryforward attributes that were generated prior to tax year 2016 may still be adjusted upon examination by the IRS or state tax authorities if they either have been or will be used in a future period. Currently, no federal or state income tax returns are under examination by the respective taxing authorities. The foreign tax returns for the years ended December 31, 2017 through 2019 are open for examination.

In assessing the realization of deferred tax assets, management considers whether it is more likely than not that some portion or all of the deferred tax assets will be realized. The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income during the period in which those temporary differences become deductible. Management considers the scheduled reversal of deferred tax liabilities, projected future taxable income and taxing strategies in making this assessment. In case the deferred tax assets will not be realized in future periods, the Company has provided a valuation allowance for the full amount of the deferred tax assets at December 31, 2019 and 2018. The valuation allowance increased by approximately \$3.5 million during the year ended December 31, 2019.

The expected tax expense (benefit) based on the U.S. federal statutory rate is reconciled with actual tax expense (benefit) as follows (in thousands):

	 For the years ended December 31,			
	2019		2018	
Statutory federal income tax expense (benefit)	\$ (4,293)	\$	(12,791)	
State taxes, net of federal tax expense (benefit)	(664)		(2,887)	
Stock compensation	1,142		174	
Other	195		_	
Change in valuation allowance	3,477		14,805	
Income taxes benefit	\$ (143)	\$	(699)	

The Company has not identified any uncertain tax positions requiring a reserve as of December 31, 2019 and 2018. The Company's policy is to recognize interest and penalties that would be assessed in relation to the settlement value of unrecognized tax benefits as a component of income tax expense. The Company did not accrue either interest or penalties for the years ended December 31, 2019 and 2018.

The Company is subject to U.S. federal income tax and primarily Oklahoma and Colorado state income tax. The Company has not been under tax examination in any jurisdiction for the years ended December 31, 2019 and 2018.

Note 15. Commitments and Contingencies

Commitments:

Oklahoma Lease Agreement

On February 27, 2018, Kairos entered into a lease agreement (the "OKC Lease") with 7725 Reno #1, LLC ("7725 Reno"), pursuant to which Kairos leases approximately 107,600 square foot warehouse located in Oklahoma City, Oklahoma. Pursuant to the terms of the OKC Lease, the initial term of one year terminates on February 15, 2019, unless terminated earlier pursuant to the terms of the OKC Lease. Kairos has the right to operate from the premises on a 24 hour/seven day a week basis. Base rent for the premises during the initial term of the OKC Lease was equal to \$55.95/kW per month for a total of 4 Megawatts (MW) of available electrical power, or \$223,800 per month.

On March 26, 2018, Kairos entered into a first amendment to the above OKC Lease, whereby 7725 Reno agreed to increase the electrical power available for Kairos's use from 6MW to 12MW, and the base rent under the lease was increased to approximately \$664,760 per month, effective as of the date when such additional power is available.

Effective November 29, 2018, Kairos entered into the second amendment to the OKC Lease which provided the following:

- extended the initial term of the lease through August 19, 2019;
- monthly base rent of \$235,000 for December 2018, \$230,000 for January and \$190,000 per month thereafter for the duration of the OKC Lease, including any renewals thereof:
- · changes the monthly electricity usage charges; and
- · granting Kairos the option to renew the OKC Lease for up to two, three-month periods after expiration of the initial term of the second amendment to the OKC Lease.

On May 15, 2019, Kairos renewed the OKC Lease for the first renewal term of three months, extending the OKC Lease through November 15, 2019.

On August 15, 2019, Kairos renewed the OKC Lease for the second renewal term of three months, extending the lease through February 15, 2020.

On January 8, 2020, Kairos entered into a third amendment to the OKC Lease to extend the lease term through May 15, 2020, with all other terms remaining substantially the same as the second amendment to the OKC Lease.

Corporate Lease Agreement

On April 9, 2018, the Company entered into a commercial lease agreement (the "Florida Lease") with W-Crocker Fin Place Owner VII, LLC, a Delaware limited liability company, pursuant to which the Company leases approximately 1,700 rentable square feet of office and common area space in Fort Lauderdale, Florida. Pursuant to the terms of the Florida Lease, the initial term is for thirty-nine (39) months expiring on August 9, 2021, with one, five-year option to renew. The initial base rent is \$4,658.50 per month (or \$2.75 per sq. ft.) for the first year and shall escalate at the rate of 3.0% per annum thereafter. Additionally, common operating expenses are prorated and charged monthly as additional rent.

Operating Leases

At December 31, 2019, the Company had operating lease liabilities of approximately \$0.4 million and right of use assets of approximately \$0.4 million, which are included in the consolidated balance sheet.

The following summarizes quantitative information about the Company's operating leases (dollars in thousands):

Lease cost	Year End	ded December 31, 2019
Operating lease cost	\$	2,378
Variable lease cost		3,200
Operating lease expense		5,578
Short-term lease rent expense		17
Total rent expense	\$	5,595
Other information		
Operating cash flows from operating leases	\$	2,377
Right of use assets exchanged for new operating lease liabilities	\$	2,664
Weighted-average remaining lease term – operating leases		0.5 years
Weighted-average discount rate – operating leases		10.00%
Maturities of the Company's operating lease liabilities, are as follows (in thousands):		
For the year ended December 31, 2020	\$	344
For the year ended December 31, 2021		35
Total	\$	379
Less present value discount		(11)
Operating lease liabilities	\$	368

Rent expense, recorded on a straight-line basis, was approximately \$5.6 million and \$5.5 million for the years ended December 31, 2019 and 2018, respectively.

Ingenium International LLC Consulting Agreement

On February 21, 2018, the Company entered into a Consulting Agreement with Ingenium International LLC (the "Consultant") to provide consulting services related to the Company's business for a twelve-month period. Pursuant to the Consulting Agreement, Consultant's services are defined as follows: complete the installation and deployment of 8,000+ ASIC cryptocurrency miners, which included the Prive Equipment and the BMSS Equipment; assist in managing and monitoring the operation of the 8,000+ cryptocurrency miners on an ongoing basis; promptly responding to and troubleshooting any issues as they arise in the management and monitoring of the operations; continuing the buildout of up to 40 Megawatts of energy capacity, with the ultimate goal to secure the power and build the location for up to 80 Megawatts of energy capacity; and to make strategic introductions to other cryptocurrency business opportunities and contacts in the sector. In connection with the Consulting Agreement the Company made a lump sum payment of \$4.0 million to the Consultant. The Company recorded the \$4.0 million as a prepaid expense on February 21, 2018 and was amortizing the total cost over the one-year life of the agreement. However, the Company determined that as of December 31, 2018, the Consultants had provided substantially all the agreed upon services under the Consulting Agreement and therefore, recorded any remaining prepaid balance to selling, general and administrative expense on the accompanying statement of operations.

The controlling principals of Ingenium International LLC. are shareholders in the Company by virtue of the previous acquisitions of Kairos and Prive.

Synapse Financial Technologies, Inc. Agreement

On October 23, 2018, the Company, through its wholly-owned subsidiary, Logical Brokerage entered into an agreement (the "SynapseFi Agreement") with Synapse Financial Technologies, Inc. ("SynapseFi") to secure Synapse's services. SynapseFi is an industry leader in the provision of Application Program Interfaces ("API") to the financial services industry.

The SynapseFi Agreement was terminated by mutual agreement of the parties, in September 2019.

For the years ended December 31, 2019 and 2018, there were no material expenses incurred related to the SynapseFi Agreement.

Contingencies

The Company, and its subsidiaries, are subject at times to various claims, lawsuits and governmental proceedings relating to the Company's business and transactions arising in the ordinary course of business. The Company cannot predict the final outcome of such proceedings. Where appropriate, the Company vigorously defends such claims, lawsuits and proceedings. Some of these claims, lawsuits and proceedings seek damages, including, consequential, exemplary or punitive damages, in amounts that could, if awarded, be significant. Certain of the claims, lawsuits and proceedings arising in ordinary course of business are covered by the Company's insurance program. The Company maintains property, and various types of liability insurance in an effort to protect the Company from such claims. In terms of any matters where there is no insurance coverage available to the Company, or where coverage is available and the Company maintains a retention or deductible associated with such insurance, the Company may establish an accrual for such loss, retention or deductible based on current available information. In accordance with accounting guidance, if it is probable that an asset has been impaired or a liability has been incurred as of the date of the financial statements, and the amount of loss is reasonably possible that an asset may be impaired as of the date of the financial statement, then the Company in the accompanying consolidated balance sheets. If it is reasonably possible that an asset may be impaired as of the date of the financial statement, then the Company discloses the range of possible loss. Expenses related to the defense of such claims are recorded by the Company as incurred and included in the accompanying consolidated statements of operations. Management, with the assistance of outside counsel, may from time to time adjust such accruals according to new developments in the matter, court rulings, or changes in the strategy affecting the Company's defense of such matters. On the basis of current informatio

On February 17, 2018, Creighton Takata filed an action asserting putative class action claims on behalf of the Company's stockholders in the United District Court for the District of New Jersey, *Takata v. Riot Blockchain Inc.*, et al., Case No. 3: 18-cv-02293. The complaint asserts violations of federal securities laws under Section 10(b) and Section 20(a) of the Securities Exchange Act of 1934 on behalf of a putative class of stockholders that purchased stock from November 13, 2017 through February 15, 2018. The complaint alleges that the Company and certain of its officers and directors made, caused to be made, or failed to correct false and/or misleading statements in press releases and public filings regarding its business plan in connection with its cryptocurrency business. The complaint requests damages in unspecified amounts, costs and fees of bringing the action, and other unspecified relief.

Two additional, nearly identical complaints were subsequently filed by Richard Roys and Bruce Greenawalt in the United District States Court for the Southern District of Florida (*Roys v. Riot Blockchain Inc., et al.*, Case No. 9:18-cv-80225) and the United States District Court for the District of Colorado *Greenawalt v. Riot Blockchain Inc., et al.*, Case No. 1:18-cv-00440), respectively. On March 27, 2018, the court closed the Roys case for administrative purposes. On April 2, 2018, Mr. Greenawalt filed a notice of voluntary dismissal of his action, which the court entered on the same date.

On April 18, 2018, Joseph J. Klapper, Jr., filed a complaint against Riot Blockchain, Inc., and certain of its officers and directors in the United District Court for the District of New Jersey (*Klapper v. Riot Blockchain Inc., et al.*, Case No. 3: 18-cv-8031). The complaint contained substantially similar allegations and the same claims as those filed by Mr. Takata, and requests damages in unspecified amounts, costs and fees of bringing the action, and other unspecified relief. On November 6, 2018, the court in the Takata action issued an order consolidating Takata with Klapper into a single putative class action. The court also appointed Dr. Golovac as Lead Plaintiff and Motely Rice as Lead Counsel of the consolidated class action.

Lead Plaintiff filed a consolidated complaint on January 15, 2019. Defendants filed motions to dismiss on March 18, 2019. In lieu of opposing defendants' motions to dismiss, Lead Plaintiff filed another amended complaint on May 9, 2019. Defendants filed multiple motions to dismiss the amended complaint starting on September 3, 2019. Briefing on the motions to dismiss has been completed. Subject to the outcome of the pending motions, defendants intend to continue to vigorously contest Lead Plaintiff's allegations. Because this litigation is still at this early stage, we cannot reasonably estimate the likelihood of an unfavorable outcome or the magnitude of such an outcome, if any.

Shareholder Derivative Cases

On April 5, 2018, Michael Jackson filed a shareholder derivative complaint on behalf of the Company in the Supreme Court of the State of New York, County of Nassau, against certain of the Company's officers and directors, as well as against an investor (*Jackson v. Riot Blockchain, Inc., et al.*, Case No. 604520/18). The complaint contains similar allegations to those contained in the shareholder class action complaints and seeks recovery for alleged breaches of fiduciary duty, unjust enrichment, waste of corporate assets, abuse of control and gross mismanagement. The complaint seeks unspecified monetary damages and corporate governance changes. At the last preliminary conference, the court adjourned the conference until March 9, 2020 in lieu of staying the action. Defendants do not anticipate any other activity on this case until the next preliminary conference.

On May 22, 2018, two additional shareholder derivative complaints were filed on behalf of the Company in the Eighth Judicial District Court of the State of Nevada in and for the County of Clark (Kish v. O'Rourke, et al., Case No. A-18-774890-B & Gaft v. O'Rourke, et al., Case No. A-18-774896-8). The two complaints make identical allegations, which are similar to the allegations contained in the shareholder class action complaints. The shareholder derivative plaintiffs also seek recovery for alleged breaches of fiduciary duty, unjust enrichment, waste of corporate assets, and aiding abetting a breach of fiduciary duty. The complaints seek unspecific monetary damages and corporate governance changes.

On September 24, 2018, the court entered an order consolidating the *Gaft* and *Kish* actions, which is now styled as *In re Riot BlockChain, Inc. Shareholder Derivative Litigation*, Case No. A-18-774890-B. The plaintiffs filed a consolidated complaint on March 15, 2019. The consolidated action has been temporarily stayed until the resolution of the motion(s) to dismiss in the securities class action pending in the United District Court for the District of New Jersey.

On October 9, 2018, another shareholder derivative complaint was filed on behalf of the Company in the United District Court for the Eastern District of New York *Rotkowitz v. O'Rourke, et al.*, Case No. 2:18-cv-05632). As with the other shareholder derivative actions, the shareholder plaintiff alleges breach of fiduciary duty, waste of corporate assets, and unjust enrichment against certain of the Company's officers, directors, and an investor. The complaint's allegations are substantially similar to those made in the other securities class action and shareholder derivative complaints filed in 2018. The complaint seeks unspecific monetary damages and corporate governance changes. The parties filed a motion with the court to temporarily stay this action until the resolution of the motion(s) to dismiss in the securities class action pending in the United District Court for the District of New Jersey. In response, the court dismissed the action without prejudice with leave to refile a complaint following the resolution of the motion(s) to dismiss in the securities class action pending in the United District Court for the District of New Jersey.

On October 22, 2018, a fifth shareholder derivative complaint was filed on behalf of the Company in the United District Court for the Southern District of New York *Finitz v. O'Rourke, et al.*, Case No. 1: 18-cv-09640). The shareholder plaintiffs allege breach of fiduciary duty, waste of corporate assets, and unjust enrichment against certain of the Company's officers, directors, and an investor. The complaint's allegations are substantially similar to those made in the other securities class action and shareholder derivative complaints filed in 2018. The complaint seeks unspecific monetary damages and corporate governance changes. Upon the parties' stipulation, the court issued an order temporarily staying this action until the resolution of the motion(s) to dismiss in the securities class action pending in the United District Court for the District of New Jersey.

Defendants intend to vigorously contest plaintiffs' allegations in the shareholder derivative actions and plaintiffs' right to bring the action in the name of Riot Blockchain. But because this litigation is still at this early stage, we cannot reasonably estimate the likelihood of an unfavorable outcome or the magnitude of such an outcome, if any.

SEC Subpoena and Other Matters

On April 9, 2018, the Company received a subpoena from the SEC, requesting documents and information. The Company fully cooperated with the SEC in that investigation. On January 29, 2020, the SEC notified the Company that it had concluded its investigation as to Riot and based on the information the SEC has as of the date of the letter, it does not intend to recommend an enforcement action against Riot.

Beneficial Ownership

Pursuant to the rules of the SEC, the Company has consistently reported its beneficial ownership positions in its proxy and other filings where beneficial ownership disclosures are presented, for certain beneficial owners with respect to any person (including any "group" as that term is used in Section 13(d)(3) of the Securities and Exchange Act of 1934 (the "Exchange Act") who is known to the Company to be the beneficial owner of more than 5% of the Company's common stock. The Company has relied on each person who has reported to the SEC beneficial ownership of more than 5% of our common stock to provide complete and accurate information regarding their ownership, based on the reports filed by these persons.

Riot Blockchain, Inc. and Subsidiaries Notes to Consolidated Financial Statements (in thousands, except for share and per share amounts)

On September 7, 2018, a complaint was filed by the SEC (Case 1:18-cv-08175) and as subsequently amended, (the "Complaint") against, among others, a number of individuals and entities some of whom the Company has previously disclosed as its beneficial owners, as well as, Mr. John O'Rourke III, the Company's former chairman of the board of directors and chief executive officer who resigned from the Company on September 8, 2018, as disclosed in the Current Periodic Report on Form 8-K filed September 10, 2018. Other persons named in the Complaint have previously reported that they were beneficial owners of the Company's common stock, however, the Company has no basis to determine whether any such persons may have operated as a control group, collectively beneficially owning more than 5% of the Company's common stock.

Note 16. Related Party Transactions

Tess

Tess related parties include: Powercases Inc., and 2227470 Ontario Inc., (companies that are wholly-owned by Jeffrey Mason, President and Chief Executive Officer of Tess), 1038088 Ontario Limited (a company that is wholly-owned by Fraser Mason, Chairman and Chief Financial Officer of Tess), and JLM Strategic Marketing (a proprietorship owned by Jennifer Mason, Manager Corporate Communications of Tess).

The following table provides the total amount of transactions that have been entered into with Tess related parties and outstanding balances with Tess related parties as of and for the periods identified (in thousands):

	Year F	Year Ended		
Services to Tess provided by (1):	December 31, 2019	December 31, 2018		
Powercases Inc.	\$ 213	\$ 655		
JLM Strategic Marketing	<u> </u>	\$ 228		
1038088 Ontario Limited	\$ 45	\$ 187		
Payable to:	December 31, 2019	December 31, 2018		
Powercases Inc.	\$	\$ 37		
JLM Strategic Marketing	<u> </u>	\$ 9		
1038088 Ontario Limited	<u> </u>	\$ 52		

^{(1) - 2019} amounts provided by related parties are up to the date of de-consolidation.

During the 2019 period ended (up to the point of de-consolidation) and the year ended December 31, 2018, included in Tess's recorded services from related parties was approximately \$0.3 million and \$0.7 million, respectively for Tess's key management personnel salaries.

Note 17. Subsequent Events:

Financing

Subsequent to December 31, 2019, in connection with the Company's Sales Agreement with H.C. Wainwright, the Company received gross proceeds of approximately \$9.5 million from the sale of 5,995,559 shares of common stock.

Common Stock

On February 7, 2020, the Company issued 122,377 restricted stock units, and 5,000 vested restricted stock units to an officer of the Company.

On February 27, 2020, for 2020 services the Company awarded 1,212,192 restricted shares of common stock vesting over a one-year period to Directors and certain employees of the Company.

Riot Blockchain, Inc. and Subsidiaries Notes to Consolidated Financial Statements (in thousands, except for share and per share amounts)

Prive share escrow status

As of February 2020, the conditions for the release of the 200,000 shares of Riot's stock held in escrow in connection with the Prive acquisition were not achieved by the date specified in the Prive Purchase Agreement. The Escrow Agent has been notified that the conditions set forth in the Prive Purchase Agreement were not met and the 200,000 shares of Riot's stock that have been held in escrow by the Escrow Agent are to be returned to the Company. See Note 4, Acquisitions, for additional discussion regarding the Prive acquisition.

Corporate Matters

On February 7, 2020, the Company amended and restated its employment agreement (the "Agreement") with its Chief Executive Officer and Interim Chief Financial Officer (the "Executive"). Under the terms of the Agreement, the Executive will receive a prorated annual salary of \$0.3 million and 209,790 restricted common stock units, which vest in four equal quarterly installments, with each quarterly installment vesting as of the end of each quarter. The termination date of the Agreement is February 7, 2021.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

Not applicable.

ITEM 9A. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our Chief Executive Officer (principle executive and accounting officer), has evaluated the effectiveness of our disclosure controls and procedures (as such term is defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) as of the end of the period covered by this Annual Report on Form 10-K to ensure that the information required to be disclosed by the Company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in SEC rules and forms, and that information required to be disclosed in the reports we file or submit under the Exchange Act is accumulated and communicated to our management, including our Chief Executive Officer, to allow timely decisions regarding required disclosures. Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and management necessarily applies its judgment in evaluating the cost benefit relationship of possible controls and procedures. Based on such evaluation, our Chief Executive Officer has concluded that our disclosure controls and procedures were not effective at the reasonable assurance level as of December 31, 2019 due to the material weaknesses described below.

As further discussed below under "Management's Report on Internal Control Over Financial Reporting," management has identified material weaknesses in our information technology (IT) general controls (collectively, "ITGCs") and related IT-dependent process level controls, which are part of our internal control over financial reporting. Additionally, management identified a material weakness related to controls surrounding cash disbursement. We have developed a remediation plan for each weakness, which is described below under "Remediation."

Notwithstanding the identified material weaknesses and management's assessment that our internal control over financial reporting was not effective as of December 31, 2019, management believes that the consolidated financial statements included in this Annual Report on Form 10-K fairly present, in all material respects, our financial condition, results of operations and cash flows as of and for the periods presented in accordance with generally accepted accounting principles.

Management's Report on Internal Control over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act.

Our internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

A material weakness is a deficiency, or combination of deficiencies, in internal control over financial reporting such that there is a reasonable possibility that a material misstatement of annual or interim consolidated financial statements will not be prevented or detected on a timely basis.

Management utilized the criteria established in the Internal Control – Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) to assess the effectiveness of our internal control over financial reporting as of December 31, 2019. Based on this evaluation, management identified the following weaknesses in internal control over financial reporting as described below:

1) The Company did not design and/or implement user access controls to ensure appropriate segregation of duties that would adequately restrict user and privileged access to the financially relevant systems and data to the appropriate Company personnel.

- 2) The Company did not design and implement program change management controls for certain financially relevant systems to ensure that IT program and data changes affecting the Company's (i) financial IT applications, (ii) digital currency mining equipment, (iii) digital currency hardware wallets, and (iv) underlying accounting records, are identified, tested, authorized and implemented appropriately to validate that data produced by its relevant IT system(s) were complete and accurate. Such data is relied on by the Company in recording amounts pertaining to revenue and cryptocurrency assets.
- 3) The Company did not properly design or implement controls to ensure that data received from third parties is complete and accurate. Such data is relied on by the Company in determining amounts pertaining to revenue and cryptocurrency assets is complete and accurate.
- 4) The Company did not properly design or implement controls to ensure proper segregation of duties exist as it pertains to the ability to make electronic cash disbursements.

The material weaknesses described above resulted in no material misstatements in our consolidated financial statements; however, these material weaknesses create a reasonable possibility that a material misstatement to our consolidated financial statements or disclosures would not be prevented or detected on a timely basis.

Marcum LLP, the independent registered public accounting firm that audited our consolidated financial statements, has issued an attestation report on the effectiveness of our internal control over financial reporting as of December 31, 2019. Marcum's report, which expresses an adverse opinion on the effectiveness of our internal control over financial reporting due to the material weaknesses described above, is included in Item 9A on page 40 included in this Annual Report on Form 10-K.

Remediation

Our Board of Directors and management take internal control over financial reporting and the integrity of our financial statements seriously. We have implemented certain remedial actions and will continue to implement adequate measures to ensure the material weaknesses are remediated, such that these controls are designed, implemented, and operating effectively. The remediation actions include: (i) enhancing design and documentation related to both user access and change management processes and control activities (ii) developing and communicating additional policies and procedures to govern the area of IT change management (iii) develop robust processes to validate all data that is received from third-parties and relied upon to generate financial statements (iv) implement additional controls to enforce segregation of duties related to electronic cash disbursements.

However, the material weaknesses in our internal control over financial reporting will not be considered remediated until other ITGCs and process-level controls operate for a sufficient period of time and can be tested and concluded by management to be designed and operating effectively. We cannot provide any assurance that these remediation efforts will be successful or that our internal control over financial reporting will be effective as a result of these efforts. In addition, we continue to evaluate and work to improve our internal control over financial reporting related to the identified material weaknesses, management may determine to take additional measures to address control deficiencies or determine to modify the remediation plan described above.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM ON INTERNAL CONTROL OVER FINANCIAL REPORTING

To the Shareholders and Board of Directors of Riot Blockchain, Inc.

Adverse Opinion on Internal Control over Financial Reporting

We have audited Riot Blockchain, Inc. and Subsidiaries' (the "Company") internal control over financial reporting as of December 31, 2019, based on criteria established in *Internal Control-Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. In our opinion, because of the effect of the material weaknesses described in the following paragraph on the achievement of the objectives of the control criteria, the Company has not maintained effective internal control over financial reporting as of December 31, 2019, based on criteria established in *Internal Control-Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

A material weakness is a control deficiency, or combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the Company's annual or interim financial statements will not be prevented or detected on a timely basis. The following material weaknesses have been identified and included in "Management's Annual Report on Internal Control Over Financial Reporting":

- 1) The Company did not design and/or implement user access controls to ensure appropriate segregation of duties that would adequately restrict user and privileged access to the financially relevant systems and data to the appropriate Company personnel.
- 2) The Company did not design and implement program change management controls for certain financially relevant systems to ensure that IT program and data changes affecting the Company's (i) financial IT applications, (ii) digital currency mining equipment, (iii) digital currency hardware wallets, and (iv) underlying accounting records, are identified, tested, authorized and implemented appropriately to validate that data produced by its relevant IT system(s) were complete and accurate. Such data is relied on by the Company in recording amounts pertaining to revenue and cryptocurrency assets.
- 3) The Company did not properly design or implement controls to ensure that data received from third parties is complete and accurate. Such data is relied on by the Company in determining amounts pertaining to revenue and cryptocurrency assets is complete and accurate.
- 4) The Company did not properly design or implement controls to ensure proper segregation of duties exist as it pertains to the ability to make electronic cash disbursements.

These material weaknesses were considered in determining the nature, timing and extent of audit tests applied in our audit of the fiscal 2019consolidated financial statements, and this report does not affect our report dated March 25, 2020 on those financial statements.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) ("PCAOB"), the consolidated balance sheets as of December 31, 2019 and 2018 and the related consolidated statements of operations, stockholders' equity, and cash flows for each of the two years in the period ended December 31, 2019, and the related notes, of the Company and our report dated March 25, 2020 expressed an unqualified opinion on those financial statements.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying "Management Annual Report on Internal Control Over Financial Reporting". Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standardsrequire that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in thecircumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financialreporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of the inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that degree of compliance with the policies or procedures may deteriorate.

/s/ Marcum LLP

Marcum llp New York, NY March 25, 2020

Changes in Internal Control over Financial Reporting

No changes were made to our internal control over financial reporting during our most recently completed fiscal quarter that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting. We are taking the remedial actions described above and we expect to implement them before December 31, 2019.

ITEM 9B. OTHER INFORMATION.

None.

PART III

ITEM 10. DIRECTORS, NAMED EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE.

Information required to be disclosed by this Item with respect to our executive officers is incorporated into this Annual Report on Form 10-K by reference from the section entitled "Directors, Named Executive Officers and Corporate Governance" contained in our definitive proxy statement for our 2020 annual meeting of stockholders, which we intend to file within 120 days of the end of our fiscal year ended December 31, 2019.

ITEM 11. EXECUTIVE COMPENSATION.

Information required to be disclosed by this Item with respect to our executive officers is incorporated into this Annual Report on Form 10-K by reference from the section entitled "Executive Compensation" contained in our definitive proxy statement for our 2020 annual meeting of stockholders, which we intend to file within 120 days of the end of our fiscal year ended December 31, 2019.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS.

Information required to be disclosed by this Item with respect to our executive officers is incorporated into this Annual Report on Form 10-K by reference from the section entitled "Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters" contained in our definitive proxy statement for our 2020 annual meeting of stockholders, which we intend to file within 120 days of the end of our fiscal year ended December 31, 2019.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE.

Information required to be disclosed by this Item with respect to our executive officers is incorporated into this Annual Report on Form 10-K by reference from the section entitled "Certain Relationships and Related Transactions, and Director Independence" contained in our definitive proxy statement for our 2020 annual meeting of stockholders, which we intend to file within 120 days of the end of our fiscal year ended December 31, 2019.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES.

Information required to be disclosed by this Item with respect to our executive officers is incorporated into this Annual Report on Form 10-K by reference from the section entitled "Principal Accountant Fees and Services" contained in our definitive proxy statement for our 2020 annual meeting of stockholders, which we intend to file within 120 days of the end of our fiscal year ended December 31, 2019.

PART IV

ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES.

- No. Exhibit
- 3. Certificate of Incorporation and Bylaws.
- 3.1 Articles of Incorporation filed September 20, 2017 (Incorporated by reference to Exhibit 3.1 of the Current Report on Form 8-K filed September 25, 2017).
- 3.2 Amendment to Bylaws effective March 9, 2018 (Incorporated by reference to Exhibit 3.1 of the Current Report on Form 8-K filed March 12, 2018).
- 3.3 Bylaws effective September 20, 2017 (Incorporated by reference to Exhibit 3.2 of the Current Report on Form 8-K filed September 25, 2017).
- 3.4 Articles of Merger between Bioptix, Inc., and Riot Blockchain, Inc. (Incorporated by reference to Exhibit 3.1 of the Current Report on Form 8-K filed October 4, 2017).
- 4. Instruments Defining the Rights of Security Holders, Including Indentures.
- 4.1 Certificate of Designation of Rights, Powers, Preferences, Privileges and Restrictions of the 2% Series A Convertible Preferred Stock of Bioptix, Inc. (Incorporated by reference to Exhibit 3.3 of the Current Report on From 8-K filed September 25, 2017).
- 4.2 Amendment to Certificate of Designation of 0% Series B Convertible Preferred Stock of the Company (Incorporated by reference from Exhibit 3.1 of the Current Report on From 8-K filed December 21, 2017)
- 4.3 Certificate of Designations, Preferences and Rights of the 0% Series B Convertible Preferred Stock of the Company (Incorporated by reference from Exhibit 3.1 of the Current Report on From 8-K filed November 3, 2017).
- 4.4 2017 Equity Incentive Plan, as amended (Incorporated by reference to Appendix E to the Definitive Proxy Statement on Schedule DEF14A filed July 10, 2017, as amended incorporated by reference to the Definitive Proxy Statement on Schedule DEF14A filed March 26, 2018 and Schedule DEFA14A filed April 2, 2018).
- 4.5 2019 Equity Incentive Plan (Incorporated by reference to Appendix A to the Definitive Proxy Statement on Schedule DEF14A filed September 20, 2019.
- 4.6 Bioptix, Inc. Amended and Restated Equity Incentive Plan (Incorporated by reference to Exhibit 10.1 of the Current Report on Form 8-K filed December 2, 2016).
- 4.7 Share Exchange Agreement by and among the Company, Kairos Global Technology, Inc., and the shareholders of Kairos Global Technology, Inc. dated as of November 1, 2017 (Incorporated by reference to Exhibit 10.4 of the Quarterly Report on Form 10-Q for the quarter ended September 30, 2017 filed November 13, 2017).
- 4.8 Form of Purchase Agreement by and between the Company and Tess Inc. dated as of October 20, 2017 (Incorporated by reference to Exhibit 10.2 of the Quarterly Report on Form 10-Q for the quarter ended September 30, 2017 filed November 13, 2017).
- 4.9 Registration Rights Agreement by and between the Company and Tess Inc. dated as of October 20, 2017 (Incorporated by reference to Exhibit 10.3 of the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2017 filed November 13, 2017).
- 4.10 Form of Subscription Agreement by and between the Company and goNumerical, Ltd. (Coinsquare) dated as of September 29, 2017 (Incorporated by reference to Exhibit 10.1 of the Quarterly Report on Form 10-Q for the quarter ended September 30, 2017 filed November 13, 2017).
- 4.11 Form of Securities Purchase Agreement (Units) dated as of December 18, 2017 (Incorporated by reference to Exhibit 10.1 of the Current Report on Form 8-K filed December 19, 2017).
- 4.12 Form of Registration Rights Agreement dated as of December 18, 2017 (Incorporated by reference to Exhibit 10.2 of the Current Report on Form 8-K filed December 19, 2017).
- 4.13Form of Common Stock Purchase Warrant dated as of December 18, 2017 (Incorporated by reference to Exhibit 4.1 of the Current Report on Form 8-K filed December 19, 2017).

- 4.14Form of Securities Purchase Agreement dated as of March 10, 2017 (Incorporated by reference to Exhibit 10.1 of the Current Report on Form 8-K filed March 16, 2017).
- 4.15Form of Amendment to Registration Rights Agreement (Units) dated as of December 21, 2017 (Incorporated by reference to Exhibit 10.1 of the Current Report on Form 8-K filed December 21, 2017).
- 4.16Form of Amendment to Registration Rights Agreement dated as of December 21, 2017 (Incorporated by reference to Exhibit 10.2 of the Current Report on Form 8-K filed December 21, 2017).
- 4.17 Form of Registration Rights Agreement dated as of March 10, 2017 (Incorporated by reference to Exhibit 10.2 of the Current Report on Form 8-K filed March 16, 2017).
- 4.18Form of Escrow Deposit Agreement dated as of March 10, 2017 (Incorporated by reference to Exhibit 10.3 of the Current Report on Form 8-K filed March 16, 2017).
- 4.19Form of Escrow Deposit Agreement (Securities) dated as of March 10, 2017 (Incorporated by reference to Exhibit 10.4 of the Current Report on Form 8-K filed March 16, 2017).
- 4.20 Form of Securities Purchase Agreement dated as of March 15, 2017 (Incorporated by reference to Exhibit 10.5 of the Current Report on Form 8-K filed March 17, 2017).
- 4.21 Form of Common Stock Purchase Warrant dated as of March 10, 2017 (Incorporated by reference to Exhibit 4.1 of the Current Report on Form 8-K filed March 16, 2017).
- 4.22Form of Common Stock Purchase Warrant Agreement dated as of May 30, 2013 (Incorporated by reference to Exhibit 4.1 of the Current Report on Form 8-K filed May 30, 2013).
- 4.23Form of Senior Secured Promissory Note dated as of January 30, 2019 (Incorporated by reference to Exhibit 4.1 of the Current Report on Form 8-K filed February 1, 2019).
- 4.24Form of Common Warrant Agreement dated as of January 30, 2019 (Incorporated by reference to Exhibit 4.2 of the Current Report on Form 8-K filed February 1, 2019).

10. Material Contracts.

- 10.1 Lease Agreement dated as of February 27, 2018 (Incorporated by reference to Exhibit 10.1 of the Current Report on Form 8-K filed February 28, 2018).
- 10.2 First Amendment to Lease Agreement, dated March 26, 2018 (Incorporated by reference to Exhibit 10.1 of the Current Report on Form 8-K filed March 27, 2018).
- 10.3 First Amendment to Lease Agreement, dated March 26, 2018 (Incorporated by reference to Exhibit 10.1 of the Current Report on Form 8-K filed March 27, 2018).
- 10.4Executive Employment Agreement dated as of January 27, 2018 by and between Company and Christopher Ensey (Incorporated by reference to Exhibit 10.1 of the Current Report on Form 8-K filed January 31, 2018).
- 10.5 Employment Agreement by and between the Company and John O'Rourke dated as of November 3, 2017. (Incorporated by reference to Exhibit 10.6 of the Quarterly Report on Form 10-Q for the period ended September 30, 2017 filed November 13, 2017).
- 10.6 Executive Employment Agreement dated as of February 27, 2018 by and between Company and Robby Chang (Incorporated by reference to Exhibit 10.2 of the Current Report on Form 8-K filed February 28, 2018).
- 10.7 Executive Employment Agreement dated as of January 20, 2018 by and between Riot Blockchain Canada, Inc. and Jeffrey Vormittag (Incorporated by reference to Exhibit 10.1 of the Current Report on Form 8-K filed January 18, 2018).
- 10.8Executive Employment Agreement dated as of January 7, 2018 by and between Digital Green Energy Corp. and Daniel Stefan Robertson (Incorporated by reference to Exhibit 10.1 of the Current Report on Form 8-K filed January 11, 2018).
- 10.9 Amendment No. 1 to Retention Agreement by and between the Company and Jeff McGonegal dated as of March 27, 2018 (Incorporated by reference to Exhibit 10.3 of the Current Report on Form 8-K filed March 27, 2018).
- 10.10Retention Agreement by and Between the Company and Jeff McGonegal dated as of June 30, 2017 (Incorporated by reference to Exhibit 10.1 of the Current Report on Form 8-K filed July 3, 2017).
- 10.11Jeffrey G. McGonegal Executive Employment Agreement dated as of February 6, 2019 (Incorporated by reference to Exhibit 10.1 of the Current Report on Form 8-K filed February 11, 2019).
- 10.12Separation Agreement by and between the Company and Michael Beeghley dated as of November 3, 2017 (Incorporated by reference to Exhibit 10.5 of the Quarterly Report on Form 10-Q for the period ended September 30, 2017 filed November 13, 2017).

- 10.13Separation Agreement by and between the Company and Richard Whitcomb dated as of June 15, 2017 (Incorporated by reference to Exhibit 10.1 of the Current Report on Form 8-K filed June 15, 2017).
- 10.14Separation Agreement by and between the Company and Steve Lundy dated as of April 6, 2017 (Incorporated by reference to Exhibit 10.1 of the Current Report on Form 8-K filed April 7, 2017).
- 10.15<u>Logical Brokerage Corp. Stock Purchase Agreement dated as of March 26, 2018 (Incorporated by reference to Exhibit 2.1 of the Current Report on Form 8-K filed March 27, 2018).</u>
- 10.16Stockholders Agreement dated March 26, 2018 among Logical Brokerage Corp., Riot Blockchain, Inc. and Mark Bradley Fisher (Incorporated by reference to Exhibit 10.2 of the Current Report on Form 8-K filed March 27, 2018).
- 10.17 Asset Purchase Agreement by and between Company and Prive Technologies, LLC dated as of February 15, 2018 (Incorporated by reference to Exhibit 10.1 of the Current Report on Form 8-K filed February 16, 2018).
- 10.18 Form of Escrow Deposit Agreement (Incorporated by reference to Exhibit 10.2 of the Current Report on Form 8-K filed February 16, 2018).
- 10.19 Asset Purchase Agreement by and between Blockchain Mining Supply & Services, Ltd and the Company dated February 15, 2018 (Incorporated by reference to Exhibit 10.3 of the Current Report on Form 8-K filed February 16, 2018).
- 10.20 Escrow Agreement by and between Blockchain Mining Supply & Services, Ltd. and the Company dated February 15, 2018 (Incorporated by reference to Exhibit 10.4 of the Current Report on Form 8-K filed February 16, 2018).
- 10.21 Ingenium International Consulting Agreement dated as of February 21, 2018 (Incorporated by reference to Exhibit 10.1 of the Current Report on Form 8-K filed February 23, 2018).
- 10.22 Agreement by and among Barry Honig, Catherine DeFrancesco and certain related parties with respect to the Company dated January 18, 2017 (Incorporated by reference to Exhibit 10.1 of the Current Report on Form 8-K filed January 20, 2017).
- 10.23 Exclusive License Agreement between the Company and The Washington University, dated May 1, 2004, as amended (Incorporated by reference from the Quarterly Report on Form 10-Q for the quarter ended June 30, 2010, filed August 5, 2010).
- 10.24Amended and Restated Unanimous Shareholder Agreement dated October 2, 2017, by and among the Company, goNumerical, Ltd., and the other parties named therein (Incorporated by reference to Exhibit 10.1 of the Current Report on From 8-K filed May 25, 2018).
- 10.25 Form of Securities Purchase Agreement dated as of January 30, 2019 (Incorporated by reference to Exhibit 10.01 of the Current Report filed on February 1, 2019).
- 10.26 Form of Security Agreement dated as of January 30, 2019 (Incorporated by reference to Exhibit 10.02 of the Current Report filed on February 1, 2019).
- 10.27 Form of Registration Rights Agreement dated as of January 30, 2019 (Incorporated by reference to Exhibit 10.03 of the Current Report filed on February 1, 2019).
- 10.28At the Market Offering Agreement by and between Riot Blockchain, Inc. and H. C. Wainwright & Co., LLC, dated May 24, 2019 (Incorporated by reference to Exhibit 1.01 of the Current Report filed on May 24, 2019).
- 10.29Sale Purchase Agreement by and between Bitmaintech PTE. LTD. and Riot Blockchain, Inc., dated as of December 2, 2019 (Incorporated by reference to Exhibit 10.01 of the Current Report filed on December 4, 2019).
- 14 Code of Ethics Adopted October 23, 2017 (Incorporated by reference to Exhibit 14 of the Current Report on Form 8-K filed October 25, 2017).
- 23. Consent of Independent Registered Public Accounting Firm.
- 23 Consent of Marcum LLLP.*
- 31. Certifications.
- 31 Rule 13a-14(a)/15d-14(a) Certification of Chief Executive Officer Certification of Principal Financial Officer.*
- 32 Section 1350 Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.*
- Interactive data files pursuant to Rule 405 of Regulation S-T: (i) the Balance Sheets, (ii) the Statements of Operations, (iii) Statements of Stockholders Equity, (iv) the Statement of Cash Flows and (v) the Notes to the Financial Statements *

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SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf on March 25, 2020, by the undersigned thereunto duly authorized.

RIOT BLOCKCHAIN, INC.

/s/ Jeffrey G. McGonegal

Jeffrey G. McGonegal,

Chief Executive Officer and Chief Financial Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Jeffrey G. McGonegal, each and individually, as his or her true and lawful attorney-in-fact and agent, with full power of substitution and re-substitution, for them and in their name, place and stead, in any and all capacities, to sign any and all amendments to this Annual Report on Form 10-K, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, and generally to do all such things in their names and behalf in their capacities as officers and directors to enable the Company to comply with the provisions of the Securities Exchange Act of 1934 and all requirements of the Securities and Exchange Commission, granting unto each said attorney-in-fact and agent full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he or she might or could do in person, ratifying and confirming all that said attorney-in-fact and agent, or their or his or her substitutes or substitute, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant on March 25, 2020 in the capacities indicated.

/s/ Jeffrey G. McGonegal

Jeffrey G. McGonegal

Chief Executive Officer (principal executive officer) Chief Financial Officer (principal financial officer)

/s/ Remo Mancini

Remo Mancini, Director

/s/ Jason Les

Jason Les, Director

/s/ Benjamin Yi

Benjamin Yi, Director

INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM'S CONSENT

We consent to the incorporation by reference in the Registration Statement of Riot Blockchain, Inc. on Form S-3 (File No. 333-226111) and Form S-8 (File No. 333-235355) of our report dated March 25, 2020, with respect to our audits of the consolidated financial statements of Riot Blockchain, Inc. and Subsidiaries as of December 31, 2019 and 2018 and for each of the two years in the period ended December 31, 2019, and our report dated March 25, 2020 with respect to our audit of the effectiveness of internal control over financial reporting of Riot Blockchain, Inc. and Subsidiaries as of December 31, 2019, which reports are included in this Annual Report on Form 10-K of Riot Blockchain, Inc. for the year ended December 31, 2019.

Our report on the consolidated financial statements refers to a change in the method of accounting for leases in 2019 due to the adoption of the guidance in ASC Topic 842, Leases effective January 1, 2019.

Our report on the effectiveness of internal control over financial reporting expressed an adverse opinion because of the existence ofmaterial weaknesses.

/s/ Marcum llp

Marcum llp New York, NY March 25, 2020

CERTIFICATION

I, Jeffrey G. McGonegal certify that:

- 1. I have reviewed this annual report on Form 10-K of Riot Blockchain, Inc.;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report.
- 4. The registrant's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that
 material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the
 period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 5. The registrant's other certifying officers and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

March 25, 2020

/s/ Jeffrey G. McGonegal

Jeffrey G. McGonegal, Chief Executive Officer PRINCIPAL EXECUTIVE OFFICER Chief Financial Officer PRINCIPAL FINANCIAL OFFICER

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of Riot Blockchain, Inc. (the "Company") on Form 10-K for the year ended December 31, 2019 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned Jeffrey G. McGonegal, hereby certifies, pursuant to Section 1350 of Chapter 63 of Title 18 of the United States Code as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) the Report fully complies with the requirements of section 13(a) of the Securities Exchange Act of 1934; and
- (2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

March 25, 2020

/s/Jeffrey G. McGonegal

Jeffrey G. McGonegal, Chief Executive Officer PRINCIPAL EXECUTIVE OFFICER PRINCIPAL FINANCIAL OFFICER