ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2020

OR

TRANSITION REPORT UNDER SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from: to:

Commission file number: 001-33675

RIOT BLOCKCHAIN, INC.

(Exact name of registrant as specified in its charter)

Nevada

84-1553387

(State or other jurisdiction of Incorporation or organization) (I.R.S. Employer Identification No.)

202 6th Street, Suite 401, Castle Rock, CO

80104

(Address of principal executive offices) (Zip Code)

Registrant’s telephone number, including area code (303) 794-2000

Securities registered under Section 12(b) of the Exchange Act:

Common Stock no par value per share

RIOT

The Nasdaq Capital Market

(The title of class) (Trading Symbol) (Name of each exchange on which registered)

Securities registered pursuant to Section 12(g) of the Securities Exchange Act: None.

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act: Yes ☒ No ☐

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Exchange Act: Yes ☐ No ☒

Note - Checking the box above will not relieve any registrant required to file reports pursuant to Section 13 or 15(d) of the Exchange Act from their obligations under those Sections.

Indicate by check mark whether the registrant (1) filed all reports required to be filed by Section 13 or 15(d) of the Exchange Act during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See definitions of “large accelerated filer,” “accelerated filer,” “non-accelerated filer,” “smaller reporting company,” and “emerging growth company” in Rule 12b-2 of the Exchange Act.

Large accelerated filer ☐

Accelerated filer ☒

Non-accelerated filer ☒

Smaller reporting company ☒

Emerging growth company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant has filed a report on and attestation to its management’s assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

The aggregate market value of the shares of common stock, no par value, held by non-affiliates of the registrant as of June 30, 2020, the last business day of the registrant’s most recently completed second fiscal quarter, was approximately $77.7 million, based on the closing sale price per share of the registrant’s common stock as reported by the Nasdaq Capital Market on such date.

As of March 30, 2021, the registrant had 84,120,723 shares of common stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant’s definitive proxy statement to be delivered to stockholders in connection with its Annual Stockholders’ Meeting to be held in 2021 are incorporated by reference into Part III of this Annual Report on Form 10-K. Only those portions of the definitive proxy statement that are specifically incorporated by reference herein shall constitute a part of this Annual Report on Form 10-K.
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RIOT BLOCKCHAIN, INC.

As used in this Annual Report on Form 10-K for the fiscal year ended December 31, 2020 (this “Annual Report on Form 10-K”), the terms “we,” “us,” “our,” the “Company,” the “Registrant,” “Riot Blockchain,” and “Riot” mean Riot Blockchain, Inc. and its consolidated subsidiaries, unless otherwise indicated.

SUMMARY OF RISK FACTORS APPLICABLE TO OUR BUSINESS

Below is a summary of certain material factors that could harm our business, operating results and/or financial condition, impair our future prospects, and/or cause the price of our common stock to decline. Please refer to the additional discussion of the risks summarized below in Item 1A (“Risk Factors”) of Part I of this Annual Report on Form 10-K, which should be carefully considered, together with other information in this Annual Report on Form 10-K and in our other filings with the SEC, before making an investment decision regarding our common stock.

- **Risks Related to Our Cryptocurrency Mining Business.**
  - To be competitive in the cryptocurrency mining industry at scale, we may need to acquire new miners to expand our hashrate capacity or invest in new technologies, and we may not be able to do so in sufficient quantities to meet our business needs.
  - Increased demand for new miners at scale may impact the ability of miner manufacturers to keep up with demand for new miners, and prices and delivery schedules for new miners may be adversely impacted.
  - Cryptocurrency mining is a capital intensive industry, and we estimate having to use significant capital to acquire new miners to expand our hashrate capacity to compete with other large scale miners in the future.
  - We have historically purchased our miners from a single manufacturer located overseas, which exposes us to concentration, supply chain and other third-party risks.
  - We have subcontracted our primary cryptocurrency mining operations through a co-location mining services agreement with Coinmint, LLC, and we are subject to various third-party risks and uncertainties associated with our arrangement.
  - The COVID-19 global coronavirus pandemic has had far-reaching and adverse effects on the global supply chain that could affect the price, availability and delivery schedule for new miners.
  - Our miners require a significant amount of electrical power to operate, which requirement will increase as we deploy new miners we acquire, and if we are unable to secure sufficient electrical power to operate our miners, we may be unable to realize the benefit of our significant investment in new miners.
• **Risks Related to the Price of Bitcoin.**

  - We believe the market price for our securities has been connected to the market price for bitcoin, our main cryptocurrency, which has been subject to significant volatility.
  - We have observed significant volatility in the market price for bitcoin and the other cryptocurrencies that we mine, which makes predicting future prices of bitcoin highly speculative and may be subject to "bubble-type" risks.
  - There are not well-regulated markets for bitcoin (or for other cryptocurrencies) and the industry is, in large part, dependent on underregulated third-party reporters to establish a market price for bitcoin.
  - Our bitcoin mining business relies on our ability to sell the bitcoin we mine at a price above our cost to earn bitcoin.
  - The purchase price of new miners may increase significantly as the market price for bitcoin increases, which may result in us paying higher prices to purchase new miners.

• **Risks Related to Governmental Regulation and Enforcement.**

  - Cryptocurrency regulation, both in the United States and internationally, could adversely affect the price of cryptocurrencies and the cryptocurrency mining industry.
  - Future regulation over the environmental impact of both cryptocurrency mining and the manufacture of new miners could restrict our mining activity or affect the availability of new miners.
  - Due to future regulations, we may not be able to secure sufficient electrical power to operate our miners at full capacity.

• **Risks Related to Ownership of our Common Stock.**

  - We have observed significant historical volatility in the market price of shares of our common stock, which makes investment in our securities highly speculative and investors may lose part or all of their investment.
  - We have a small executive management team who are responsible for meeting our public company reporting requirements, and if we lose any of our executive management team, we may have difficulty complying with these requirements.
  - We have relied on our ability to raise capital to fund our operations, which capital may not be available on acceptable terms in the future, if at all.

### CAUTIONARY NOTE REGARDING 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. However, the inclusion of forward-looking statements 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. These forward-looking statements are subject to a number of risks, uncertainties and assumptions, including those described in Part I, Item 1A, “Risk Factors,” beginning on page 14 of this Annual Report on Form 10-K and under the section entitled “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” as well as those disclosed in subsequent reports we file with the Securities and Exchange Commission (“SEC”).

Moreover, we operate in a very competitive and rapidly changing environment and new risks emerge from time to time. It is not possible for our management to predict all risks, nor can we comprehensively assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements we may make. In light of these risks, uncertainties and assumptions, the future events and trends discussed in this Annual Report on Form 10-K may not occur and actual results could differ materially and adversely from those anticipated or implied in the forward-looking statements. Given these risks and uncertainties, the reader should not place undue reliance on these forward-looking statements.

Further, certain 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 and which may contain such forward-looking statements. We have not independently verified any market, industry or similar data presented in this Annual Report on Form 10-K 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 statements obtained from third-party sources are subject to the same qualifications and the additional uncertainties accompanying any estimates of future markets or events.

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, except as required by law. 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.
ITEM 1. BUSINESS

Overview

We are one of the leading Nasdaq publicly traded cryptocurrency mining companies operating in North America. We have made the strategic decision to focus our efforts on mining bitcoin by deploying special cryptocurrency mining computers (known in the industry as “miners”) designed to mine for bitcoin. As of the date of this Annual Report on Form 10-K, we exclusively operated the Antminer series of miners manufactured by Bitmain Technologies Limited (“Bitmain”) to mine bitcoin and, to a much lesser extent, litecoin. We generate substantially all of our revenue through our cryptocurrency mining operation. We generate revenue from the cryptocurrency we earn through our mining activities, which we may hold for our own account and or sell at prices and times as determined by our executive management team in accordance with our corporate strategy. The Company is also exploring innovative cryptocurrency mining technologies and other strategic initiatives as part of a continual effort to maximize the energy efficiency and cost-effectiveness of its cryptocurrency mining activities.

Cryptocurrency Mining

We seek to mine bitcoin by using our miners to solve complex cryptographic algorithms to support the Bitcoin blockchain (in a process known as “solving a block”). In return for solving a block, we receive a bitcoin or other cryptocurrency reward, depending on the blockchain, which we hold for our account and attempt to sell on the market to generate a profit.

Miners measure their capability in terms of processing power, which is known as in the industry as “hashing” power. Hashing power is measured in terms of the number of hashing algorithms solved (or “hashes”) per second, which is the miner’s “hash rate.” Generally speaking, miners with greater hashing power relative to other miners attempting to solve a block have a higher chance of solving the block and receiving a cryptocurrency award. However, although newer generations of miners advertise improved energy efficiency, we have observed that increasing hash rate generally requires greater electrical power, which increases the cost of solving a block and, therefore, the relative cost of mining a cryptocurrency. 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.

Participation in 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 hashing power 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 pool(s) wherein groups of miners associate to pool their resources together to earn cryptocurrency rewards, which are allocated to each miner according to the “hashing” capacity they contribute to the pool. The mining pool operator provides a service that coordinates the computing power of the independent mining enterprises participating in the mining pool. 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 no more than approximately 2% per reward earned, on average. Mining pools are subject to various risks such as disruption and down time. In the event that a pool experiences down time or is not yielding returns, our results may be impacted.

Mining Equipment

All of the miners we operate were manufactured by Bitmain, and incorporate application-specific integrated circuit (“ASIC”) chips specialized to solve blocks on the bitcoin blockchains using the 256-bit secure hashing algorithm (“SHA-256”) in return for bitcoin cryptocurrency rewards. Therefore, the only cryptocurrencies we are able to mine using the miners we presently employ or have ordered from Bitmain are those whose blockchain uses SHA-256, including bitcoin. If cryptocurrencies, particularly bitcoin, cease using SHA-256, we would likely incur significant costs to replace our existing miners. We are continually evaluating the effectiveness of the miners we purchase from Bitmain and we continuously explore new technology developments from Bitmain and other manufacturers, including manufacturers located in Asia, Europe, and domestically in the United States.

In late 2019, the Company made a strategic decision to concentrate on increasing its overall hash rate and to update its fleet of miners by acquiring the latest generation Antminer series of miners directly from Bitmain to replace the approximately 7,500 legacy model S9 miners manufactured by Bitmain, which the Company had acquired in third-party transactions in 2017 and 2018. The Company has chosen to focus on acquiring the latest generation of the Antminers directly from Bitmain because the Company’s management believes, both in terms of hash rate produced and energy efficiency, these new Antminers are the most powerful and energy efficient miners available on the market in sufficient quantities to meet our needs; 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.

The Company began the process of upgrading its existing mining fleet by ordering ordered 4,000 model S17-Pro Antminers directly from Bitmain in December 2019 for a total purchase price of approximately $6.3 million, which was paid in 2019. All 4,000 of these new Bitmain model S17-Pro Antminers were received and deployed at the Company’s former Oklahoma City, Oklahoma mining facility (the “OKC Facility”) by February 2020. As discussed in greater detail under the section entitled “Mining Facility” below, the Company relocated all 4,000 of these new model S17-Pro Antminers from the OKC Facility to the current mining facility of Coinmint LLC, a colocation facility located in Massena, New York in the second quarter of the fiscal year ended December 31, 2020.
Beginning in April 2020, the Company began a series of acquisitions of the latest generation Bitmain model S19 series of Antminers and began retiring its older model S9 miners. As of December 31, 2020, the Company operated a fleet of 7,043 model S17-Pro, S19, and S19-Pro Antminers, and had ordered an additional 30,603 new model S19-Pro, A19 and S19j-Pro Antminers, form Bitmain.

As set forth in the applicable purchase agreements previously disclosed by the Company as exhibits to current reports on Form 8-K filed with the SEC, which are incorporated by reference herein and included as exhibits to this Annual Report on Form 10-K, the Company pre-paid significant portions of the purchase price for these new Antminers as refundable deposits, with delivery scheduled to occur in installments through October 2021, and the remainder of the purchase price for these new Antminers is payable in installments, with payment due in advance of the scheduled delivery dates set forth in the applicable purchase agreement.

Miner Deliveries Subsequent to December 31, 2020.

Subsequent to December 31, 2020, the Company received the following shipments of new Bitmain Antminers purchased in 2020:

- 2,500 model S19-Pro Antminers in January 2021;
- 2,002 model S19-Pro Antminers in February 2021; and
- 2,201 model S19-Pro Antminers in March 2021.

Pursuant to the schedules as set forth in the applicable purchase agreement, the remaining 11,900 model S19-Pro Antminers are set to be delivered in monthly installments through August 2021. The 12,000 model S19j-Pro Antminers purchased by the Company during the year ended December 31, 2020 are expected to be delivered during September through November 2021, according to the schedule set forth on the applicable purchase agreement.

Miner Purchases Subsequent to December 31, 2020.

As reported by the Company on its current report on Form 8-K filed with the SEC on March 17, 2021, the Company ordered 1,500 model S19j (90TH/s) Antminers from Bitmain for approximately $7.2 million pursuant to a purchase agreement dated as of March 11, 2021, between the Company and Bitmain. Consistent with previous Bitmain agreements, the Company prepaid a significant portion of the total purchase price as a refundable deposit, with the remainder due in advance of delivery of the miners, which is expected to occur during late October 2021.

With the full deployment of all 32,103 new Bitmain model S19-Pro, S19j-Pro, and S19j Antminers delivered or scheduled to be delivered in 2021, our total fleet will consist of 39,146 total model S17-Pro, S19 and S19 Pro Antminers, each having a substantially greater hash rate capacity and electrical power usage efficiency than the Bitmain model S9 Antminers we previously operated. The Company considers this a substantial step forward towards its goal of developing an increasingly powerful and efficient bitcoin miner fleet in order to produce a greater overall hash rate capacity.

Mining Facility

After evaluating the Company’s lease arrangement and power costs at its former Oklahoma mining facility (the “OKC Facility”), the Company made the strategic decision to explore alternative mining locations to reduce its overhead and operating costs. Effective as of April 8, 2020, the Company and Coinmint, LLC (“Coinmint”) entered into a co-location mining services agreement (the “Coinmint Agreement”) which enabled the Company to relocate all of its miners from the OKC Facility to Coinmint’s Massena, New York facility (the “Coinmint Facility”) and to allow its lease of the OKC Facility to expire by its terms as of June 30, 2020.

Pursuant to the terms of the Coinmint Agreement, Coinmint provides electric power and performs all maintenance necessary to operate Riot’s miners at the Coinmint Facility. In exchange, Coinmint receives a performance fee based on the net cryptocurrencies earned by Riot’s miners deployed at the Coinmint Facility and is reimbursed for direct production expenses. The relocation to the Coinmint Facility reduced the Company’s overhead and operating costs, increased the overall uptime of its miners, and provided Riot with the opportunity to continue to expand its total hash rate capacity with potential access to additional megawatts of electric power, as compared to the former OKC Facility. The initial six (6) month term of the Coinmint Agreement ended on October 8, 2020 and was automatically renewed for a subsequent three (3) month term, which, by the terms of the Coinmint Agreement, is set to automatically renew for successive three (3) month terms until terminated.

The Company is currently evaluating an amendment to the Coinmint Agreement to revise, among other provisions, the total available electric power and the total number of miners it may deploy at the Coinmint Facility under the Coinmint Agreement. The Company continually evaluates its mining performance, including the status of the Coinmint Agreement, and as part of this evaluation, the Company may explore alternative mining facilities and mining arrangements in connection with its short-, medium- and long-term strategic planning.
Performance Metrics

Hash Rate

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 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 performance advantages over CPUs. General purpose chipsets like CPUs and GPUs have since been replaced in the mining industry by ASIC chips like those found in the model S17-Pro, S19, S19-Pro, S19j and S19j-Pro Antminers. Riot uses and plans to continue to use to mine bitcoin. These ASIC chips are designed specifically to maximize the rate of hashing operations of the miners in which they are installed; however, because they are specialized to operate SHA-256, if bitcoin or other cryptocurrencies cease using SHA-256 as the secure hashing algorithm support their blockchain, our miners may have to be replaced, which would likely require a significant capital expenditure by the Company.

Hash Rate Capacity

As of December 31, 2020, the Company’s operational fleet of 7,043 model S17-Pro, S19, and S19-Pro Antminers was capable of producing an estimated aggregate hash rate (the Company’s “hash rate capacity”) of approximately 0.57 exahash per second (EH/s), while utilizing approximately 20 megawatt (MW) of electrical energy. This hash rate capacity represents an increase of approximately 461% over the hash rate capacity previously capable of being generated by the Company’s older generation model S9 miners as of December 31, 2019.

As of the filing of this Annual Report on Form 10-K, the Company had received a total of 13,746 Antminers from Bitmain and once fully deployed, are expected to produce an estimated hash rate capacity of approximately 1.3 EH/s, while utilizing approximately 43 MW of electrical energy. This hash rate capacity represents an increase of approximately 1,191% over the hash rate capacity previously capable of being generated by the Company’s older generation model S9 miners as of December 31, 2019.

With the full deployment of all of the latest generation Antminers the Company has ordered from Bitmain as of the filing of this Annual Report on Form 10-K, the Company’s total mining fleet will comprise 39,146 Model S17-Pro, S19, and S19-Pro Antminers. Each of these 39,146 advanced miners is capable of producing a substantially greater hash rate and use electrical power more efficiently than the older generation model S9 miners we previously operated. At full deployment, the Company’s management estimates that the Company’s total miner fleet will be capable of producing a hash rate capacity of approximately 4.0 EH/s, while utilizing approximately 127 MW of electrical power, which will represent an increase of approximately 3,824% over the hash rate capacity previously capable of being generated by the Company’s older generation model S9 miners as of December 31, 2019. The Company’s management considers this a substantial step forward towards its goal of developing an increasingly powerful and efficient bitcoin miner fleet to produce a greater overall hash rate capacity.

Network Hash Rate

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 the blockchain-wide hash rate for a specific coin (its “Network Hash Rate”) can be understood as the aggregate of the hash rates of all of the miners actively trying to solve a block on the coin’s blockchain at a given time. Generally, the greater the proportion of a specific coin’s Network Hash Rate that an individual miner’s (or a miner pool’s) total hash rate represents will, over time, result in a greater chance of that miner solving a block on the coin’s blockchain and, therefore, of earning a cryptocurrency reward, as compared to miners with relatively lower total hash rates.

However, as the relative market price for a coin increases, more miners are encouraged to attempt to mine the coin, which increases the coin’s Network Hash Rate. Therefore, a miner must increase its total hash rate just to maintain its relative possibility of solving a block on the coin’s blockchain. Thus, a feedback loop is created: as a coin gains popularity and its relative market price increases, more miners attempt to mine the coin and its Network Hash Rate is increased; in response, existing miners and new miners devote more and more hash rate to the coin’s blockchain in a process that should, theoretically, replicate itself continually until the supply of available coins is exhausted. Finally, as more and more hash rate is needed to maintain competitiveness on a given coin’s blockchain, miners deploy more and more machines, which require electrical power to operate, both to directly power hash rate production and also to dissipate the significant amount of heat generated by the machines’ operation. Therefore, as more hash rate is generated, more electric power is consumed, which generally increases the cost of mining a given coin.

In response, miners have attempted to achieve greater hash rate by deploying increasingly sophisticated miners in ever greater quantities. This has become the cryptocurrency mining industry’s great “arms race.” There are very few manufacturers of miners capable of producing a sufficient number of machines of adequate quality to meet this need, and scarcity results. Compounding this phenomenon, we have seen reports that Bitmain, the largest manufacturer of bitcoin miners, increases its prices for new machines as the market price of bitcoin increases.
As a miner of primarily bitcoin, the oldest and most widely mined cryptocurrency, the Company is continually seeking to maximize its relative hash rate on the Bitcoin blockchain, while keeping costs as low as possible. The Company’s goal, therefore, is to acquire and deploy as powerful of a fleet of miners as possible, while operating as energy-efficiently as possible. To date, this has involved acquiring large numbers of the latest generation Antminer series of miners manufactured by Bitmain, because the Company’s management believes, to the best of their knowledge, that the S17-Pro, S19, S19-Pro, S19j, and S19j-Pro Antminers offer the best mix of hash rate capacity, reliability, energy efficiency, and cost.

Mining Results

Mining Production and Cryptocurrency Sales

The Company measures the success of its operations, in one respect, by the number and U.S. Dollar (US$) value of the cryptocurrency rewards it earns from its cryptocurrency mining activities. The following table presents additional information regarding our cryptocurrency mining operations, including cryptocurrency production and sales of the cryptocurrency the Company mines, expressed in terms of quantities of coins, including bitcoin (“BTC”), litecoin (“LTC”) and bitcoin cash (“BCH”), mined and in amounts (in thousands of US$):

<table>
<thead>
<tr>
<th></th>
<th>BTC</th>
<th>LTC</th>
<th>BCH</th>
<th>Amounts</th>
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<tbody>
<tr>
<td><strong>Balance at January 1, 2019</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revenue recognized from cryptocurrencies mined</td>
<td>164</td>
<td>3,082</td>
<td>—</td>
<td>$ 707</td>
</tr>
<tr>
<td>Mining pool operating fees</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>(135)</td>
</tr>
<tr>
<td>Proceeds from sale of cryptocurrencies</td>
<td>(585)</td>
<td>(3,110)</td>
<td>(499)</td>
<td>(3,196)</td>
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<tr>
<td>Purchase of miner equipment with cryptocurrencies</td>
<td>(9)</td>
<td>—</td>
<td>—</td>
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<tr>
<td>Realized gain on sale/exchange of cryptocurrencies</td>
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<td>—</td>
<td>—</td>
<td>665</td>
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<tr>
<td>Impairment of cryptocurrencies</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>(844)</td>
</tr>
<tr>
<td><strong>Balance at December 31, 2019</strong></td>
<td>514</td>
<td>3,449</td>
<td>1</td>
<td>3,839</td>
</tr>
<tr>
<td>Revenue recognized from cryptocurrencies mined</td>
<td>1,033</td>
<td>21</td>
<td>—</td>
<td>11,984</td>
</tr>
<tr>
<td>Mining pool operating fees</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>(146)</td>
</tr>
<tr>
<td>Proceeds from sale of cryptocurrencies</td>
<td>(500)</td>
<td>—</td>
<td>—</td>
<td>(8,298)</td>
</tr>
<tr>
<td>Realized gain on sale/exchange of cryptocurrencies</td>
<td>26</td>
<td>(3,470)</td>
<td>—</td>
<td>5,184</td>
</tr>
<tr>
<td>Impairment of cryptocurrencies</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>(989)</td>
</tr>
<tr>
<td>Cryptocurrencies received from sale of equipment</td>
<td>5</td>
<td>—</td>
<td>—</td>
<td>52</td>
</tr>
<tr>
<td><strong>Balance at December 31, 2020</strong></td>
<td>1,078</td>
<td>—</td>
<td>1</td>
<td>$ 11,626</td>
</tr>
</tbody>
</table>

As the above table shows, the Company increased the quantity of bitcoin rewards earned from its cryptocurrency mining operations from 944 in fiscal year 2019, to 1,033 in fiscal year 2020, representing an increase of approximately 9.4% in the number of bitcoin mined. As part of the strategy enacted in December 2019 to focus on using our miners to support the bitcoin blockchain by solving blocks as part of mining pools in exchange for bitcoin rewards, the Company significantly curtailed its litecoin and bitcoin cash mining activities and only received 21 litecoin rewards and did not receive any bitcoin cash rewards from operations during fiscal year 2020. Despite this, the US$ amount of revenue the Company recognized from its cryptocurrency mining activities increased from approximately $6,741 during fiscal year 2019 to $11,984 during fiscal year 2020, representing an increase of approximately 78% in revenue from the Company’s mining operations. As discussed in greater detail in the section of this Annual Report on Form 10-K entitled “Factors Affecting Profitability” below, this is largely attributable to the increased market price of bitcoin during fiscal year 2020.

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; and
- **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; and
- 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 for Riot to provide its 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 net 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. It is not probable that a significant reversal of cumulative revenue will occur, and the consideration is constrained until the mining pool operator successfully places a block (by being the first to solve an algorithm) and when the Company receives confirmation of the consideration it will receive, at which time the 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 United States Generally Accepted Accounting Principles ("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 Financial Accounting Standards Board ("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.

Factors Affecting Profitability

Market Price of Bitcoin

Our business is heavily dependent on the spot price of bitcoin. The prices of cryptocurrencies, specifically bitcoin, 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. Bitcoin (as well as other cryptocurrencies) may have value based on various factors, including their acceptance as a means of exchange by consumers and producers, scarcity, and market demand.

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, our most significant cryptocurrency asset to which the majority of our mining power is devoted, the reward was initially set at 50 bitcoin currency rewards per block. The Bitcoin blockchain has undergone halving three times since its inception as follows: (1) on November 28, 2012 at block 210,000; (2) on July 9, 2016 at block 420,000; (3) on May 11, 2020 at block 630,000, when the reward was reduced to its current level of 6.25 bitcoin per block. The next halving for the Bitcoin blockchain is anticipated to occur in March 2024 at block 840,000. This process will reoccur until the total amount of bitcoin currency rewards issued reaches 21 million and the theoretical supply of new bitcoin is exhausted, which is expected to occur around 2140. Many factors influence the price of bitcoin and the other cryptocurrencies we mine for, and potential increases or decreases in prices in advance of or following a future halving is unknown.

Competition

Our business environment is constantly evolving, and cryptocurrency miners can range from individual enthusiasts to professional mining operations with dedicated data centers. The Company competes with other companies that focus all or a portion of their activities on mining activities at scale. We face significant competition in every aspect of our business, including, but not limited to, the acquisition of new miners, the ability to raise capital, obtaining the lowest cost of electricity, obtaining access to energy sites with reliable sources of power, and evaluating new technology developments in the industry.

At present, the information concerning the activities of these enterprises may not be 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.

We believe, based on available data, that the trend of increasing market prices for bitcoin and other major cryptocurrencies we observed beginning in the third fiscal quarter of calendar year 2020 has resulted in an increase in the scale and sophistication of competition in the cryptocurrency mining industry, with new entrants and existing competitors gaining access to substantial capital resources to build larger and larger mining operations. If this trend of increasing market prices for bitcoin and other cryptocurrencies continues, which we believe has occurred (though with significant volatility) into calendar year 2021, we believe many new and existing competitors may be encouraged to build or scale bitcoin mining operations.

Despite this trend, we believe, based on available data and assuming full deployment of the miners we have ordered from Bitmain, we have and will continue to maintain a competitive hash rate capacity among both public and private bitcoin miners. However, to stay competitive in our evolving industry, both against new entrants into the market and existing competitors, we anticipate that we will have to continue to expand our existing miner fleet by purchasing the latest generation of miners, as well as innovating to develop and implement new technologies and mining solutions.

Several public companies (traded in the U.S. and internationally) and private companies may be considered to compete with us, including the following companies which we have identified as our competitors:
• Argo Blockchain PLC;
• Bit Digital, Inc.;
• Bitcoin Investment Trust;
• Bitfarms Technologies Ltd. (formerly Blockchain Mining Ltd);
• Blockchain Industries, Inc. (formerly Omni Global Technologies, Inc.);
• Digihost International, Inc.;
• DMG Blockchain Solutions Inc.;
• DPW Holdings, Inc. (through its ownership of Digital Farms Inc.);
• GMO Internet, Inc.;
• Galaxy Digital Holdings Ltd.;
• HashChain Technology, Inc.;
• Hive Blockchain Technologies Inc.;
• Hut 8 Mining Corp.;
• Layer1 Technologies, Inc.;
• Marathon Digital Holdings, Inc.;
• MGT Capital Investments, Inc.;
• Northern Data AG;
• Overstock.com Inc.;
• SOS Limited; and
• SBI Holdings.
Government Regulation

Blockchain and Bitcoin are increasingly becoming subject to governmental regulation, both in the U.S. and internationally. State and local regulations also may apply to our activities and other activities in which we may participate in the future. Other governmental or semi-governmental regulatory bodies have shown an interest in regulating or investigating companies engaged in the blockchain or cryptocurrency business. For instance, the Cyber-Digital Task Force of the U.S. Department of Justice (the “DOJ”) published a report entitled “Cryptocurrency: An Enforcement Framework” in October 2020. This report provides a comprehensive overview of the possible threats and enforcement challenges the DOJ views as associated with the use and prevalence of cryptocurrency, as well as the regulatory and investigatory means the DOJ has at its disposal to deal with these possible threats and challenges. Further, in early March 2021, the SEC chairperson nominee expressed an intent to focus on investor protection issues raised by bitcoin and other cryptocurrencies.

Presently, we do not believe any U.S. or State regulatory body has taken any action or position adverse to our main cryptocurrency, bitcoin, with respect to its production, sale, and use as a medium of exchange; however, future changes to existing regulations or entirely new regulations may affect our business in ways it is not presently possible for us to predict with any reasonable degree of reliability.

Further, following the appreciation of the market price of bitcoin in the second half of 2020, we have observed increasing media attention directed at the environmental concerns associated with cryptocurrency mining, particularly its energy-intensive nature. While we do not believe any U.S.-based regulators have taken a position adverse to bitcoin mining, in March 2021, we became aware of the actions taken by the governmental authorities for the Chinese province of Inner Mongolia, which represents roughly 8% of the world’s total mining power, to outright ban bitcoin mining in the province due to the industry’s intense electrical power demands and its negative environmental impacts (both in terms of the waste produced by mining the rare Earth metals used to manufacture miners and the production of electrical power used in bitcoin mining). While we have yet to see whether these miners will be able to relocate to another location in China to continue mining, this action serves as a stark reminder of the power of national and state governments to affect our industry through regulator action.

As the regulatory and legal environment evolves, we may become subject to new laws, such as further regulation by the SEC and other agencies, which may affect our mining and other activities. 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, we intend 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.
Strategic Initiatives

To assist the Company with identifying new and emerging technologies, as well as other opportunities to enhance its business, the Company engaged XMS Capital Partners, LLC (“XMS”), an experienced M&A financial advisory firm, to identify new transaction partners and strategic opportunities for the Company in the Bitcoin space. XMS is assisting the Company in navigating the dynamic Bitcoin landscape and is advising the Company on potential strategic transactions in bitcoin mining related operations. The Company does not have a defined timeline for any transaction and cannot provide any assurance whether or when a transaction may be announced or consummated.

Lancium Pilot Project

In December 2020, we announced a pilot project in Houston, Texas to evaluate the use of immersion cooling technology and electric power cost management strategies for mining bitcoin in the Texas energy market. We partnered with two leading-edge technology companies, Enigma Digital Assets AG (“Enigma”) and Lancium, LLC (“Lancium”) to launch the pilot project. The pilot project has the unique dual focus of evaluating Enigma’s next-generation immersion technology to increase mining productivity, in addition to evaluating Lancium’s Smart Response™ software to reduce energy costs. This software allows data centers to adjust server electricity consumption based on power grid conditions such as price, frequency, or ancillary service revenue, which potentially unlocks significant power savings for operators. Lancium has also been advising Riot on power strategy in the Texas energy market, known as “ERCOT”.

Immersion cooling is a cooling technique where bitcoin mining units are submerged in a specialized fluid in order to keep the integrated circuits operating at lower temperatures. When successful, this has the potential to: prolong equipment life, enhance microchip efficiencies, and provides the opportunity to “overclock” the rig, i.e., running at speeds beyond factory specified design. Overclocking, including when assisted by immersion cooling, is a technique that can be used to increase a miner’s overall hash rate.

Lancium will facilitate providing 8 MW of power capacity for the pilot project. The initial 3 MW will be dedicated to a current-generation Enigma immersion module, for use with S19-Pro ASIC miners. If the parties decide to proceed with the pilot project after this initial testing stage is complete, a further 5 MW may be made available for Enigma’s next-generation immersion module solution, which is currently in development and expected to be available later in 2021. This next-generation immersion module solution involves proprietary ASIC chips combined with a new cooling solution. Both modules are the first of their kind from Enigma. Riot will control the pilot project with Enigma providing the immersion containers and Lancium licensing its Smart Response™ software. If successful, Riot may seek to expand upon the pilot project at larger-scale sites.

Employees

As of March 25, 2021, we had eight full-time employees. We believe our employee relations to be good. Currently, our activities rely on the services of one individual consultant under a full-time agreement.

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 Financial Officer and accounting staff, and our telephone number is (303) 794-2000. Our principal operating location which is provided under a co-location mining services agreement with Coinmint is in Massena, New York.

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.
ITEM IA. — 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. Certain factors may have a materially adverse effect on our business, financial condition and results of operations, including the risk factors described below. You should carefully consider all of the risks and uncertainties described below and elsewhere in this Annual Report on Form 10-K, as well as those risks disclosed in the Company’s other public filings, together with the other information contained in this report and the Company’s other public filings before making an investment decision regarding the Company’s securities. The risks and uncertainties described below are not the only ones we face. Additional risks and uncertainties not presently known to us or that we currently believe are not material may also become important factors that could adversely affect our business, financial condition and results of operations, perhaps materially. If any of the following risks actually occur, our business, financial condition, results of operation and future prospects could be materially and adversely affected. In that event, the trading price of shares of our common stock could decline, and you could lose part or all your investment. 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. For more information regarding forward-looking statements in this Annual Report, please see the Section entitled “Cautionary Note Regarding Forward-Looking Statements” on Page 4 of this Annual Report on Form 10-K.

Risks Related to Our Cryptocurrency Mining Business

The cost of obtaining new and replacement miners and parts has historically been capital intensive, and is likely to continue to be very capital intensive, which may have a material and adverse effect on our business and results of operations.

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 the cryptocurrencies we mine when we sell them. Our miners experience ordinary wear and tear from operation and may also face more significant malfunctions caused by factors which may be beyond our control. Additionally, as the technology evolves, we may acquire newer models of miners to remain competitive in the market. Over time, we replace those miners which are no longer functional with new miners purchased from third-party manufacturers, who are primarily based in China.

For example, the 30,603 new Bitmain Antminer model S19, S19-Pro and S19j-Pro miners we purchased in the fiscal year ended December 31, 2020, at a cost of approximately $69.5 million, will eventually become obsolete or will degrade due to ordinary wear and tear from usage, and may also be lost or damaged due to factors outside of our control. Once this happens, these new miners will need to be repaired or replaced along with other equipment from time to time for us 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 based on availability of new miners and our access to adequate capital resources. If we are unable to obtain adequate numbers of new and replacement miners at scale, we may be unable to remain competitive in our highly competitive and evolving industry. If this happens, we may not be able to mine cryptocurrency as efficiently or in similar amounts as our competition and, as a result, our business and financial results could suffer. This could, in turn, materially and adversely affect the trading price of our securities and our investors could lose part or all of their investment.

The price of new miners may be linked to the market price of bitcoin and other cryptocurrencies, and, if the current relatively high market price of bitcoin persists, our costs of obtaining new and replacement miners may increase, which may have a material and adverse effect on our financial condition and results of operations.

Reports have been released that the prices of new miners are adjusted according to the price of bitcoin. As a result, the cost of new machines can be unpredictable, and could also be significantly higher than our historical cost for new miners. Similarly, as bitcoin prices have risen, we have observed significant increase in the demand for miners. As a result, at times, we may obtain Bitmain miners and other hardware from Bitmain or from third parties at higher prices, to the extent they are available. For example, in the second half of 2020 and continuing into 2021, we have observed a significant appreciation in the market price of bitcoin, as well as an increase in the per-unit price of the new Bitmain Antminer model S19-Pro and S19j-Pro miners we purchased during this same period. While we cannot know definitively if these two phenomena are linked, we have seen a measurable increase in the prices for new miners offered by Bitmain.
As disclosed in this Annual Report on Form 10-K, our financial condition and results of operations are dependent on our ability to sell the bitcoin we mine at a price greater than our costs to produce that bitcoin. As the price for new miners we buy increases, our cost to produce a single bitcoin also increases, therefore requiring a corresponding increase in the price of bitcoin for us to maintain our results of operations. We have observed significant fluctuations in market prices for bitcoin, to the extent that we are unable to reasonably predict future prices for the bitcoin we mine.

We incur significant up-front capital costs each time we acquire new miners, and, if future prices of bitcoin are not sufficiently high, we may not realize the benefit of these capital expenditures. If this occurs, our business, results of operations, and financial condition could be materially and adversely affected, which may have a negative impact on the trading price of our securities, which may have a materially adverse impact on investors’ investment in our Company.

There are several new and existing competitors in our industry that are purchasing mining equipment at scale, which may cause delays or difficulty in us obtaining new miners, which could materially and adversely affect our business and results of operations.

Many of the competitors in our industry have also been purchasing mining equipment at scale, which has caused a world-wide shortage of mining equipment and extended the corresponding delivery schedules for new miner purchases. There are no assurances that our manufacturer Bitmain, or any other manufacturers, will be able to keep pace with the surge in demand for mining equipment. It is uncertain how manufacturers will respond to this increased global demand and whether they can deliver on the schedules promised to all of their customers.

In the event Bitmain or other manufacturers are not able to keep pace with demand, we may not be able to purchase miners from Bitmain or other manufacturers in sufficient quantities or on the delivery schedules that meet our business needs. Additionally, should Bitmain default on its purchase agreements with us, we would have to pursue recourse in an international jurisdiction, which would be costly and time consuming to resolve, and there is no guarantee we would succeed in recovering any of our deposits paid for such mining purchases, which could materially and adversely affect our business and results of operations.

The COVID-19 pandemic has disrupted and may continue to disrupt international shipping and we may not be able to obtain new miners or replacement parts for our existing miner fleet in a timely or cost-effective manner, which could materially and adversely affect our business and results of operations.

The novel strain of the coronavirus ("COVID-19") has spread as a global pandemic throughout the world and has resulted in authorities imposing, and businesses and individuals implementing, numerous unprecedented measures to try to contain the virus. Although the United States and countries around the world have been releasing a vaccine, there are no assurances that the vaccine will be effective, and what impact it will have on reducing the spread or containment of COVID-19. In addition to vaccinations, these efforts include travel bans and restrictions, quarantines, shelter-in-place/stay-at-home and social distancing orders, and shutdowns. These measures have impacted and may further impact our workforce and operations, the operations of our customers, and those of our vendors, suppliers and manufacturing partners. The extent to which the COVID-19 pandemic will continue to affect our business, results of operations and financial condition is difficult to predict and depends on numerous evolving factors, including: the duration and scope of the pandemic and its impact on overall global uncertainty; government, social, business and other actions that have been and will be taken in response to the pandemic; and the effect of the pandemic on short- and long-term general economic conditions.

Current and future restrictions or disruptions of transportation, such as reduced availability of air and ground transport, port closures or congestion, and increased border controls or closures, can also impact our ability to meet demand and could materially adversely affect us. We have already observed a significant increase in both air and sea freight costs as a result of the COVID-19 pandemic, which results in higher shipping costs for us as we seek to ship new and replacement miners from manufacturing locations primarily located in Malaysia to our operations in the U.S. These increased costs could have a material adverse effect on our financial condition and results of operations, particularly if the effects of COVID-19 are prolonged.
The COVID-19 global pandemic has disrupted and may continue to disrupt the manufacture and availability of new miners, which could materially and adversely affect our business and results of operations.

Various COVID-19-related restrictions on travel, work, and movement of goods and supplies, as well as the cumulative impact of the mounting number of lost working days as a result of COVID-19 has already put strain on our manufacturing partners, suppliers and logistics partners to produce and deliver a sufficient number of products needed to meet the global demand for miners. This has had a particularly strong impact on the global supply chain and availability of semiconductors, which are used in the manufacture of the ASIC chips used in the miners we operate. The strain on the global supply of semiconductors, largely stemming from manufacturing interruptions due to COVID-19-related disruptions, has resulted in decreased production across many industrial sectors.

While our manufacturing partners and component suppliers mostly have been able to continue to operate to date in compliance with applicable regulations and current limitations, future restrictions on their operations could impact their ability to meet global demand for new miners. Concurrently, along with an increased trading price of bitcoin and other cryptocurrencies in the fourth quarter of 2020 and continuing into the first quarter of 2021, we have observed an increased demand for ASIC miners during this period. In the last fiscal quarter of 2020 and through the date of this Annual Report on Form 10-K, we have already experienced increased per-unit costs for new miners, and, if the scarcity of ASIC miners continues, this trend may continue. If we are unable to acquire new miners, or if our cost for new miners is excessively high, we may not be able to keep up with our competitors, which may materially and adversely affect our business and results of operations.

Our primary focus is on our digital currency mining operation located at the Coinmint Facility, where we have engaged Coinmint to maintain and provide power to our

Our mining operating costs could 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.

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. Acquiring this specialized hardware at scale requires the investment of significant up-front capital, and miners incur significant expenses related to the operation of this hardware at scale, such as the leasing of operating space (often in data centers or warehousing facilities), incurring of electricity costs to run the miners 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 thus harm investors.

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

Our primary focus is on our digital currency mining operation located at the Coinmint Facility, where we have engaged Coinmint to maintain and provide power to our miners. Our current strategy will continue to expose us to the numerous risks and volatility associated within this sector. Further, we have experienced recurring losses and negative cash flows from operations. As of December
31, 2020, we had approximate balances of cash and cash equivalents of $223.4 million, working capital of $233.9 million, total stockholders' equity of $277.1 million and an accumulated deficit of $229.9 million. To date, we have, in large part, relied on equity financings to fund our operations and, if cryptocurrency prices are not sufficiently high to enable us to sell the cryptocurrency we mine at prices above our cost to mine it, then we are likely to continue to be unable to fund our operations without raising additional capital.

Even if prices are sufficiently high for our mining activities, we are likely to need to raise additional capital to fund the acquisition of new miners to replace our existing miners and expand our fleet to be competitive in our volatile and highly competitive industry.

_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 strategy is implemented, 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 share 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 or 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.
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’s operations such as a result of cyber(attacks against the mining pool operator and/or our limited recourse against the mining pool operator with respect to rewards paid to us.

We receive cryptocurrency mining rewards from our mining activity through a third-party mining pool operator. 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 cryptocurrency for which we mine, bitcoin, is 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.

As disclosed in Part I, Item 1, “Business,” of this Annual Report on Form 10-K, under the subheading “Halving” on page 10 hereof, the primary cryptocurrencies for which we mine, bitcoin, are subject to “halving,” which is the process by which the cryptocurrency reward for solving a block is cut in half – hence, “halving.” While bitcoin 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.

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 benefiting 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 likely require less energy, which 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 from this as a result, and may be negatively impacted if a switch to proof of stake validation were to occur. 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 our miners are designed specifically to mine bitcoin, our future success will depend in large part upon the value of bitcoin and any sustained decline in its value could adversely affect our business and results of operations.

Our operating results will depend in large part upon the value of bitcoin because it is 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 business strategy focuses almost entirely on producing bitcoin (as opposed to other cryptocurrencies), and our current application-specific integrated circuit (“ASIC”) miners principally utilize the “SHA-256 algorithm,” which is designed primarily for mining bitcoin. We therefore, cannot use these miners to mine other cryptocurrencies, such as ether, that are not mined utilizing this algorithm. If other cryptocurrencies overtake bitcoin or litecoin in terms of acceptance, the value of bitcoin or litecoin could decline. Further, if bitcoin or litecoin were to switch its proof of work algorithm from SHA-256 to another algorithm for which our miners would not be suited or if the value of bitcoin or litecoin were to decline for other reasons, particularly if such decline were significant or over an extended period of time, we would likely incur very significant costs in retooling or replacing our existing miners with miners better suited for this new protocols and our operating results could be adversely affected. This could result in a material adverse effect 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, and thus harm investors.

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 Antminer type miners, if there are issues with those machines, such as a design flaw in the ASIC chips they employ, 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; therefore, if a defect or other flaw exists and 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.

Our mining operations, including the facilities in which our miners are operated, may experience damages, including damages that are not covered by insurance.

Our current mining operation at the Coinmint Facility is, and any future mines we establish will be, subject to a variety of risks relating to physical condition and operation, including, but not limited to:

- 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; therefore 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 existing insurance coverage may not be adequate to cover all of our potential losses, and increased self-insurance and other insurance costs could materially and adversely affect our business and results of operations.
We maintain insurance policies for our business, and our agreement with Coinmint provides us with some protection in the event our miners are lost or damaged while at the Coinmint Facility; however, these insurance policies and protections may not be adequate to protect us from liabilities that we may incur in connection with the operation of our business. Certain extraordinary hazards, for example, may not be covered, and insurance may not be available (or may be available only at prohibitively expensive rates) with respect to many other risks. Moreover, any loss incurred could exceed policy limits, and policy payments made to us may not be made on a timely basis. Because of the high cost of new miners, if our insurance coverage is insufficient to cover the replacement, or if payment of our existing coverage benefits is significantly delayed, we may be required to expend additional capital resources to replace any miners we lose as a result of casualty events.

Additionally, although we seek to control our insurance risk and costs, the premiums we pay to obtain insurance coverage have increased over time and are likely to continue to increase in the future. These increases in insurance premiums can occur unexpectedly and without regard to our efforts to limit them, and, because of these rising costs, we may not be able to obtain similar levels of insurance coverage on reasonable terms, or at all. If this occurs, we may choose or be forced to self-insure our assets, which could expose us to significant financial risk due to the high cost of new miners. If insurance costs become unacceptably high and we elect to self-insure, and we experience a significant casualty event resulting in the loss of some or all of our miners, we could be forced to expend significant capital resources to acquire new miners to replace those we lose.

Furthermore, if such casualty loss of our miners is not adequately covered by insurance and we do not have access to sufficient capital resources to acquire replacement miners, we may not be able to compete in our rapidly evolving and highly competitive industry, which could materially and adversely affect our financial condition and results of operations, and our business could suffer.

We are subject to risks associated with our need for significant electrical power.

Our bitcoin mining operations have required significant amounts of electrical power, and, as we continue to expand our mining fleet, we anticipate our demand for electrical power will continue to grow. If we are unable to continue to obtain sufficient electrical power to operate our miners on a cost-effective basis, we may not realize the anticipated benefits of our significant capital investments in new miners.

Additionally, our mining operations could be materially adversely affected by prolonged power outages. Although our miners may be powered by backup generators on a temporary basis, it would not be feasible or cost-effective to run miners on back-up power generators for extended periods of time. Therefore, we may have to reduce or cease our operations in the event of an extended power outage, or as a result of the unavailability or increased cost of electrical power. If this were to occur, our business and results of operations could be materially and adversely affected, and investors in our securities could be harmed.

Our agreement with Coinmint does not guarantee us sufficient power to allow us to operate our expanding fleet of miners at peak capacity and, if we are unable to successfully negotiate for adequate power supply, we may not realize the benefit of our investment in additional miners.

Our Coinmint Agreement only guarantees us access to 9 MW of electrical power for our miners currently deployed and scheduled to be deployed at the Coinmint Facility. As of the date of this Annual Report on Form 10-K, Coinmint has been able to supply us with sufficient electrical power to allow us to operate our current fleet. However, we cannot guarantee that this will remain the case under the current terms of the Coinmint Agreement. We estimate that our full fleet of miners, including the nearly 32,103 Bitmain Antminer model S19-Pro and S19j-Pro miners scheduled to be delivered in 2021 that we purchased in the third and fourth fiscal quarters of 2020, will require approximately 127 MW of electricity to operate at full capacity. With these miners fully deployed, we estimate that the aggregate hash rate capacity of our miners will approach 4.0 EH/s, which would represent an increase of approximately 3,824% over our aggregate hash rate capacity as of December 31, 2019. As discussed under Part 1, Item 1, “Business,” of this Annual Report on Form 10-K, a higher hash rate capacity tends to increase our relative chances of solving a block in the Bitcoin blockchain and, therefore, obtaining a bitcoin reward. If we are unable to successfully negotiate a sufficient guaranteed power supply for our new miners under our existing understanding with Coinmint, we may be forced to relocate some or all of our new miners to another facility.

If we are forced to relocate some or all of our miners, we may not be successful in identifying adequate replacement facilities to operate our miners. And even if we do identify such facilities, we may not be successful in securing those facilities at a cost that is economically viable to support our mining activities. Further, relocating our miners will require us to incur costs to transition to a new facility including, but not limited to, transportation expenses and insurance. If we are unable to mine, legal fees to negotiate the new arrangement, de-installation 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. Therefore, if we are required to move our mine, or if we are unable to secure adequate power supply for our miners, we may not achieve increased hash rate capacity upon the deployment of these new miners and, therefore, we may not realize the benefit of our substantial capital investments in new miners. If this occurs, our business may suffer, and the results of our operations may be adversely affected.

Interruptions to our power supply and internet access could disrupt our operations, which could adversely affect our business and results of operations.

Our cryptocurrency mining operations require a significant amount of electrical power and access to high-speed internet to be successful. If we are unable to secure sufficient electrical power, or if we lose internet access for a prolonged period, we may be required to reduce our operations or cease them altogether. If this occurs, our business and results of operations may suffer, and our investors may be materially and adversely affected.
Risks Related to the Price of Bitcoin

The trading price of shares of our common stock has appeared at times to have been correlated to the trading price of bitcoin, which may be subject to pricing risks, including "bubble" type risks, and has historically been subject to wide swings.

The trading prices of our common stock has appeared at times to have been 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 may experience similar outcomes if 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. The trading price of our common stock could be 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.

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, making their market prices more volatile or creating "bubble" type risks for the trading price of bitcoin.

During the year ended December 31, 2020, the trading price of bitcoin has appreciated significantly, from a low closing value of approximately $5,000 per bitcoin in March 2020, to a high closing value of approximately $29,400 per bitcoin in December 2020. During the 2021 interim period, prior to the date of this Annual Report on Form 10-K, the trading price of bitcoin had a high reported closing value of approximately $61,000 per bitcoin (an all-time high). During this time, the trading price for shares of our common stock has experienced unprecedented growth. In 2017, the trading price of bitcoin increased to nearly $20,000 per bitcoin (an all-time high at that time), only to decline significantly and sharply to a low of approximately $3,400 per bitcoin in December 2018, during which time the trading price for shares of our common stock likewise declined significantly. We cannot give any assurances that similar fluctuations in the trading price of bitcoin will not occur in the future. Accordingly, since the trading price of our securities appears to be at times correlated to the trading price of bitcoin, if the trading price of bitcoin again experiences a significant decline, we could experience a similar decline in the trading price for shares of our common stock. If this occurs, you may not be able to sell the shares of our common stock which you purchased at or above the price you paid for them and you may lose your investment.

The markets for bitcoin and other cryptocurrencies and the existing markets may be underregulated; as a result, the market price of most cryptocurrencies may be subject to significant volatility, which could decrease consumer confidence in cryptocurrencies, which could have a materially adverse effect on our business and results of operations.

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 more lax 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.

Bitcoin and other cryptocurrency market prices have historically been volatile, are impacted by a variety of factors, and 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, making their market prices more volatile or creating “bubble” type risks for both bitcoin and shares of our common stock.

These factors may inhibit consumer trust in and market acceptance of cryptocurrencies as a means of exchange 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.

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 of 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;
• 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 effects 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.**

Although a number of significant U.S. banks and investment institutions, such as Goldman Sachs, Citi Group, J. P. Morgan and BlackRock, have indicated they plan to begin allowing customers to carry and invest in bitcoin and other cryptocurrencies, either directly or indirectly their acceptance and use by banks remains far from mainstream. Indeed, a number of companies and individuals engaged in bitcoin and/or other cryptocurrency-related activities have been unable to find banks or financial institutions that are willing to provide them with banking services. Similarly, a number of companies and individuals or businesses associated with cryptocurrencies may have had and may continue to have their existing banking 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.

Acceptance and/or widespread use of cryptocurrency is uncertain.

There are increasing public reports of businesses, insurance companies, and local governments, among other organizations, either holding or planning to utilize cryptocurrencies, specifically bitcoin, as a store of value or as a medium of exchange and payment method. For example, in February 2021, Tesla, Inc. publicly announced plans to accept bitcoin as a form of payment from consumers. Other companies, typically through partnerships with digital currency processors, have also begun to increase the adoption of cryptocurrencies in the retail and commercial marketplace. Despite these public reports, there is still 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 less likely to accept it as a direct 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 acceptance 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, several countries such as China, India and Russia, may continue taking 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. For example in China and Russia (India is currently proposing new legislation), 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 us, 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 thus 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 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 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 thus 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, including competing cryptocurrencies which our miners may not be able to mine, such as cryptocurrencies being developed by popular social media platforms, online retailers, or government sponsored cryptocurrencies, 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 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, which could materially and adversely affect investors’ investments in our securities.

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. Increased numbers of miners and deployed mining power globally will likely continue to increase the available supply of bitcoin and other cryptocurrencies, which may depress their market price. Further, large “block sales” involving significant numbers of bitcoin following appreciation in the market price of bitcoin may also increase the supply of bitcoin available on the market, which, without a
corresponding increase in demand, may cause its price to fall. Additionally, 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 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.

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 as compared to 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.

Our security procedures and protocols may be ineffective in reducing our exposure to hacking or adverse software events.

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.
The Company periodically evaluates 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. Our cryptocurrency assets are not subject to FDIC or SPIC insurance and may not be adequately covered by private insurance; therefore, if our security procedures and protocols are ineffective 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.

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.

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 botnet or malicious actor obtaining control of the blockchain’s processing power will increase, because such botnet or malicious actor could more readily infiltrate and seize control over the blockchain by compromising a single mining pool, if the mining pool compromises more than 50% of the mining power on the blockchain, than it could if the mining pool had a smaller share of the blockchain’s total hashing power. Conversely, if the blockchain remains decentralized it is inherently more difficult for the botnet or malicious actor to aggregate enough processing power to gain control of the blockchain. If this were to occur, the public may lose confidence in the bitcoin blockchain, and blockchain technology more generally. This would likely have a material and adverse effect on the price of bitcoin, which could have a material adverse effect on our business, financial results and operations, and harm investors.
If the award of cryptocurrency rewards for solving blocks are not sufficiently high, miners may not have adequate incentive to continue mining and may cease mining operations, which may make the blockchains they support with their mining activity less stable.

As the number of cryptocurrency rewards awarded for solving a block in a blockchain decreases, the relative cost of producing a single cryptocurrency will also increase, unless there is a corresponding increase in demand for that cryptocurrency. Even relatively stable demand may not be sufficient to support the costs of mining, because as new miners begin working to solve blocks, the relative amount of energy expended to obtain a cryptocurrency award will tend to increase. This increased energy directly relates to an increased cost of mining, which means an increased cost of obtaining a cryptocurrency award. This increased cost, if not met with a corresponding increase in the market price for the cryptocurrency resulting from increased scarcity and demand, may lead miners to conclude they do not have an adequate incentive to continue mining and, therefore, may cease their mining operations. This reduction in active miners supporting a blockchain may result in a reduction in the aggregate hash rate devoted to the blockchain as its cryptocurrency award is reduced. We believe this would tend to 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% of the processing power active on a blockchain. This could permit such malicious 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 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.

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 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 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.

Risks Related to Governmental Regulation and Enforcement

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 could have a material adverse effect on our business, prospects or operations.

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. We may be required to 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 crytpocurrency on hand or liquidating our investment securities or crytpocurrency 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.

**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 (“OFAC”) of the U.S. 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 U.S. 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.

**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.
Governmental action in the Peoples’ Republic of China may have a materially adverse effect on the cryptocurrency mining industry as a whole, which would have an adverse effect on our business and results of operations.

China is the world’s largest producer of bitcoin and the large majority of the world’s cryptocurrency mining power (some observers estimate that China produces as high as 80% of the world’s cryptocurrency mining power). China has already made transacting in cryptocurrencies illegal for Chinese citizens in mainland China, and additional restrictions may follow. However, thus far, China has permitted bitcoin mining on a national scale, but provincial governments have taken action to restrict and even ban bitcoin mining within their province. For example, on March 2, 2021, we became aware of the actions taken by the governmental authorities for the Chinese province of Inner Mongolia, which represents roughly 8% of the world’s total mining power, to outright ban bitcoin mining in the province due to the industry’s intense electrical power demands and its negative environmental impacts (both in terms of the waste produced by mining the rare Earth metals used to manufacture miners and the production of electrical power used in bitcoin mining). While we have yet to see whether these miners will be able to relocate to another location in China to continue mining, we cannot quantify the effects of this regulatory action on our industry as a whole. If further regulation follows, it is possible that our industry may not be able to cope with the sudden and extreme loss of mining power.

Because we are unable to influence or predict future regulatory actions taken by governments in China, we may have little opportunity or ability to respond to rapidly evolving regulatory positions which may have a materially adverse effect on our industry and, therefore, our business and results of operations. If further extreme regulatory action is taken by governments in China or elsewhere, including the United States, our business may suffer and investors in our securities may lose part or all of their investment.

Climate change, and the regulatory and legislative developments related to climate change, may materially adversely affect our business and financial condition.

The potential physical impacts of climate change on our operations are highly uncertain and would be particular to the geographic circumstances in areas in which we operate. These may include changes in rainfall and storm patterns and intensities, water shortages, changing sea levels and changing temperatures. The impacts of climate change may materially and adversely impact the cost, production and financial performance of our operations. Further, any impacts to our business and financial condition as a result of climate change are likely to occur over a sustained period of time and are therefore difficult to quantify with any degree of specificity. For example, extreme weather events may result in adverse physical effects on portions of our infrastructure, which could disrupt our supply chain and ultimately our business operations. In addition, disruption of transportation and distribution systems could result in reduced operational efficiency and customer service interruption. Climate related events have the potential to disrupt our business, including the business of our customers, and may cause us to experience higher attrition, losses and additional costs to resume operations.

In addition, a number of governments or governmental bodies have introduced or are contemplating legislative and regulatory changes in response to various climate change interest groups and the potential impact of climate change. Given the very significant amount of electrical power required to operate cryptocurrency miners, as well the environmental impact of mining for the Rare Earth Metals used in the production of mining servers, the cryptocurrency mining industry may become a target for future environmental and energy regulation. Legislation and increased regulation regarding climate change could impose significant costs on us and our suppliers, including costs related to increased energy requirements, capital equipment, environmental monitoring and reporting, and other costs to comply with such regulations. Any future climate change regulations could also negatively impact our ability to compete with companies situated in areas not subject to such limitations. Given the political significance and uncertainty around the impact of climate change and how it should be addressed, we cannot predict how legislation and regulation will affect our financial condition, operating performance and ability to compete. Furthermore, even without such regulation, increased awareness and any adverse publicity in the global marketplace about potential impacts on climate change by us or other companies in our industry could harm our reputation. Any of the foregoing could result in a material adverse effect on our business and financial condition.

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, the Company received written notice on January 29, 2020 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.

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, bitcoin and other cryptocurrencies;
- actions by our competitors, such as new business initiatives, acquisitions and divestitures;
- strategic transactions undertaken by us;
- integration of new businesses and opportunities into our existing business;
- implementation of new technologies in the industry;
- 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 on Form 10-K.

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, which provides that “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.

Article XIV of our Bylaws, as amended, designates the courts of the State of New York as the sole and exclusive forum for certain types of actions and proceedings that may be initiated by our shareholders, and therefore may limit our shareholders' ability to choose a forum for disputes with us or our directors, officers, employees, or agents.

Article XIV of our Bylaws, as amended provides that, to the fullest extent permitted by law, and unless we consent to the selection of an alternative forum, the state and federal courts in and for the State of New York shall be the sole and exclusive forum for the resolution of certain actions and proceedings that may be initiated by our shareholders, and that, by purchasing our securities, our shareholders are deemed to have notice of and consented to this forum selection clause. Under Article XIV of our Bylaws, the following claims are subject to this forum selection clause: (a) any derivative action or proceeding brought on behalf of the Company, (b) any action or proceeding asserting a claim of breach of a fiduciary duty owed by any director or officer of the Company to the Company or the Company’s shareholders, (c) any action or proceeding asserting a claim against the Company arising pursuant to any provision of the Nevada Revised Statutes or the Company’s articles of incorporation or Bylaws (as either might be amended from time to time), or (d) any action or proceeding asserting a claim against the Company governed by the internal affairs doctrine.

By its terms, the forum selection clause in our Bylaws applies to the foregoing claims to the fullest extent permitted by law, and, as such, should not be interpreted as precluding our shareholders from bringing claims under the Exchange Act in the appropriate federal court with jurisdiction over such claims, as provided by Section 27 of the Exchange Act. Likewise, the forum selection clause in our Bylaws should not be interpreted as precluding our shareholders from bringing claims under the Securities Act in the appropriate state or federal court with jurisdiction over such claims, as provided by Section 22 of the Securities Act.

We believe the choice-of-forum provision in our Bylaws will help provide for the orderly, efficient, and cost-effective resolution of legal issues affecting us by designating courts located in the State of New York as the exclusive forum for cases involving such issues. However, this provision may limit a shareholder's ability to bring a claim in a judicial forum that it believes to be favorable for disputes with us or our directors, officers, employees, or agents, which may discourage such actions against us and our directors, officers, employees, and agents.

Nevada revised statutes permit us to make this selection in our Bylaws, and, while there is no New York case law addressing the enforceability of this type of provision, New York courts have on prior occasion found persuasive authority in Delaware case law in favor of the enforceability of forum selection clauses in the absence of statutory or case law specifically addressing an issue of corporate law. However, if a court were to find the choice-of-forum provision in our Bylaws inapplicable to, or unenforceable in respect of, one or more of the specified types of actions or proceedings, we may incur additional costs associated with resolving such matters in other jurisdictions, which could adversely affect our business, financial condition, or results of operations.

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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.

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.

The volatility in the trading price of our common stock and the large proportion held by retail investors may make our common stock a target of online campaigns to artificially influence its trading price, which may trigger markets or trading platforms to impose restrictions on the trading of our securities; as a result, investors in our common stock may incur substantial losses.

The trading price of our common stock has experienced, and may continue to experience, significant volatility and trading volume. Further, a significant majority of the issued and outstanding shares of our common stock are held by individual, non-institutional investors (i.e. “retail investors”). We are aware of reports surrounding social media sites and online forums influencing the trading price of certain publicly traded securities. Some of these reports indicate that the organizers of these campaigns selected specific securities as a result of, among other factors, significant volatility in their trading price and volume, as well as a perception that their trading prices were undervalued or subject to significant short positions. We are also aware of reports that a number of significant trading platforms catering to retail investors allegedly halted or otherwise restricted trading of a number of securities on their platforms following these reports.

As a significant proportion of the outstanding shares of our common stock are held by retail investors who may make use of these trading platforms, if these trading platforms take similar action with respect to shares of our common stock, those of our investors who make use of these platforms may be unable to transact in our securities in response to changes in the trading price of shares of our common stock. As a result, we cannot guarantee that we have not become subject to such a campaign or that we will not become subject to such a campaign in the future. If we do become subject to such a campaign, we can give no assurances that we will be able to respond to the campaign and the trading price of our common stock may, therefore, not be tied to our business or industry. As a result, the trading price of our common stock may suffer and investors in our securities may experience may lose part or all of their investment.

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 FASB 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 operations. 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 expect to acquire for our own account and harm investors.

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 small executive management to alleviate pressure on our existing team including with regard to meeting our public company reporting requirements, and 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.

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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 our 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, and, as a result, 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 have identified material weaknesses in our internal control over financial reporting 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, 2020. 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, 2020, 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.
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.

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.

Our insurance may be inadequate to cover existing and future claims against the Company and our ability to pay for such claimsmay 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.

We incur significant costs and devote substantial management time as a result of operating as a public company and additional resources would be required if we lose our “smaller reporting company” and “non-accelerated filer” status.

As a public company, we operate in an increasingly demanding regulatory environment, which requires us to comply with applicable provisions of the Sarbanes-Oxley Act of 2002 and the related rules and regulations of the SEC, expanded disclosure requirements, accelerated reporting requirements and more complex accounting rules. Company responsibilities required by the Sarbanes-Oxley Act include establishing corporate oversight and adequate internal control over financial reporting and disclosure controls and procedures. Effective internal controls are necessary for us to produce reliable financial reports and are important to help prevent financial fraud. However, we are currently a “smaller reporting company” and “non-accelerated filer” under the current SEC rules. As such we take advantage of exemptions from certain reporting requirements.
We cannot predict if investors will find our common stock less attractive if we choose to rely on these exemptions. However, for as long as we remain a “smaller reporting company” and “non-accelerated filer”, we intend to take advantage of certain exemptions from various reporting requirements that are applicable to other public companies that do not qualify under these categories including, but not limited to, not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements, and other exemptions as permitted under the Exchange Act. We intend to take advantage of these reporting exemptions as long as we remain eligible to do so under the related rules.

We will qualify as a smaller reporting company if, as of the last day of the second quarter of our fiscal year (June 30th): (1) our public float is less than $250 million; or (2) we have less than $100 million in annual revenues and public float of less than $700 million. Under applicable Exchange Act rules, we are required to calculate our public float for purpose of determining our filer status each year as of the end of the year based on the trading price of our common stock, as reported on the Nasdaq Capital Market (or such other market as may be applicable at that time) as of June 30th of each year. Based on our public float as of the date of this Annual Report on Form 10-K, we believe we may lose our smaller reporting company status, as well as our non-accelerated filer status, effective for our 2021 annual report. Should we lose these statuses, we may no longer be exempt from these requirements and expect that compliance with the requirements will increase our legal and financial compliance costs and will make some activities more time consuming and costly. In addition, our management and other personnel will need to divert attention from operational and other business matters to devote substantial time to these public company requirements. In particular, we expect to incur significant expenses and devote substantial management effort toward ensuring compliance with the requirements of Section 404(b) of the Sarbanes-Oxley Act.

ITEM 1B. UNRESOLVED STAFF COMMENTS.

None.

ITEM 2. PROPERTIES.

Office Leases

As of December 31, 2020, 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. 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 estimable, then an accrual for the cost to resolve or settle these claims is recorded by 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. 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 any, will result from any claims, lawsuits and proceedings to which the Company is subject to either individually, or in the aggregate.
Class Actions and Related Claims

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.

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.

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 (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, 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 August 10, 2021 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 unspecified 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.

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 August 10, 2021 in lieu of staying the action. Defendants do not anticipate any other activity on this case until the next preliminary conference.

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 unspecified 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, another 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.

On December 13, 2018, another shareholder derivative complaint was filed on behalf of the Company in the United District Court for the Northern District of New York *(Monts v. O’Rourke, et al.*, Case No. 1:18-cv-01443). The shareholder plaintiffs allege claims for violation of Section 14(a) of the Securities Exchange Act of 1934, breach of fiduciary duties, unjust enrichment, waste of corporate assets, and aiding and abetting 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.

**Kashwise Demand**

On February 18, 2020, the Company received a demand letter from Kashwise Global Funding, Inc. (“Kashwise”) for the payment of fees pursuant to an alleged arrangement between the Company and Kashwise in connection with the January 2019 private exempt offering of the Company’s securities to a group of accredited investors (the “Kashwise Demand”). The Company timely responded to the Kashwise Demand; however, on April 13, 2020, Kashwise Global Funding Solutions, Inc. filed suit against the Company in the Circuit Court of the 17th Judicial Circuit in and for Broward County, Florida (the “Kashwise Suit”) alleging substantially similar claims as in the Kashwise Demand. The Company has removed the Kashwise Suit to Federal District Court in and for the Southern District of Florida where it remains pending with a scheduled trial date (if not delayed by the COVID-19 pandemic) in June of 2021. The Company continues to vigorously dispute the allegations made in the Kashwise Suit. However, the Company 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 had as of the date of the letter, it did not intend to recommend an enforcement action against Riot.

**ITEM 4. MINE SAFETY DISCLOSURES.**

Not applicable.
Market Information

Our common stock trades on the Nasdaq Capital Market under the symbol “RIOT”.

As of March 26, 2021, we had approximately 9550 holders of record of our common stock.

The closing price of our common stock on March 30, 2021 was $51.51 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, as amended (the “2019 Plan”). The Company currently provides stock-based compensation to employees, directors and consultants, under the 2019 Plan, as approved by the Company’s shareholders on October 23, 2019, and on November 12, 2020 with respect to the first amendment to the 2019 Plan. 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 114,103 shares of restricted common stock. No additional grants can be made under the 2017 Plan. The Company has reserved 4,061,809 common shares for issuance under the 2019 Plan.

The following table provides information as of December 31, 2020, 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:

<table>
<thead>
<tr>
<th>Plan Category</th>
<th>Number of securities to be issued upon exercise of outstanding options and restricted common stock</th>
<th>Weighted average exercise price of outstanding options</th>
<th>Number of securities remaining available for future issuance</th>
</tr>
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<tbody>
<tr>
<td>Equity compensation plans approved by security holders (1)</td>
<td>825,306</td>
<td>$4.09</td>
<td>4,061,809</td>
</tr>
<tr>
<td>Equity compensation plans not approved by security holders</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Total</td>
<td>825,306</td>
<td>$4.09</td>
<td>4,061,809</td>
</tr>
</tbody>
</table>

(1) Consists of 12,000 stock options with a weighted average exercise price of $4.09 and 813,306 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 the section entitled “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 “Cautionary Note Regarding Forward-Looking Statements” on page 4 of this report.
RESULTS OF OPERATIONS

The Company has experienced recurring losses and negative cash flows from operations. At December 31, 2020, the Company had approximate balances of cash and cash equivalents of $223.4 million, working capital of $233.9 million, total stockholders' equity of $277.1 million and an accumulated deficit of $229.9 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 growing its cryptocurrency mining operation, primarily with the goal of mining bitcoin. As discussed under Part I, Item 1 of this Annual Report on Form 10-K, the Company utilizes specialized ASIC miners manufactured by Bitmain, known as Antminers. As disclosed, during the year ended December 31, 2020, the Company continued an ongoing process begun in late 2019 of upgrading its existing miner fleet and evaluating every level of its mining operations, with the objective to increase the Company’s operational efficiency and performance.

Miner Network Upgrade

The initial stage of this upgrading process began in December 2019, with the acquisition of 4,000 model S17-Pro Antminers from Bitmain, which were fully deployed at Riot’s former Oklahoma City, Oklahoma mining facility (the “OKC Facility”), increasing Riot’s overall hash rate capacity to approximately 0.25 EH/s in the first quarter of 2020.

Throughout the year ended December 31, 2020, Riot continued its ongoing project of updating its miner fleet, making the following Antminer purchases pursuant to purchase agreements with their manufacturer, Bitmain, as disclosed by the Company on its current reports on Form 8-K filed with the SEC and included as exhibits hereto:

(i) 1,040 model S19 miners at an aggregate purchase price of approximately $1.94 million, all of which were delivered and installed at the Coinmint Facility by August 2020;

(ii) 20,606 model S19-Pro miners at an aggregate purchase price of approximately $48.4 million, 2,003 of which were delivered and installed at the Coinmint Facility by November 2020, with the remaining 18,603 scheduled to be delivered in stages through October 31, 2021; and

(iii) 12,000 model S19j-Pro miners at an aggregate purchase price of approximately $26.3 million, which are scheduled to be delivered in stages starting August 2021 through October 2021.

As of December 31, 2020, with all 4,000 model S17-Pro Antminers and 3,043 of the new model S19 and model S19-Pro Antminers received and deployed at the Coinmint Facility, the Company’s miner fleet was capable of producing an estimated aggregate hash rate capacity of approximately 0.57 EH/s, representing an increase of approximately 461% over the Company’s estimated maximum hash rate capacity as of December 31, 2019.

In March 2021, the Company executed an additional purchase agreement with Bitmain to acquire 1,500 Bitmain model S19j Antminers at an aggregate purchase price of $7.2 million, which are scheduled to be delivered in October 2021.

With the full deployment of these new model S17-Pro, S19, S19-Pro, S19j, and S19j Pro Antminers, Riot’s total fleet will comprise 39,146 total Antminers. These 39,146 advanced miners have substantially greater hash rate capacities and use electric power more efficiently than the Bitmain model S9 Antminers Riot previously operated. Once all 39,146 of these newer generation Antminers have been received and deployed, the Company expects to be able to achieve a total hash rate capacity of approximately 4.0 EH/s by November 2021, representing an increase of approximately 699% over the Company’s estimated maximum aggregate hash rate capacity as of December 31, 2020, and an increase of approximately 3,824% over the maximum hash rate capacity the Company’s former fleet of legacy model S9 miners were capable of producing.

Relocation of Mining Operations

During the first quarter of the fiscal year ended December 31, 2020, the Company made the strategic decision to explore alternatives to the OKC Facility after observing elevated energy costs in operating its miners combined with atmospheric heat in Oklahoma City. After engaging in an extensive search and vetting process involving the Company’s independent strategic advisory firm, XMS Capital Partners (“XMS”), the Company entered into a co-location mining services agreement, dated as of April 28, 2020, (the “Coinmint Agreement”) with Coinmint, LLC (“Coinmint”) to allow the Company to relocate its miners to Coinmint’s cryptocurrency mining facility in Massena, New York (the “Coinmint Facility”).
During the second quarter of the fiscal year ended December 31, 2020, and after an initial testing period, Riot completed the relocation of its cryptocurrency mining operations from the OKC Facility to the Coinmint Facility, where Coinmint provides access to electrical power and internet, as well as basic maintenance, for Riot’s miners, including all 4,000 of its S17-Pro Antminers. In connection with this relocation, Riot also began selling off or otherwise salvaging for spare parts its legacy model S9 miners, which the Company’s management team had made the strategic decision to take offline to accommodate its growing newer generation Antminer fleet.

Riot relocated its mining operations to the Coinmint Facility for a number of benefits, the largest of which was to reduce overhead and take advantage of the more competitive electricity costs in the New York ISO market. Following the relocation to the Coinmint Facility, the Company’s lease of the OKC Facility was allowed to terminate by its terms as of June 21, 2020.

Strategic Opportunities

The Company engaged XMS to assist with evaluating strategic growth opportunities. XMS is an independent global financial services firm with expertise in M&A and strategic advisory. The Company engaged XMS to help with navigating the dynamic Bitcoin landscape and advise the Company on potential strategic transactions in bitcoin mining related operations. The Company does not have a defined timeline for any transaction and cannot provide any assurance whether or when a transaction may be announced or consummated.

COVID-19

The COVID-19 global pandemic has been unpredictable and unprecedented and is likely to continue to result in significant national and global economic disruption, which may adversely affect our business. Based on the Company’s current assessment, however, the Company does not expect any material impact on its long-term development, its operations, or its liquidity due to the worldwide spread of the COVID-19 virus. However, the Company is actively monitoring this situation and the possible effects on its financial condition, liquidity, operations, suppliers, and industry.

Summary of Mining Results

The following table presents additional information about our cryptocurrency mining activities in coins and amounts during the years ended December 31, 2020 and 2019 ($ in thousands):

<table>
<thead>
<tr>
<th>Balance at January 1, 2019</th>
<th>BTC</th>
<th>Amounts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue recognized from cryptocurrencies mined</td>
<td>164</td>
<td>$707</td>
</tr>
<tr>
<td>Mining pool operating fees</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Proceeds from sale of cryptocurrencies</td>
<td>(585)</td>
<td>(135)</td>
</tr>
<tr>
<td>Purchase of miner equipment with cryptocurrencies</td>
<td>(9)</td>
<td>(99)</td>
</tr>
<tr>
<td>Realized gain on sale/exchange of cryptocurrencies</td>
<td>-</td>
<td>665</td>
</tr>
<tr>
<td>Impairment of cryptocurrencies</td>
<td>-</td>
<td>(844)</td>
</tr>
<tr>
<td><strong>Balance at December 31, 2019</strong></td>
<td><strong>514</strong></td>
<td><strong>3,839</strong></td>
</tr>
<tr>
<td>Revenue recognized from cryptocurrencies mined</td>
<td>1,033</td>
<td>-</td>
</tr>
<tr>
<td>Mining pool operating fees</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Proceeds from sale of cryptocurrencies</td>
<td>(500)</td>
<td>(8,298)</td>
</tr>
<tr>
<td>Realized gain on sale/exchange of cryptocurrencies</td>
<td>26</td>
<td>-</td>
</tr>
<tr>
<td>Impairment of cryptocurrencies</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Cryptocurrencies received from sale of equipment</td>
<td>5</td>
<td>-</td>
</tr>
<tr>
<td><strong>Balance at December 31, 2020</strong></td>
<td><strong>1,078</strong></td>
<td><strong>11,626</strong></td>
</tr>
</tbody>
</table>
2020 Compared to 2019

Revenues

Cryptocurrency mining revenues for the years ended December 31, 2020 and 2019, totaled approximately $12.0 million and $6.7 million, respectively. Other revenue consisted of license payments of approximately $0.1 million in each period. Revenues from cryptocurrency mining are impacted significantly by volatility in bitcoin prices, as well as increases in the Bitcoin blockchain’s Network Hash Rate resulting from the growth in the overall quantity and quality of miners working to solve blocks on the Bitcoin blockchain and the difficulty index associated with the secure hashing algorithm employed in solving the blocks.

From early 2019 to the end of 2020 the Bitcoin blockchain’s Network Hash Rate increased by approximately 249% as a result of, among other factors, the increased number of miners working to solve blocks on the Bitcoin blockchain during that period, many of which make use of newer, more efficient ASIC chips that are specially designed to solve blocks using the SHA-256 set of cryptographic hash functions employed on the Bitcoin blockchain. For years ended December 31, 2020 and 2019, the average Network Hash Rate working on the Bitcoin blockchain was 142.74 EH/s and 98.67 EH/s, respectively. Further, the difficulty index increased over 231% in the past two fiscal years. The cumulative difficulty index increase over each of years ended December 31, 2020 and 2019 was 43.79% and 97.67%, respectively.

Cost of Revenues

Cost of revenue for the year ended December 31, 2020 of approximately $6.3 million consisted primarily of direct production costs of the mining operations, including rent and utilities and fees paid to Coinmint pursuant to the Coinmint Agreement, but excluding depreciation and amortization, which are separately stated. The cost of revenue for the year ended December 31, 2019 was approximately $6.1 million. The cost of revenue for the years ended December 31, 2020 and 2019 as a percentage of mining revenue totaled 52.2% and 90.4%, respectively. The improvement in 2020 resulted from higher average bitcoin values for mined bitcoin and lower fixed and variable costs incurred for costs of revenue for the second half of 2020 following the relocation to the Coinmint Facility.

Selling, General and Administrative Expenses

Selling, general and administrative expenses for the year ended December 31, 2020 totaled approximately $10.3 million, which is an approximately $1.1 million, or a 11.9% increase, as compared to $9.2 million in the 2019 period. Compensation related expense decreased by approximately $0.6 million due primarily to staff reductions during 2019, net of severance costs and the compensation expense of $0.3 for Tess in the 2019 period, which in 2020 is no longer reported in our consolidated financial statements. Stock-based compensation increased by approximately $2.7 million for the year ended December 31, 2020 as compared with the 2019 period due to the 2020 issuance of 1,544,359 restricted stock units and the accelerated vesting of 471,544 restricted stock units due to the resignation of a member of the Company’s board. Legal fees decreased by approximately $0.6 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 2019 period. Audit fees decreased approximately $0.3 million due to the higher level of financial activities and the audit of internal controls over financial reporting incurred for the year ended December 31, 2019.

Depreciation and Amortization

Depreciation and amortization expenses in the year ended December 31, 2020 totaled approximately $4.5 million, which is an increase of approximately $4.4 million, compared to $0.1 million during the year ended December 31, 2019. The increase is primarily due to higher average depreciable equipment levels in the year ended December 31, 2020 resulting from the Company’s acquisition of 7,043 new miners, which the Company depreciates over their two-year estimated usable lives using the straight-line method.

Asset Impairment Charges

Impairment of long-term investments of $9.4 million recognized during the year ended December 31, 2020 was recorded in connection with the impairment of our investment in Coinsquare. The Company recorded this 100% impairment as a result of the OSC Order and Settlement Agreement in which Coinsquare and certain of its executives and directors admitted to violations of Ontario securities laws and conduct contrary to the public interest in connection with their operation of the Coinsquare Market.

Impairment charges for cryptocurrencies was $1.0 million for the year ended December 31, 2020, which was recorded to recognize an impairment of our cryptocurrencies during the three months ended March 31, 2020.
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.

**Other Income and Expense**

During the year ended December 31, 2020, we recognized income of approximately $1.4 million in connection with the reversal of our registration rights penalty.

During the year ended December 31, 2019, we recognized losses related to the issuance of convertible notes of approximately $6.2 million and expenses totaling $6.8 million to revalue the notes and the related warrant liability to fair value.

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%. No such expense was recognized during the year ended December 31, 2020.

During the years ended December 31, 2020 and 2019, interest income and interest expense was nominal.

Other expense for the year ended December 31, 2020 was nominal. 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.

During the years ended December 31, 2020 we recorded a gain on the sale / exchange of cryptocurrencies of approximately $5.2 million. During the year ended December 31, 2019 the gain on sale of cryptocurrencies was $0.7 million.

**Income Taxes**

For the years ended December 31, 2020 and 2019, the Company recorded income tax benefits of zero and $0.1 million, respectively.

**LIQUIDITY AND CAPITAL RESOURCES**

At December 31, 2020, we had working capital of approximately $233.9 million, which included cash and cash equivalents of $223.4 million. We reported a net loss of $12.7 million during the year ended December 31, 2020. The net loss included $12.0 million in non-cash items consisting of the impairment of our investment in Coinsquare of $9.4 million, depreciation and amortization totaling $4.5 million, stock-based compensation totaling $3.4 million, impairment to our cryptocurrencies of $1.0 million, and amortization of our right of use assets of $0.4 million, offset by a $5.2 million realized gain on the sale / exchange of cryptocurrencies, $1.4 million for the reversal of our accrual for the registration rights penalty, and amortization of our license revenue of $0.1 million. Subsequent to December 31, 2020, the Company received gross proceeds of approximately $84.8 million from the sale of approximately 4.4 million shares of common stock via the 2020 ATM Offering.

**Coinmint Co-location Mining Services Agreement**

On April 8, 2020, the Company entered into an agreement with Coinmint, (the “Coinmint Agreement”), pursuant to which Coinmint agreed to provide up to approximately 9.5 MW of electrical power and to perform all maintenance necessary to operate Riot’s miners deployed at the Coinmint Facility. In exchange, Coinmint is reimbursed for direct production expenses and receives a performance fee based on the net cryptocurrencies generated by Riot’s miners deployed at the Coinmint Facility. The amount of electrical power supplied to Riot's miners at the Coinmint Facility has subsequently been increased to accommodate Riot’s expanding miner fleet. However, no formal written amendment to the Coinmint Agreement solidifying Riot’s continuing access to sufficient power to operate its expanding fleet of miners has been entered into with Coinmint. The initial term of the Coinmint Agreement was six (6) months, with automatic renewals for subsequent three (3) month terms until terminated as provided in the agreement.

**Prior Lease Agreements**

Effective November 29, 2018, Kairos entered into the second amendment to the lease agreement for the approximately 107,600 square foot warehouse located in Oklahoma City, Oklahoma, including improvements thereon. Subsequent amendments extended the lease term to June 30, 2020 at a monthly base rent of $190,000 per month plus electrical and utility costs based upon actual usage. During the three months ended June 30, 2020, the Company relocated its miners to the Coinmint Facility and vacated the OKC Facility. The Company’s refundable lease deposit of approximately $0.7 million related to its OKC lease was fully refunded, less applicable electricity charges on July 2, 2020.
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 leased 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 was for thirty-nine (39) months. During May 2020, an agreement was reached to terminate the Florida Lease, and the Company expensed the termination payments for the Florida Lease.

Miners

During the year ended December 31, 2020, the Company entered into purchase agreements with Bitmain for the acquisition of a total of 33,646 of their model S19, S19-Pro, and S19j-Pro Antminer series of miners, to be shipped and delivered during 2020 and 2021. During the year ended December 31, 2020, the Company received 3,043 model S19 Antminers of these 33,646 new miners, all of which have been deployed at the Coinmint Facility. The remaining 30,603 of these new miners are scheduled for monthly deliveries in 2021. The purchase commitment for these new miners totals $76.1 million, including $6.6 million paid for the 3,043 miners delivered during the year ended December 31, 2020, $31.9 million paid as deposits during the same period, and the remaining $37.6 million due to be paid during the year ending December 31, 2021 according to the previously disclosed payment schedules set forth in the applicable purchase agreements.

During December 2019, the Company purchased 4,000 next generation Bitmain model S17-Pro Antminers for a total purchase price of approximately $6.3 million directly from Bitmain. During the year ended December 31, 2020, the Company relocated all 4,000 of these miners from its former OKC Facility to the Coinmint Facility in Massena, New York.

Revenue from Mining Operations

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.

At-the-Market Equity Offerings

During the year ended December 31, 2020, the Company received net proceeds of approximately $257.5 million (after deducting $7.3 million in commissions and expenses) from sales of 49,932,051 shares of its common stock, no par value, at a weighted average gross sales price of $5.30 per share pursuant to an At-The-Market Sales Agreement, dated effective as of May 24, 2019, as amended (the “2019 ATM Sales Agreement”), with its sales agent, H.C. Wainwright & Co., LLC (“Wainwright”). For a more detailed discussion of Company’s At-the-Market Equity Offerings, see Note 11, Stockholders’ Equity, to the Company’s Consolidated Financial Statements for the fiscal years ended December 31, 2019 and December 31, 2020, beginning on page F-24 of this Annual Report on Form 10-K.

Legal Proceedings

The Company has been named a defendant in several class action and other investor related lawsuits as more fully described in Part I, Item 3., “Legal Proceedings”, of this Annual Report on Form 10-K. 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.
Operating Activities

Net cash used in operating activities was $11.1 million during the year ended December 31, 2020. Cash was consumed from continuing operations by the net loss of $12.7 million, less non-cash items of $12.0 million, consisting of the impairment of our investment in Coinsquare of $9.4 million, depreciation and amortization totaling $4.5 million, stock-based compensation totaling $3.4 million, impairment to our cryptocurrencies of $1.0 million, and amortization of our right of use assets of $0.4 million, offset by a $5.2 million realized gain on the sale / exchange of cryptocurrencies, $1.4 million for the reversal of our accrual for the registration rights penalty, and amortization of our license revenue of $0.1 million. Cryptocurrencies increased by $11.8 million and prepaid expenses and other current assets decreased by $0.8 million, offset by, an increase in accounts payable and accrued expenses of $0.9 million and a decrease in our lease liability of $0.4 million.

Net cash used in operating activities was $15.4 million during the year ended December 31, 2019. Cash was consumed from the net loss of $20.3 million, less non-cash items of $14.7 million, including a loss on the issuance of our convertible notes, common stock and warrants 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, 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.

Investing Activities

Net cash used in investing activities during the year ended December 31, 2020 was $32.8 million, consisting of proceeds received from the sale of cryptocurrencies of $8.3 million and proceeds received from the sale of property and equipment of $0.1 million, offset by deposits on equipment of $33.1 million, and purchases of property and equipment of $8.1 million.

Net cash used in investing activities during the year ended December 31, 2019 was $3.2 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, deposits on equipment of $1.4 million.

Financing Activities

Net cash provided by financing activities were $259.9 million during the year ended December 31, 2020, which primarily consisted of net proceeds from the issuance of our common stock in connection with our 2019 ATM Offering of $48.0 million and $209.5 million in connection with our 2020 ATM Offering, and proceeds received from the exercise of common stock warrants of $2.9 million, offset by the repurchase of common stock to pay director and employee withholding taxes of $0.4 million.

Net cash provided by financing activities were $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 Notes and Warrants of $3.0 million in the 2019 Private Financing, 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.

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:
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, 2020, 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 and litecoin) are included in current assets in the accompanying consolidated balance sheets. The classification of cryptocurrencies as a current asset has been made after the Company’s consideration of the significant consistent daily trading volume on readily available cryptocurrency exchanges, there are no limitations or restrictions on Company’s ability to sell bitcoin and the pattern of actual sales of bitcoin by the Company. 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.
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.

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.

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 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 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 contingency was eliminated.

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.

As of December 31, 2020, the Company’s only active office lease was its lease of its office space for its Castle Rock, Colorado headquarters (the “Castle Rock Lease”). The leased terms are not material and the lease is cancelable upon short notice.

The Company also terminated two former operating leases during the year ended December 31, 2020: (i) the lease of the OKC Facility and (ii) the Florida Lease, both of which are discussed under “Prior Leases” above.
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.

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:

1. Step 1: Identify the contract with the customer;
2. Step 2: Identify the performance obligations in the contract;
3. Step 3: Determine the transaction price;
4. Step 4: Allocate the transaction price to the performance obligations in the contract; and
5. 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 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 equity 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.

**Earnings (loss) per share**

Basic net earnings (loss) per share (“EPS”) of common stock is computed by dividing the Company’s net earnings (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 the unvested restricted share units (RSUs) awarded to its employees, officers, directors, and contractors under the 2019 Equity Plan from this net loss per share calculation because including them would be antidilutive.

**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-10 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 companies.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA.

| Report of Independent Registered Public Accounting Firm | F-1 |
| Consolidated Balance Sheets at December 31, 2020 and 2019 | F-4 |
| Consolidated Statements of Operations for the years ended December 31, 2020 and 2019 | F-5 |
| Consolidated Statements of Changes in Stockholders’ Equity for the years ended December 31, 2020 and 2019 | F-6 |
| Consolidated Statements of Cash Flows for the years ended December 31, 2020 and 2019 | F-7 |
| Notes to Consolidated Financial Statements | F-8 |

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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, 2020 and 2019, the related consolidated statements of operations, stockholders’ equity and cash flows for each of the two years in the period ended December 31, 2020, 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, 2020 and 2019, and the results of its operations and its cash flows for each of the two years in the period ended December 31, 2020, in conformity with accounting principles generally accepted in the United States of America.

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 Public Company Accounting Oversight Board (United States) (“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. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company’s internal control over financial reporting. Accordingly, we express no such opinion.

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.

Critical Audit Matters

The critical audit matters communicated below are matters arising from the current period audit of the financial statements that were communicated or required to be communicated to the audit committee and that: (1) relate to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The
communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

**Evaluation of the Accounting for and Disclosure of Cryptocurrencies Held**

As disclosed in Note 3 to the consolidated financial statements, the Company’s cryptocurrencies held as of December 31, 2020, which mainly consist of Bitcoin, are accounted for as indefinite-lived intangible assets, and have been included in current assets on the consolidated balance sheet. The Company’s cryptocurrencies as of December 31, 2020 were approximately $11,626,000.

We identified the accounting for and disclosure of cryptocurrencies held as a critical audit matter for the following reasons. Currently, no authoritative guidance exists for the accounting for and disclosure of cryptocurrencies held in accordance with accounting principles generally accepted in the United States (“GAAP”). The Company’s management has exercised significant judgment in their determination of how existing GAAP should be applied to the accounting for cryptocurrencies held, the associated financial statement presentation and accompanying footnote disclosures. In addition, the accounting for cryptocurrencies involves the Company’s information technology (“IT”) environment as such assets are held in digital cold storage wallets.

The primary procedures we performed to address this critical audit matter included the following:

- Tested the design and effectiveness of certain internal controls over the Company’s digital cold storage wallets with the assistance of our IT professionals;
- Performed an observation of the Company’s digital cold storage wallets;
- Evaluated management’s rationale for the application of Accounting Standards Codification (“ASC”) 350 to account for its cryptocurrencies held, including management’s processes for evaluating its cryptocurrencies for impairment;
- Evaluated management’s rationale for the inclusion of cryptocurrencies as a current asset on the balance sheet with the assistance of our internal valuation specialists;
- Evaluated management’s disclosures of its cryptocurrency activity in the financial statement footnotes; and
- Examined supporting sale and cash receipt evidence for cryptocurrency sales, including management’s processes for calculating any gains on sales of cryptocurrencies.

**Evaluation of the Accounting for and Disclosure of Cryptocurrency Mining Revenue Recognized**

As disclosed in Note 3, the Company recognizes revenue in accordance with ASC 606, Revenue from Contracts with Customers. The Company provides computing power services to a digital asset mining pool (the “Pool”) and has executed a contract with the Pool operator to provide computing power to the Pool. The contract, as amended, is 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 Pool. In exchange for providing computing power, the Company is entitled to a fractional share of the fixed cryptocurrency award the Pool operator receives for successfully adding a block to the blockchain, plus a fractional share of the transaction fees attached to that block. The Company’s fractional share is based on the proportion of computing
power the Company contributed to the Pool as compared to the total computing power contributed by the Pool participants in solving the current algorithm. The contract between the Company and the Pool also specifies that both parties waive any rights, claims or notices to revise or adjust any of the amounts of fractional share of the fixed cryptocurrency awarded to the Company after 35 days of the date of any cryptocurrency award. During the year ended December 31, 2020, the Company recognized net cryptocurrency mining revenue of approximately $11,984,000.

We identified the accounting for and disclosure of cryptocurrency mining revenue recognized as a critical audit matter for the following reasons. Currently, no authoritative guidance exists for the accounting for and disclosure of cryptocurrency mining revenue recognized in accordance with GAAP. The Company’s management has exercised significant judgment in their determination of how existing GAAP should be applied to the accounting for and disclosure of cryptocurrency mining revenue recognized. In addition, the Company’s cryptocurrency mining hardware that provides computing power to the Pool is currently hosted at a third party facility. As such, the overall accounting for and disclosure of cryptocurrency mining revenue recognized involved the IT environment of both the Company and the third party hosting facility and material weaknesses were identified in the design and effectiveness of certain internal controls over the IT environment of the Company.

The primary procedures we performed to address this critical audit matter included the following:

• Evaluated the design and effectiveness of IT general controls over the Company’s IT environment and key financially relevant systems. We also performed similar procedures over the IT environment of the third party hosting facility;
• Performed a site visitation of the third party hosting facility where the Company’s mining hardware is located, which included an observation of the physical and environmental controls and mining equipment inventory observation procedures;
• Evaluated management’s rationale for the application of ASC 606 to account for its cryptocurrency awards earned, which included evaluating the provisions of the contract between the Company and the Pool;
• Evaluated and tested management’s disclosures of its cryptocurrency activity in the financial statement footnotes;
• Evaluated and tested management’s rationale and supporting documentation associated with the valuation of cryptocurrency awards earned with the assistance of our internal valuation specialists;
• Independently confirmed certain financial and performance data directly with the Pool; and
• Compared the Company’s digital cold storage wallet records to publicly available blockchain records.

Marcum LLP

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

Los Angeles, CA
March 31, 2021
### Riot Blockchain, Inc. and Subsidiaries
#### Consolidated Balance Sheets
(in thousands, except for share and per share amounts)

**December 31, 2020**  
**December 31, 2019**

<table>
<thead>
<tr>
<th>ASSETS</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Current assets</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash and cash equivalents</td>
<td>$223,382</td>
<td>$7,440</td>
</tr>
<tr>
<td>Prepaid expenses and other current assets</td>
<td>1,257</td>
<td>1,349</td>
</tr>
<tr>
<td>Cryptocurrencies</td>
<td>11,626</td>
<td>3,839</td>
</tr>
<tr>
<td>Total current assets</td>
<td>236,265</td>
<td>12,628</td>
</tr>
<tr>
<td>Property and equipment, net</td>
<td>10,143</td>
<td>5,051</td>
</tr>
<tr>
<td>Right of use assets</td>
<td>—</td>
<td>367</td>
</tr>
<tr>
<td>Deposits on equipment</td>
<td>33,093</td>
<td>1,449</td>
</tr>
<tr>
<td>Long-term investments</td>
<td>310</td>
<td>9,723</td>
</tr>
<tr>
<td>Security deposits</td>
<td>—</td>
<td>703</td>
</tr>
<tr>
<td>Patents, net</td>
<td>336</td>
<td>459</td>
</tr>
<tr>
<td><strong>Total assets</strong></td>
<td>$280,147</td>
<td>$30,380</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>LIABILITIES AND STOCKHOLDERS’ EQUITY</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Current liabilities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accounts payable</td>
<td>$718</td>
<td>$717</td>
</tr>
<tr>
<td>Accrued expenses</td>
<td>1,582</td>
<td>2,187</td>
</tr>
<tr>
<td>Deferred revenue, current portion</td>
<td>97</td>
<td>97</td>
</tr>
<tr>
<td><strong>Total current liabilities</strong></td>
<td>2,397</td>
<td>3,369</td>
</tr>
<tr>
<td>Deferred revenue, less current portion</td>
<td>679</td>
<td>776</td>
</tr>
<tr>
<td><strong>Total liabilities</strong></td>
<td>3,076</td>
<td>4,145</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Commitments and contingencies - Note 15</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Stockholders’ equity</strong></td>
</tr>
<tr>
<td>Preferred stock, no par value, 15,000,000 shares authorized:</td>
</tr>
<tr>
<td>2% Series A Convertible stock, 2,000,000 shares authorized; no shares issued and outstanding as of December 31, 2020 and 2019, respectively</td>
</tr>
<tr>
<td>0% Series B Convertible stock, 1,750,001 shares authorized; 4,199 shares issued and outstanding as of December 31, 2020 and 2019, respectively, liquidation preference over common stock, equal to carrying value</td>
</tr>
<tr>
<td>Common stock, no par value; 170,000,000 shares authorized; 78,523,517 and 25,082,872 shares issued and outstanding as of December 31, 2020 and 2019, respectively</td>
</tr>
<tr>
<td>Accumulated deficit</td>
</tr>
<tr>
<td><strong>Total Riot Blockchain stockholders’ equity</strong></td>
</tr>
<tr>
<td>Non-controlling interest</td>
</tr>
<tr>
<td><strong>Total stockholders’ equity</strong></td>
</tr>
<tr>
<td><strong>Total liabilities and stockholders’ equity</strong></td>
</tr>
</tbody>
</table>

See Accompanying Notes to Consolidated Financial Statements.

F-4
Riot Blockchain, Inc. and Subsidiaries  
Consolidated Statements of Operations  
(in thousands, except for share and per share amounts)

<table>
<thead>
<tr>
<th></th>
<th>Years Ended December 31,</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2020</td>
<td>2019</td>
<td></td>
</tr>
<tr>
<td><strong>Revenue:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revenue, net - cryptocurrency mining</td>
<td>$11,984</td>
<td>$6,741</td>
<td></td>
</tr>
<tr>
<td>License fees</td>
<td>97</td>
<td>96</td>
<td></td>
</tr>
<tr>
<td><strong>Total Revenue</strong></td>
<td>12,081</td>
<td>6,837</td>
<td></td>
</tr>
<tr>
<td><strong>Costs and expenses:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost of revenues (exclusive of depreciation and amortization shown below)</td>
<td>6,251</td>
<td>6,097</td>
<td></td>
</tr>
<tr>
<td>Selling, general and administrative</td>
<td>10,251</td>
<td>9,159</td>
<td></td>
</tr>
<tr>
<td>Depreciation and amortization</td>
<td>4,494</td>
<td>119</td>
<td></td>
</tr>
<tr>
<td>Impairment of intangible rights acquired</td>
<td>—</td>
<td>700</td>
<td></td>
</tr>
<tr>
<td>Impairment of long-term investment</td>
<td>9,413</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>Impairment of cryptocurrencies</td>
<td>989</td>
<td>844</td>
<td></td>
</tr>
<tr>
<td><strong>Total costs and expenses</strong></td>
<td>31,398</td>
<td>16,919</td>
<td></td>
</tr>
<tr>
<td>Operating loss</td>
<td>(19,317)</td>
<td>(10,082)</td>
<td></td>
</tr>
<tr>
<td><strong>Other income (expense):</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loss on issuance of convertible notes, common stock and warrants</td>
<td>—</td>
<td>(6,155)</td>
<td></td>
</tr>
<tr>
<td>Change in fair value of warrant liability</td>
<td>—</td>
<td>(2,869)</td>
<td></td>
</tr>
<tr>
<td>Change in fair value of convertible notes</td>
<td>—</td>
<td>(3,896)</td>
<td></td>
</tr>
<tr>
<td>Reversal of registration rights penalty</td>
<td>1,358</td>
<td>—</td>
<td>1,139</td>
</tr>
<tr>
<td>Gain on deconsolidation of Tess</td>
<td>—</td>
<td>—</td>
<td>1,139</td>
</tr>
<tr>
<td>Gain on sale of equipment</td>
<td>29</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Interest income</td>
<td>85</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Interest expense</td>
<td>—</td>
<td>(122)</td>
<td>—</td>
</tr>
<tr>
<td>Other income (expense)</td>
<td>(6)</td>
<td>874</td>
<td></td>
</tr>
<tr>
<td>Realized gain on sale/exchange of cryptocurrencies</td>
<td>5,184</td>
<td>665</td>
<td></td>
</tr>
<tr>
<td><strong>Total other income (expense)</strong></td>
<td>6,650</td>
<td>(10,364)</td>
<td></td>
</tr>
<tr>
<td><strong>Deferred income tax benefit</strong></td>
<td>—</td>
<td>143</td>
<td></td>
</tr>
<tr>
<td><strong>Net loss</strong></td>
<td>(12,667)</td>
<td>(20,303)</td>
<td></td>
</tr>
<tr>
<td><strong>Net (income) loss attributable to non-controlling interest</strong></td>
<td>(7)</td>
<td>264</td>
<td></td>
</tr>
<tr>
<td><strong>Net loss attributable to Riot Blockchain</strong></td>
<td>$ (12,674)</td>
<td>$ (20,039)</td>
<td></td>
</tr>
<tr>
<td>Basic and diluted net loss per share:</td>
<td>$ (0.30)</td>
<td>$ (1.02)</td>
<td></td>
</tr>
<tr>
<td>Basic and diluted weighted average number of shares outstanding</td>
<td>41,976,704</td>
<td>19,597,977</td>
<td></td>
</tr>
</tbody>
</table>

See Accompanying Notes to Consolidated Financial Statements.

F-5
# Riot Blockchain, Inc. and Subsidiaries
## Consolidated Statement of Stockholders' Equity
### Years Ended December 31, 2020 and 2019
(in thousands, except for share and per share amounts)

<table>
<thead>
<tr>
<th></th>
<th>Preferred Stock</th>
<th></th>
<th>Common Stock</th>
<th></th>
<th>Accumulated deficit</th>
<th></th>
<th>Total Riot Blockchain stockholders' equity</th>
<th>Non-controlling interest</th>
<th>Total stockholders' equity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Shares</td>
<td>Amount</td>
<td>Shares</td>
<td>Amount</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Balance as of January 1, 2019</strong></td>
<td>13,000</td>
<td>$69</td>
<td>14,519,058</td>
<td>$202,917</td>
<td>$(197,199)</td>
<td>$5,787</td>
<td>$(1,296)</td>
<td></td>
<td>$4,491</td>
</tr>
<tr>
<td>Delivery of common stock underlying restricted stock units</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>239,751</td>
<td>—</td>
<td>—</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Common stock issued with convertible notes</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>150,000</td>
<td>255</td>
<td>—</td>
<td></td>
<td>—</td>
<td>255</td>
</tr>
<tr>
<td>Common stock issued in connection with conversion of notes payable</td>
<td>—</td>
<td>—</td>
<td>1,813,500</td>
<td>10,226</td>
<td>—</td>
<td>10,226</td>
<td></td>
<td>—</td>
<td>10,226</td>
</tr>
<tr>
<td>Reclassification of warrant liability to equity</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>5,439</td>
<td>—</td>
<td>5,439</td>
<td></td>
<td>—</td>
<td>5,439</td>
</tr>
<tr>
<td>Preferred stock converted to common stock</td>
<td>(8,801)</td>
<td>(47)</td>
<td>8,801</td>
<td>47</td>
<td>—</td>
<td>—</td>
<td></td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Stock-based compensation</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>745</td>
<td>—</td>
<td>745</td>
<td></td>
<td>—</td>
<td>745</td>
</tr>
<tr>
<td>Issuance of common stock, net of offering costs/At-the-market offering</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>8,351</td>
<td>10,226</td>
<td>—</td>
<td></td>
<td>—</td>
<td>10,226</td>
</tr>
<tr>
<td>Net loss attributable to non-controlling interest</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td></td>
<td>(264)</td>
<td>(264)</td>
</tr>
<tr>
<td>Deconsolidation of Tess</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>1,553</td>
<td></td>
<td>—</td>
<td>1,553</td>
</tr>
<tr>
<td>Net loss</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td></td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td><strong>Balance as of December 31, 2019</strong></td>
<td>4,199</td>
<td>$22</td>
<td>25,082,872</td>
<td>$243,458</td>
<td>$(217,238)</td>
<td>26,242</td>
<td>$(7)</td>
<td>—</td>
<td>26,235</td>
</tr>
<tr>
<td>Delivery of common stock underlying restricted stock units to settle executive compensation</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>122,377</td>
<td>175</td>
<td>—</td>
<td></td>
<td>—</td>
<td>175</td>
</tr>
<tr>
<td>Delivery of common stock underlying restricted stock units, net of tax withholding settlement</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>2,048,096</td>
<td>(446)</td>
<td>—</td>
<td></td>
<td>(446)</td>
<td>(446)</td>
</tr>
<tr>
<td>Delivery of common stock underlying restricted stock units for consulting and advisory services</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>40,634</td>
<td>—</td>
<td>—</td>
<td></td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Issuance of common stock, net of offering costs/At-the-market offering</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>49,932</td>
<td>257,472</td>
<td>—</td>
<td></td>
<td>257,472</td>
<td>257,472</td>
</tr>
<tr>
<td>Issuance of common stock related to exercise of warrants</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>1,492,487</td>
<td>2,895</td>
<td>—</td>
<td></td>
<td>2,895</td>
<td>2,895</td>
</tr>
<tr>
<td>Cancellation of Prive Escrow shares</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>(200,000)</td>
<td>—</td>
<td>—</td>
<td></td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Net income attributable to non-controlling interest</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>7</td>
<td>—</td>
<td></td>
<td>7</td>
<td>—</td>
</tr>
<tr>
<td><strong>Net loss</strong></td>
<td>(12,674)</td>
<td>(12,674)</td>
<td>(12,674)</td>
<td>(12,674)</td>
<td>—</td>
<td>—</td>
<td></td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td><strong>Balance as of December 31, 2020</strong></td>
<td>4,199</td>
<td>$22</td>
<td>78,523,517</td>
<td>$506,961</td>
<td>$(229,912)</td>
<td>277,071</td>
<td>$(7)</td>
<td>—</td>
<td>277,071</td>
</tr>
</tbody>
</table>

See Accompanying Notes to Consolidated Financial Statements

F-6
## Consolidated Statements of Cash Flows

*(in thousands)*

<table>
<thead>
<tr>
<th>Years Ended December 31,</th>
<th>2020</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cash flows from operating activities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Net loss</strong></td>
<td>$(12,667)</td>
<td>$(20,303)</td>
</tr>
<tr>
<td>Adjustments to reconcile net loss to net cash used in operating activities:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stock-based compensation</td>
<td>3,407</td>
<td>745</td>
</tr>
<tr>
<td>Depreciation and amortization</td>
<td>4,494</td>
<td>119</td>
</tr>
<tr>
<td>Deferred income tax benefit</td>
<td>—</td>
<td>(143)</td>
</tr>
<tr>
<td>Amortization of license fee revenue</td>
<td>(97)</td>
<td>(96)</td>
</tr>
<tr>
<td>Amortization of right of use assets</td>
<td>367</td>
<td>2,297</td>
</tr>
<tr>
<td>Impairment of long-term investment</td>
<td>9,413</td>
<td>—</td>
</tr>
<tr>
<td>Impairment of cryptocurrencies</td>
<td>989</td>
<td>844</td>
</tr>
<tr>
<td>Loss on issuance of convertible notes, common stock and warrants</td>
<td>—</td>
<td>6,155</td>
</tr>
<tr>
<td>Change in fair value of convertible notes</td>
<td>—</td>
<td>3,896</td>
</tr>
<tr>
<td>Change in fair value of warrant liability</td>
<td>—</td>
<td>2,869</td>
</tr>
<tr>
<td>Gain on deconsolidation of Tess</td>
<td>—</td>
<td>(1,139)</td>
</tr>
<tr>
<td>Impairment of intangible rights acquired</td>
<td>9,413</td>
<td>—</td>
</tr>
<tr>
<td>Reversal of registration rights penalty</td>
<td>(1,358)</td>
<td>—</td>
</tr>
<tr>
<td>Gain on extinguishment of accounts payable, other liabilities and accrued interest</td>
<td>(854)</td>
<td>—</td>
</tr>
<tr>
<td>Realized gain on sale/exchange of cryptocurrencies</td>
<td>(5,188)</td>
<td>(565)</td>
</tr>
<tr>
<td>Gain on sale of equipment</td>
<td>(29)</td>
<td>—</td>
</tr>
<tr>
<td>Accrued interest on Verady investment</td>
<td>—</td>
<td>700</td>
</tr>
<tr>
<td><strong>Changes in assets and liabilities:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prepaid expenses and other current assets</td>
<td>795</td>
<td>(101)</td>
</tr>
<tr>
<td>Cryptocurrencies - mining, net of mining pool operating fees</td>
<td>(11,838)</td>
<td>(6,606)</td>
</tr>
<tr>
<td>Accounts payable and accrued expenses</td>
<td>929</td>
<td>(817)</td>
</tr>
<tr>
<td>Lease liability</td>
<td>(368)</td>
<td>(2,296)</td>
</tr>
<tr>
<td><strong>Net cash used in operating activities</strong></td>
<td>$(11,147)</td>
<td>$(15,415)</td>
</tr>
</tbody>
</table>

| **Cash flows from investing activities** |      |      |
| Proceeds from sale of cryptocurrencies | 8,298 | 3,196 |
| Proceeds from sale of equipment | 146 | — |
| Deposits on equipment | (33,096) | (1,449) |
| Purchases of property and equipment | (8,139) | (4,958) |
| Patent costs incurred | (44) | (38) |
| **Net cash used in investing activities** | (32,832) | (3,249) |

| **Cash flows from financing activities** |      |      |
| Proceeds from issuance of convertible notes | — | 3,000 |
| Repayment of notes payable and other obligations | — | (950) |
| Proceeds from the issuance of common stock / At-the-market offering | 264,727 | 24,825 |
| Offering costs for the issuance of common stock / At-the-market offering | (7,255) | (996) |
| Proceeds from exercise of common stock warrants | 2,895 | — |
| Repurchase of common shares to pay employee withholding taxes | (446) | — |
| **Net cash provided by financing activities** | 259,921 | 25,879 |

| **Net increase in cash and cash equivalents** | 215,942 | 7,215 |
| Cash and cash equivalents at beginning of year | 7,440 | 225 |
| **Cash and cash equivalents at end of year** | $223,382 | $7,440 |

| **Supplemental disclosure of cash flow information:** |      |      |
| Cash paid for interest | — | — |
| Cash paid for taxes | — | — |

| **Supplemental disclosure of noncash investing and financing activities:** |      |      |
| Issue of common stock to settle previously accrued executive compensation | 175 | — |
| Cryptocurrencies received from sale of equipment | 52 | — |
| Reclassification of deposits for miners | 1,449 | — |
| Conversion of notes payable to common stock | — | 10,226 |
| Reclassification of warrant liability to equity | — | 5,439 |
| Conversion of preferred stock to common stock | — | 47 |
| Common stock issued in connection with conversion of notes payable | — | 255 |
| Cryptocurrencies used to purchase miners | — | 99 |

See Accompanying Notes to Consolidated Financial Statements

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

Note 1. Organization

Nature of operations and corporate information:

Riot Blockchain, Inc., operates a cryptocurrency mining operation, which utilizes specialized computers (also known as “miners”) using application-specific integrated circuit (ASIC) chips to solve complex cryptographic algorithms in order to support the Bitcoin blockchain (in a process known as “solving a block”), in exchange for cryptocurrency rewards. As of December 30, 2020, the Company exclusively operated the Antminer series of miners manufactured by Bitmain Technologies Limited (“Bitmain”), which use ASIC chips designed around the 256-bit secure hashing algorithm (“SHA-256”) used by the Bitcoin blockchain and, therefore the primary cryptocurrency the Company seeks to mine is bitcoin. The Company has also historically mined bitcoin cash and litecoin; however, the Company focused its efforts on mining bitcoin. The Company generates substantially all its revenue through its cryptocurrency mining operation by holding the cryptocurrency it mines and selling it on the market for its own account.

The Company 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 Biopix, Inc., and effective October 19, 2017, the Company changed its state of incorporation to Nevada from Colorado.

Mining equipment:

The Company’s current focus is on its cryptocurrency mining operation, and during the year ended December 31, 2020, it continued a full network upgrade of its miners with the objective of increasing the Company’s operational efficiency and performance, which it had begun in December 2019 with the acquisition of 4,000 model S17-Pro Antminer series of miners manufactured by Bitmain for a total purchase price of $6.3 million.

As of December 31, 2020, the Company operated a fleet of 7,043 of the Antminer series of miners manufactured by Bitmain, including 4,000 model S17-Pro miners, 1,040 model S19 miners, and 2,003 model S19-Pro miners, all of which were purchased directly from Bitmain and deployed in the Company’s mining operation pursuant to a colocation mining services agreement with Coinmint, LLC (“Coinmint”) at Coinmint’s facility in New York (the “Coinmint Facility”).

During the year ended December 31, 2020, the Company entered into purchase agreements with Bitmain for the acquisition of a total of 33,646 of their model S19, S19-Pro, and S19j-Pro Antminer series of miners, to be shipped and delivered during 2020 and 2021. During the year ended December 31, 2020, the Company received 3,043 model S19 Antminers of these 33,646 new miners, all of which have been deployed at the Coinmint Facility. The remaining 30,603 of these new miners are scheduled for monthly deliveries in 2021. The purchase commitment for these new miners totals $76.1 million, including $6.6 million paid for the 3,043 miners delivered during the year ended December 31, 2020, $31.9 million paid as deposits in deposits during the same period, and the remaining $37.6 million due to be paid during the year ending December 31, 2021 according to the payment schedules set forth in the applicable purchase agreements.

During the year ended December 31, 2020, the Company retired all of the approximately 8,000 Bitmain Antminer S9 miners it had historically acquired through its acquisition of Kairos Global Technology, Inc., (“Kairos”) in November 2017, and from Prive Technologies, LLP (“Prive”) and Blockchain Mining Supply & Services Ltd. (“BMSS”) in February 2018. The Company discontinued its use of these older model miners in favor of the 4,000 S17 miners, the 1,040 S19 miners, and 2,000 S19-Pro miners it acquired from Bitmain, which offer greater electricity usage efficiency and hash rate power than the retired models.
Riot Blockchain, Inc. and Subsidiaries
Notes to Consolidated Financial Statements
(in thousands, except for share and per share amounts)

Note 2. Liquidity and Financial Condition

The Company has experienced recurring losses and negative cash flows from operations. At December 31, 2020, the Company had approximate balances of cash and cash equivalents of $223.4 million, working capital of $233.9 million, total stockholders’ equity of $277.1 million and an accumulated deficit of $229.9 million. To date, the Company has, in large part, relied on equity financings to fund its operations. 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.

During the year ended December 31, 2020, the Company entered into purchase agreements with Bitmain for the acquisition of a total of 33,646 of their model S19, S19-Pro, and S19j-Pro Antminer series of miners, to be shipped and delivered during 2020 and 2021. The purchase commitment for these new miners totals $76.1 million, including $6.6 million paid for the 3,043 miners delivered during the year ended December 31, 2020, $11.9 million paid as deposits in deposits during the same period, and the remaining $37.6 million due to be paid during the year ending December 31, 2021 according to the payment schedules set forth in the applicable purchase agreements. See Note 7.

During the year ended December 31, 2020, the Company received net proceeds of approximately $257.5 million (after deducting $7.3 million in commissions and expenses) from sales of 49,932,051 shares of its common stock, no par value, at a weighted average gross sales price of $5.30 per share pursuant to an At-The-Market Sales Agreement, dated effective as of May 24, 2019, as amended (the "2019 ATM Sales Agreement"), with its sales agent, H.C. Wainwright & Co., LLC (“Wainwright”). Subsequent to December 31, 2020, the Company received net proceeds of approximately $82.7 million from the sale of 4,433,468 shares of common stock, no par value, at an average gross sales price of $19.13 per share, via its Sales Agent, Wainwright pursuant to the 2019 ATM Sales Agreement.

COVID-19

The COVID-19 global pandemic has been unprecedented and unpredictable and is likely to continue to result in significant national and global economic disruption, which may adversely affect our business. Based on the Company’s current assessment, however, the Company does not expect any material impact on its long-term strategic plans, its operations, or its liquidity due to the worldwide spread of the COVID-19 virus. However, the Company is actively monitoring this situation and the possible effects on its financial condition, liquidity, operations, suppliers, and industry.
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, 2020) consisted of: Riot Blockchain Canada, Inc., (100%), RiotX Holdings, Inc (92.5%) and Logical Brokerage Corp. (92.5%). None of the consolidated subsidiaries had any significant assets or operations. Amounts are in thousands except for share, per share and miner amounts.

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 indefinite lived intangibles, stock-based compensation, and the valuation allowance associated with the Company’s deferred tax assets.

Reclassifications

Certain prior year amounts have been reclassified to conform to the current year presentation. These reclassifications have no impact on the previously reported financial position or results of operations.

Long-term investments

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.

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, 2020 and 2019, 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, 2020, 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 and bitcoin cash) 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, 2020, and 2019, each, deferred revenue of approximately $0.1 million has been classified as a current liability and $0.7 million and $0.8 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, 2020 and 2019, 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.

During the year ended December 31, 2020, the Company determined there were indicators that would cause a 100% impairment of its Coinsquare investment and observed price changes. Therefore, the Company recorded an impairment expense of $9.4 million for its investment in Coinsquare during the year ended December 31, 2020.

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 income tax benefit during the year ended December 31, 2019 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, 2019 to December 31, 2019:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginning Balance, January 1, 2019</td>
<td>$143</td>
</tr>
<tr>
<td>Abandonment of Logical Brokerage</td>
<td>(143)</td>
</tr>
<tr>
<td>Ending Balance, December 31, 2019</td>
<td>$0</td>
</tr>
</tbody>
</table>

There was no deferred tax liability as of December 31, 2020.

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

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.

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:

1. Step 1: Identify the contract with the customer
2. Step 2: Identify the performance obligations in the contract
3. Step 3: Determine the transaction price
4. Step 4: Allocate the transaction price to the performance obligations in the contract
5. 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, as amended from time to time, 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 terms of the agreement provides that neither party can dispute settlement terms after thirty-five days following settlement. 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 costs of earning bitcoin related to mining operations, including mining pool fees, electric power costs, other utilities, labor, insurance whether incurred directly from self-mining operations or reimbursed, including any revenue sharing arrangements under co-location agreements, but excluding depreciation and amortization, which are separately stated in the Company’s consolidated statements of operations.

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.

Earnings (loss) per share

Basic net earnings (loss) per share (“EPS”) of common stock is computed by dividing the Company’s net earnings (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, 2020 and 2019 because their inclusion would be anti-dilutive are as follows:

<table>
<thead>
<tr>
<th>Securities</th>
<th>December 31, 2020</th>
<th>December 31, 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Warrants to purchase common stock</td>
<td>2,061,770</td>
<td>3,574,257</td>
</tr>
<tr>
<td>Options to purchase common stock</td>
<td>12,000</td>
<td>12,000</td>
</tr>
<tr>
<td>Unvested restricted stock awards</td>
<td>633,305</td>
<td>1,524,499</td>
</tr>
<tr>
<td>Convertible Series B preferred shares</td>
<td>4,199</td>
<td>4,199</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2,711,274</strong></td>
<td><strong>5,114,955</strong></td>
</tr>
</tbody>
</table>
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.

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 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 adopted this standard on January 1, 2020 and the adoption did not have a material impact on the financial statements and related disclosures.

In August 2020, the FASB issued ASU No. 2020-06, Debt—Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging—Contracts in Entity’s Own Equity (Subtopic 815-40): Accounting for Convertible Instruments and Contracts in an Entity’s Own Equity, which simplifies accounting for convertible instruments by removing major separation models required under current GAAP. The ASU removes certain settlement conditions that are required for equity contracts to qualify for the derivative scope exception and it also simplifies the diluted earnings per share calculation in certain areas. This ASU is effective for annual reporting periods beginning after December 15, 2021, including interim periods within those fiscal years. Early adoption is permitted, but no earlier than fiscal years beginning after December 15, 2020. This update permits the use of either the modified retrospective or fully retrospective method of transition. The Company is currently evaluating the impact this ASU will have 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. Upon closing of the transaction, Kairos became the owner of Prive equipment used for the mining of cryptocurrency, including, but not limited to, 3,800 Bitmain Antminer S9s. The equipment was recorded for a purchase price of approximately $19.5 million as follows:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash consideration</td>
<td>$11,000</td>
</tr>
<tr>
<td>Fair value of common stock</td>
<td>$8,480</td>
</tr>
<tr>
<td>Other expenses</td>
<td>$2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$19,482</strong></td>
</tr>
</tbody>
</table>

As part of the Prive Purchase Agreement, 200,000 shares of the Company’s common stock were held in escrow (the “Escrow Shares”). No value was assigned to the Escrow Shares at the time of the acquisition as they were contingent consideration. The Escrow Shares would have been released to the Sellers upon the Company generating net cash flow of at least $10.0 million from the equipment. If the Escrow Shares were not released to the Sellers on or before the two-year anniversary (February 2020) of the Prive Purchase Agreement, the Escrow Shares would be returned to the Company for cancellation. In February 2020, the conditions were not achieved and after receiving notification on March 4, 2020, the escrow agent returned and canceled the 200,000 shares.
Acquisition of Logical Brokerage Corp.

On March 26, 2018, the Company entered into an asset acquisition with Logical Brokerage Corp. The Company purchased 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 asset was 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 was recorded as intangible rights acquired.

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.

Note 5. Cryptocurrencies

The following table presents additional information about cryptocurrencies:

<table>
<thead>
<tr>
<th></th>
<th>December 31, 2020</th>
<th>December 31, 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginning balance</td>
<td>$3,839</td>
<td>$707</td>
</tr>
<tr>
<td>Revenue recognized from cryptocurrencies mined</td>
<td>11,984</td>
<td>6,741</td>
</tr>
<tr>
<td>Mining pool operating fees</td>
<td>(146)</td>
<td>(135)</td>
</tr>
<tr>
<td>Proceeds from sale of cryptocurrencies</td>
<td>(8,298)</td>
<td>(3,196)</td>
</tr>
<tr>
<td>Purchase of miner equipment with cryptocurrencies</td>
<td>—</td>
<td>(99)</td>
</tr>
<tr>
<td>Realized gain on sale/exchange of cryptocurrencies</td>
<td>5,184</td>
<td>665</td>
</tr>
<tr>
<td>Impairment of cryptocurrencies</td>
<td>(989)</td>
<td>(844)</td>
</tr>
<tr>
<td>Cryptocurrencies received from sale of equipment</td>
<td>52</td>
<td>—</td>
</tr>
<tr>
<td>Ending balance</td>
<td>$11,626</td>
<td>$3,839</td>
</tr>
</tbody>
</table>

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 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**

<table>
<thead>
<tr>
<th></th>
<th>January 28, 2019</th>
<th>As of June 27, 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dividend yield</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Expected price volatility</td>
<td>119.5%</td>
<td>122.2%-127.1%</td>
</tr>
<tr>
<td>Risk free interest rate</td>
<td>2.60%</td>
<td>2.07%-2.44%</td>
</tr>
<tr>
<td>Expected term</td>
<td>1 year</td>
<td>-</td>
</tr>
</tbody>
</table>
Warrants

<table>
<thead>
<tr>
<th></th>
<th>January 28, 2019</th>
<th>As of June 27, 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dividend yield</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Expected price volatility</td>
<td>111.6%</td>
<td>119.9%-120.5%</td>
</tr>
<tr>
<td>Risk free interest rate</td>
<td>2.58%</td>
<td>2.23%-2.58%</td>
</tr>
<tr>
<td>Expected term</td>
<td>5 years</td>
<td>4 years, 10 months</td>
</tr>
</tbody>
</table>

There were no assets or liabilities measured at fair value during the year ended December 31, 2020.

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:

<table>
<thead>
<tr>
<th></th>
<th>Convertible Notes</th>
<th>Warrant Liability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Issuance of senior secured convertible notes</td>
<td>$6,330</td>
<td>$</td>
</tr>
<tr>
<td>Issuance of warrants in connection with convertible notes</td>
<td>$</td>
<td>2,570</td>
</tr>
<tr>
<td>Balance at January 28, 2019</td>
<td>6,330</td>
<td>2,570</td>
</tr>
<tr>
<td>Change in fair value</td>
<td>3,896</td>
<td>2,869</td>
</tr>
<tr>
<td>Conversion of convertible notes to common stock</td>
<td>(10,226)</td>
<td>—</td>
</tr>
<tr>
<td>Reclassification of warrant liability to equity</td>
<td>—</td>
<td>(5,439)</td>
</tr>
<tr>
<td>Balance at December 31, 2019</td>
<td>$</td>
<td>$</td>
</tr>
</tbody>
</table>

Note 7. Property and Equipment

Property and equipment consisted of the following as of December 31, 2020 and 2019:

<table>
<thead>
<tr>
<th></th>
<th>December 31, 2020</th>
<th>December 31, 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Miners</td>
<td>$14,406</td>
<td>$5,010</td>
</tr>
<tr>
<td>Leasehold improvements</td>
<td>$-</td>
<td>$38</td>
</tr>
<tr>
<td>Office and computer equipment</td>
<td>$83</td>
<td>$103</td>
</tr>
<tr>
<td>Total cost of property and equipment</td>
<td>14,489</td>
<td>5,151</td>
</tr>
<tr>
<td>Less accumulated depreciation</td>
<td>(4,346)</td>
<td>(100)</td>
</tr>
<tr>
<td>Property and equipment, net</td>
<td>$10,143</td>
<td>$5,051</td>
</tr>
</tbody>
</table>

There were no impairment charges related to miners for the years ended December 31, 2020 and 2019.

During the year ended December 31, 2019, the Company purchased 4,000 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 December 31, 2019 consolidated balance sheet. During the year ended December 31, 2020, the 4,000 S17-Pro Antminers were relocated to the Coinmint facility.

During the year ended December 31, 2020, the Company purchased 33,646 Bitmain S19-Pro Antminers and as of December 31, 2020 the Company had received 3,043 of the S19-Pro Antminers.
As of December 31, 2020, the Company had outstanding executed purchase agreements primarily for the purchase of miners from Bitmain for a total of 30,603 new S19-Pro miners, to be delivered in 2021 through October 2021. A summary of the purchase agreement commitments, deposits paid and expected delivery timing (remaining balances are payable in advance of shipping) is summarized as follows:

<table>
<thead>
<tr>
<th>Agreement Date *</th>
<th>Purchase Commitment</th>
<th>Deposits Paid</th>
<th>Expected Shipping</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 12, 2020</td>
<td>$17,428</td>
<td>$13,071</td>
<td>First Quarter 2021</td>
</tr>
<tr>
<td>August 25, 2020</td>
<td>$11,110</td>
<td>$5,773</td>
<td>First - Second Quarter 2021</td>
</tr>
<tr>
<td>September 30, 2020</td>
<td>$6,094</td>
<td>$6,124</td>
<td>First Quarter 2021</td>
</tr>
<tr>
<td>December 18, 2020 (1 of 2)</td>
<td>$26,308</td>
<td>$2,631</td>
<td>Third - Fourth Quarter 2021</td>
</tr>
<tr>
<td>December 18, 2020 (2 of 2)</td>
<td>$8,577</td>
<td>$4,289</td>
<td>Second - Third Quarter 2021</td>
</tr>
<tr>
<td>Other contracts and costs</td>
<td>$2,804</td>
<td>$1,205</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$72,321</td>
<td>$33,093</td>
<td></td>
</tr>
</tbody>
</table>

* Pursuant to the Company’s agreements with Bitmain, the Company is responsible for all shipping charges incurred in connection with the delivery of the miners.

In December 2020, the Company entered into a pilot project with a dual focus of evaluating next-generation immersion technology to increase mining productivity, in addition to evaluating software to reduce energy costs. The immersion modules provide significant potential benefits, and the software is designed to help miners reduce their cost of power by being opportunistic in the local energy market. When combined, both technologies have the potential to reduce the Company’s bitcoin production costs, increase hashrates and significantly extend the life of the Company’s bitcoin mining ASICs. As of December 31, 2020, the Company has made contract deposits totaling approximately $1.2 million related to the pilot project, which amounts are included in the above table.

Depreciation and amortization expense totaled approximately $4.5 million (including $0.2 million of patent amortization) and $0.1 million, for the years ended December 31, 2020 and 2019, respectively. Depreciation is computed on the straight-line basis for the periods the assets are in service.

**Note 8. Investments**

Long-term investments consisted of the following as of December 31, 2020 and 2019:

<table>
<thead>
<tr>
<th></th>
<th>Coinsquare</th>
<th>Tess</th>
<th>Verady</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance at January 1, 2019</td>
<td>$9,413</td>
<td>$90</td>
<td>$200</td>
<td>$9,613</td>
</tr>
<tr>
<td>Investment in Tess</td>
<td>—</td>
<td>90</td>
<td>—</td>
<td>90</td>
</tr>
<tr>
<td>Accrued interest on convertible note</td>
<td>—</td>
<td>—</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Balance at December 31, 2019</td>
<td>$9,413</td>
<td>90</td>
<td>220</td>
<td>$9,723</td>
</tr>
<tr>
<td>Impairment of long-term investment</td>
<td>(9,413)</td>
<td>—</td>
<td>—</td>
<td>(9,413)</td>
</tr>
<tr>
<td>Balance at December 31, 2020</td>
<td>$—</td>
<td>$90</td>
<td>$220</td>
<td>$310</td>
</tr>
</tbody>
</table>

**Coinsquare**

In September 2017, and February 2018, the Company acquired a minority interest for $9.4 million in Coinsquare, which operates a digital crypto currency exchange platform in Canada. The investment 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.

During June 2020, the Company became aware of allegations brought by the Ontario Securities Commission (the “OSC”) that Coinsquare and certain of its executives and directors engaged in systematic “wash trading” of cryptocurrencies on its Coinsquare market to manipulate the market’s trading volume during 2018 and 2019.

On July 21, 2020, a hearing panel of the OSC entered an order (the “Order”) approving the settlement agreement between OSC, Coinsquare, and certain of its executives and directors (the “Settlement Agreement”), in which they admitted to breaches of Ontario securities laws and/or conduct contrary to the public interest including, market manipulation through reporting inflated trading volumes on its Coinsquare Market, misleading its clients and investors about these trading volumes, and taking reprisal against an internal whistleblower who brought this conduct to the attention of the named executives and directors. The Order requires certain oversight and governance procedures and to prohibit the named executives and directors from engaging in certain activities with respect to Coinsquare; additionally, the named executives and directors were required to resign from Coinsquare and Coinsquare and the named executives and directors were required to pay penalties and costs totaling approximately CAD 2.2 million.
The Company thereafter determined there were indicators that would cause a 100% impairment of the Coinsquare investment and observed price changes, which was recorded as of June 30, 2020. The Company therefore recorded an impairment expense of $9.4 million for its investment in Coinsquare during the year ended December 31, 2020, as reflected in the accompanying consolidated statements of operations.

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, 2020 and 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:

<table>
<thead>
<tr>
<th>April 10, 2019</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Tess shares held by Riot Blockchain, Inc.</td>
<td>2,708,333</td>
</tr>
<tr>
<td>Per share fair value</td>
<td>$ 0.03</td>
</tr>
<tr>
<td><strong>Fair value of Tess shares held by Riot Blockchain, Inc.</strong></td>
<td><strong>$ 90.00</strong></td>
</tr>
</tbody>
</table>

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”.

F-20
The deconsolidation of Tess resulted in a gain of approximately $1.1 million calculated as follows on the date of deconsolidation:

<table>
<thead>
<tr>
<th>Item</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current assets</td>
<td>$130</td>
</tr>
<tr>
<td>Less:</td>
<td></td>
</tr>
<tr>
<td>Accounts payable</td>
<td>$761</td>
</tr>
<tr>
<td>Accrued expenses</td>
<td>$275</td>
</tr>
<tr>
<td>Convertible notes</td>
<td>$1,696</td>
</tr>
<tr>
<td><strong>Net liabilities</strong></td>
<td><strong>(2,602)</strong></td>
</tr>
<tr>
<td>Non-controlling interest share</td>
<td>$1,553</td>
</tr>
<tr>
<td><strong>Sub-total</strong></td>
<td><strong>(1,048)</strong></td>
</tr>
<tr>
<td>Less: fair value of shares owned by Riot Blockchain</td>
<td>$90</td>
</tr>
<tr>
<td><strong>Gain on deconsolidation of Tess</strong></td>
<td><strong>$(1,139)</strong></td>
</tr>
</tbody>
</table>

**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 2019 automatic conversion resulted in an 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, 2020 and 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, 2020 and 2019, intangible rights acquired totaled zero. 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 the year ended December 31, 2020, the Company purchased 33,646 model S19, S19-Pro, and S19j-Pro Antminers from Bitmain for a total purchase price of approximately $76.1 million, including $6.6 million paid for the 3,043 miners delivered during the year ended December 31, 2020, $1.9 million paid as deposits in deposits during the same period, and the remaining $37.6 million due to be paid during the year ending December 31, 2021. As of December 31, 2020, the Company had received 3,043 of the new miners, including all 1,040 model S19 miners and 2,003 model S19-Pro miners, but had not yet received 30,603 of the new miners, including 18,603 model S19-Pro miners and all 12,000 model S19j-Pro miners. Accordingly, the Company recorded the $31.9 million paid during the year ended December 31, 2020 for these outstanding miners as a deposit, which includes these miners on the accompanying consolidated balance sheet. (See Note 7 for additional details.)

During December 2019, the Company purchased 4,000 next generation Bitmain model S17-Pro Antminers from Bitmain for approximately $6.3 million. The Company had received 3,000 of these model S17-Pro miners by December 31, 2019, and, accordingly, they were recorded as assets on the Company’s consolidated balance sheet for the year ended December 31, 2019. However, 1,000 of these S17-Pro miners were not received until February 2020. Therefore, as of December 31, 2019, the Company recorded the $1.4 million paid in advance for these 1,000 model S17-Pro miners as a deposit on the accompanying consolidated balance sheet.
Riot Blockchain, Inc. and Subsidiaries  
Notes to Consolidated Financial Statements  
(in thousands, except for share and per share amounts)

Patents

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, 2020 and 2019 were as follows:

<table>
<thead>
<tr>
<th></th>
<th>December 31, 2020</th>
<th>December 31, 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patents</td>
<td>$ 713</td>
<td>$ 1,157</td>
</tr>
<tr>
<td>Accumulated amortization</td>
<td>(377)</td>
<td>(698)</td>
</tr>
<tr>
<td>Patents, net</td>
<td>$ 336</td>
<td>$ 459</td>
</tr>
</tbody>
</table>

During the year ended December 31, 2020, the Company wrote-off approximately $0.05 million of remaining net patent costs related to its now expired license agreement with Washington University in St. Louis. See Note 13.

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

<table>
<thead>
<tr>
<th>For the year ended December 31,</th>
<th>Estimated amortization expense</th>
</tr>
</thead>
<tbody>
<tr>
<td>2021</td>
<td>86</td>
</tr>
<tr>
<td>2022</td>
<td>86</td>
</tr>
<tr>
<td>2023</td>
<td>86</td>
</tr>
<tr>
<td>2024</td>
<td>78</td>
</tr>
<tr>
<td>Total</td>
<td>$ 336</td>
</tr>
</tbody>
</table>

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 $167,000 and $86,000 for the years ended December 31, 2020 and 2019, 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, 2020 and 2019.

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 “2019 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. As additional consideration for the investment, the Company issued a total of 150,000 restricted common shares to the Investors. The Notes were subject to prepayment penalties, default conditions and other terms and conditions, as set forth 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.

F-22
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 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 in connection with the 2019 Private Financing, 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 (60) 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.

**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 $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 non-voting and 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 is also subject to beneficial ownership limitations and conversion limitations, as further described in the documents.

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, 2020 and 2019, 4,199 shares of Series B Preferred Stock were outstanding.
Common Stock:

At-the-Market Equity Offerings:

2019 ATM Offering

The Company entered into an At-The-Market Sales Agreement with H.C. Wainwright & Co., LLC ("H.C. Wainwright"), dated as of May 24, 2019 (the "Sales Agreement"), relating to the sale by the Company through H.C. Wainwright as its sales agent, of up to $100.0 million in shares of the Company's common stock from time to time in an at-the-market offering ("2019 ATM Offering"). All sales of the Company’s common stock in the 2019 ATM Offering were made pursuant to the prospectus and prospectus supplement forming a part of the Company’s shelf registration statement on Form S-3, as amended (Registration No. 333-226111), which was declared effective as of May 8, 2019 (the "2019 Registration Statement").

Effective as of October 15, 2020, as part of the First Amendment to the Sales Agreement discussed below, the Company and H.C. Wainwright terminated the 2019 ATM Offering. As of its termination, the Company had cumulatively sold 30.6 million shares of its common stock, for an aggregate gross sales price of approximately $4 million pursuant to the 2019 ATM Offering. With the termination of the 2019 ATM Offering, no additional securities will be sold by the Company pursuant to the prospectus supplement relating to the 2019 Registration Statement.

2020 ATM Offerings

As of October 15, 2020, the Company and H.C. Wainwright entered into the first amendment to the Sales Agreement (the “First Amendment to the Sales Agreement”). Pursuant to the First Amendment to the Sales Agreement, the Company sold, through H.C. Wainwright as its sales agent, $100.0 million in shares of the Company’s common stock from time to time in an at-the-market offering (the “October 2020 ATM Offering”). According to the First Amendment to the Sales Agreement, the Company paid H.C. Wainwright a commission of up to 3.0% of the aggregate gross proceeds the Company receives from all sales of its common stock in the October 2020 ATM Offering.

All Sales of shares of the Company’s common stock, no par value in the October 2020 ATM Offering were made pursuant to the prospectus and prospectus supplement filed with and forming a part of the Company’s shelf registration statement on Form S-3 (Registration No. 333-249356), filed with the SEC on October 7, 2020 and declared effective as of October 15, 2020 (the "October 2020 Registration Statement"). Under the terms of the October 2020 ATM Offering, the Company only issued shares of its common stock. The Company did not issue any other securities, including but not limited to, options to purchase shares of the Company’s common stock and common stock warrants, under the October 2020 ATM Offering.

Effective December 12, 2020, the Company and H.C. Wainwright entered into the second amendment to the Sales Agreement (the "Second Amendment to the Sales Agreement"). Pursuant to the Second Amendment to the Sales Agreement, the Company has sold, through H.C. Wainwright as its sales agent, up to $200.0 million in shares of the Company's common stock from time to time in an at-the-market offering (the “December 2020 ATM Offering”). Pursuant to the Second Amendment to the Sales Agreement, the Company paid H.C. Wainwright a commission of up to 3.0% of the aggregate gross proceeds the Company received from all sales of its common stock in the December 2020 ATM Offering.

Under the terms of the 2019 and 2020 ATM Offerings, the Company only issued shares of its common stock.

2020 Transactions

During the year ended December 31, 2020, the Company received net proceeds under the Sales Agreement, as amended with H.C. Wainwright of approximately $257.5 million (after deducting $7.3 million in commissions and expenses), at a weighted average gross sales price of $5.50 per share, from sales of 49,932,051 shares of its common stock.

During the year ended December 31, 2020, the Company issued 200,000 shares of common stock in escrow under the Escrow Deposit Agreement were voided and cancelled.

During the year ended December 31, 2020, 122,377 shares of common stock were issued to a Company executive under an employment agreement in settlement of previously accrued compensation under the Company’s 2019 Riot Blockchain, Inc. Equity Incentive Plan (the “Equity Plan”), and 5,000 shares of common stock were issued in settlement of fully vested restricted stock rights previously granted and previously expensed under the Company’s former 2017 Equity Incentive Plan.

During the year ended December 31, 2020, 4,048,096 shares of common stock were awarded to employees of the Company in settlement of an equal number of fully vested restricted stock units awarded to such individuals by the Company pursuant to grants made under the Company’s 2019 Equity Plan. The Company withheld 193,881 of these shares at a fair value of approximately $0.45 million, to cover the withholding taxes related to the settlement of these vested restricted stock units. The settlement of the fully vested restricted stock units included the accelerated vesting of 471,544 restricted stock units due to the resignation of a member of the Company’s Board, as permitted under the 2019 Equity Plan.

During the year ended December 31, 2020, the Company issued 40,634 shares of its common stock to a consultant and advisors in settlement of fully vested restricted stock units granted under the 2019 Equity Plan.

During the year ended December 31, 2020, the Company issued 1,492,487 shares of its common stock related to the exercise of 1,492,487 common stock warrants granted to the Investors in the January 2019 Private Financing for cash of approximately $2.9 million or $1.94 per share. See Note 10.
2019 Transactions

During the year ended December 31, 2019, the Company received net proceeds under the 2019 ATM Sales Agreement, as amended, with H.C. Wainwright of approximately $23.8 million (after deducting $1.0 million commissions and expenses), at a weighted average gross sales price of $2.97 per share, from sales of 8,351,762 shares of its common stock.

As additional consideration for the January 2019 Private Financing, the Company issued a total of 50,000 restricted common shares to three investors at an average fair value of $1.70 per share. See Note 10.

During the year ended December 31, 2019, 1,813,500 shares of common stock were issued in connection with the conversion of the Notes issued to the investors in the January 2019 Private Financing. See Note 10.

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 former 2017 Equity Incentive Plan.

During the year ended December 31, 2019, under the Company’s 2019 Equity Plan, 1,493,832 restricted stock units were awarded to members of the Board, advisory board members, employees of the Company, and consultants. During this period, under the Company’s former 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 periods of three months to two years.

Note 12. Stock Options, Warrants and Restricted Common Stock

The Company provides stock-based compensation to directors, employees and consultants under the 2019 Equity Plan, which was approved by shareholders on October 23, 2019 at the 2019 Annual Meeting of Shareholders. On November 12, 2020 at the 2020 Annual Meeting of Shareholders, the shareholders approved the First Amendment to the 2019 Equity Plan, which raised the total number of shares of the Company’s common stock to 4,061,809 shares. The Company also provides stock-based compensation to employees, directors and consultants, with 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, 2020 and 2019, 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, 2020 and 2019, from the following categories:

<table>
<thead>
<tr>
<th>Years Ended December 31,</th>
<th>Restricted stock awards under the Plan</th>
<th>$3,407</th>
<th>$687</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Stock option awards under the Plan</td>
<td>$0</td>
<td>58</td>
</tr>
<tr>
<td></td>
<td>Total stock-based compensation</td>
<td>$3,407</td>
<td>$745</td>
</tr>
</tbody>
</table>

Restricted common stock awards

A summary of the Company’s restricted stock activity in the years ended December 31, 2020 and 2019 is as follows:

<table>
<thead>
<tr>
<th></th>
<th>Number of Shares</th>
<th>Weighted Average Grant-Date Fair Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unvested at January 1,</td>
<td>95,939 $12.49</td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vested</td>
<td>(58,772) $7.66</td>
<td></td>
</tr>
<tr>
<td>Granted</td>
<td>1,542,332 $1.41</td>
<td></td>
</tr>
<tr>
<td>Forfeited</td>
<td>(55,000) $14.95</td>
<td></td>
</tr>
<tr>
<td>Unvested at December</td>
<td>1,524,499 $1.37</td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td>(2,435,553) $1.34</td>
<td></td>
</tr>
<tr>
<td>Granted</td>
<td>1,544,359 $1.27</td>
<td></td>
</tr>
<tr>
<td>Unvested at December</td>
<td>633,305 $1.27</td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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, 2020, there was approximately $0.2 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 nine 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 years ended December 31, 2020 and 2019.

A summary of stock option activity under the Plan for options to employees, officers, directors and consultants, for the years ended December 31, 2020 and 2019, is presented below:

<table>
<thead>
<tr>
<th>Shares Underlying Options</th>
<th>Weighted Average Exercise Price</th>
<th>Weighted Average Contractual Term (Years)</th>
<th>Aggregate Intrinsic Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outstanding at January 1, 2019</td>
<td>62,000 $15.71</td>
<td>9.2 $</td>
<td>—</td>
</tr>
<tr>
<td>Granted</td>
<td>— $</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Exercised</td>
<td>— $</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Forfeited</td>
<td>(50,000) $18.50</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Outstanding at December 31, 2019</td>
<td>12,000 $4.09</td>
<td>3.7 $</td>
<td>155</td>
</tr>
<tr>
<td>Exercisable at December 31, 2020</td>
<td>12,000 $4.09</td>
<td>2.7</td>
<td>155</td>
</tr>
</tbody>
</table>

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, 2020 and 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, 2020 and 2019, respectively.

As of December 31, 2020 and 2019, there was no unrecognized stock-based compensation related to stock options.
Other common stock purchase warrants

As of December 31, 2020, the Company had outstanding, 2,061,770 warrants issued in connection with offerings. The following is a summary of the change in outstanding warrants during the years ended December 31, 2020 and 2019:

<table>
<thead>
<tr>
<th>Shares Underlying Options/Warrants</th>
<th>Weighted Average Exercise Price</th>
<th>Weighted Average Remaining Contractual Term (Years)</th>
<th>Aggregate Intrinsic Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outstanding at January 1, 2019</td>
<td>1,671,113 $39.47</td>
<td>2.0 $</td>
<td>—</td>
</tr>
<tr>
<td>Issued</td>
<td>1,908,144 $1.94</td>
<td>5.2 $</td>
<td>—</td>
</tr>
<tr>
<td>Forfeited</td>
<td>(5,000) $7.90</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Outstanding at December 31, 2019</td>
<td>3,574,257 $19.48</td>
<td>2.9 $</td>
<td>—</td>
</tr>
<tr>
<td>Exercised</td>
<td>(1,492,487) $1.94</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Forfeited</td>
<td>(20,000) $3.50</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Outstanding and exercisable at December 31, 2020</td>
<td>2,061,770 $32.33</td>
<td>1.1 $</td>
<td>6,256</td>
</tr>
</tbody>
</table>

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, 2020, the Company issued 1,492,487 shares of its common stock in connection with the exercise of 1,492,487 common stock warrants for net proceeds of approximately $2.9 million.

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, 2020 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, 2020.

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 WU license agreement expired under its terms in 2020, with no impact on the License Agreement. 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, 2020, the Company would be entitled to receive future payments if Ceva achieves certain regulatory approvals as further outlined in the License Agreement.
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, 2020, deferred revenue of $0.1 million has been classified as a current liability and $0.7 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, 2020 and 2019, approximately $0.1 million was recorded as the amortized license fee revenue.

Note 14. Income taxes

The components of the loss from continuing operations before income taxes for the years ended December 31, 2020 and 2019 are as follows:

<table>
<thead>
<tr>
<th></th>
<th>For the years ended December 31,</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2020</td>
<td>2019</td>
</tr>
<tr>
<td>Domestic</td>
<td>$ (12,667)</td>
<td>$ (20,446)</td>
</tr>
<tr>
<td>Foreign</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Loss from Continuing Operations before Income Taxes</td>
<td>$ 12,667</td>
<td>$ (20,446)</td>
</tr>
</tbody>
</table>

The components of income tax benefit are as follows:

<table>
<thead>
<tr>
<th></th>
<th>As of December 31,</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2020</td>
</tr>
<tr>
<td>Current:</td>
<td></td>
</tr>
<tr>
<td>US Federal</td>
<td>$</td>
</tr>
<tr>
<td>US State</td>
<td>—</td>
</tr>
<tr>
<td>Foreign</td>
<td>—</td>
</tr>
<tr>
<td>Total current benefit</td>
<td></td>
</tr>
<tr>
<td>Deferred:</td>
<td></td>
</tr>
<tr>
<td>US Federal</td>
<td>$</td>
</tr>
<tr>
<td>US State</td>
<td>—</td>
</tr>
<tr>
<td>Foreign</td>
<td>—</td>
</tr>
<tr>
<td>Total deferred benefit</td>
<td>—</td>
</tr>
<tr>
<td>Total benefit for income taxes</td>
<td>$</td>
</tr>
</tbody>
</table>

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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, 2020 and 2019 are comprised of the following:

<table>
<thead>
<tr>
<th></th>
<th>As of December 31,</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2020</td>
</tr>
<tr>
<td>Deferred income tax assets:</td>
<td></td>
</tr>
<tr>
<td>Net operating loss carryforwards</td>
<td>$51,938</td>
</tr>
<tr>
<td>Research and development credit carryforwards</td>
<td>1,063</td>
</tr>
<tr>
<td>Stock option expense</td>
<td>1,253</td>
</tr>
<tr>
<td>Impairment of mining related assets and other</td>
<td>803</td>
</tr>
<tr>
<td>Total deferred tax assets</td>
<td>55,057</td>
</tr>
<tr>
<td>Valuation allowance</td>
<td>(55,057)</td>
</tr>
<tr>
<td>Net deferred tax assets</td>
<td>$—</td>
</tr>
</tbody>
</table>

The Company has approximately $210.6 million of federal and state tax Net Operating Losses ("NOLs") that may be available to offset future taxable income, if any. The federal net operating loss carryforwards of $110.3 million, if not utilized, will expire in 2037. Under the new Tax Cuts and Jobs Act, all NOLs incurred after December 31, 2017 are carried forward indefinitely for federal tax purposes. The Coronavirus Aid, Relief, and Economic Security Act ("CARES Act") signed into law on March 27, 2020, provided that NOLs generated in a taxable year beginning in 2018, 2019, or 2020, may now be carried back five years and forward indefinitely. In addition, the 80% taxable income limitation is temporarily removed, allowing NOLs to fully offset net taxable income.

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 2020, 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.

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, 2020 and 2019. The valuation allowance increased by approximately $9.7 million during the year ended December 31, 2020.

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

<table>
<thead>
<tr>
<th></th>
<th>For the years ended December 31,</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2020</td>
</tr>
<tr>
<td>Statutory federal income tax expense (benefit)</td>
<td>$ (2,660)</td>
</tr>
<tr>
<td>State taxes, net of federal tax expense (benefit)</td>
<td>(471)</td>
</tr>
<tr>
<td>Stock compensation</td>
<td>(45)</td>
</tr>
<tr>
<td>Tax return to provision true-up</td>
<td>(8,737)</td>
</tr>
<tr>
<td>State tax rate change</td>
<td>2,231</td>
</tr>
<tr>
<td>Other</td>
<td>-</td>
</tr>
<tr>
<td>Change in valuation allowance</td>
<td>9,682</td>
</tr>
<tr>
<td>Income taxes benefit</td>
<td>$—</td>
</tr>
</tbody>
</table>

The Company has not identified any uncertain tax positions requiring a reserve as of December 31, 2020 and 2019. 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, 2020 and 2019.
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, 2020 and 2019.

**Note 15. Commitments and Contingencies**

**Commitments:**

**Coinmint Co-location Mining Services Agreement**

On April 8, 2020, the Company entered into an agreement with Coinmint, (the “Coinmint Agreement”), pursuant to which Coinmint agreed to provide up to approximately 9.5 MW of power and to perform all maintenance necessary to operate Riot’s miners at the Coinmint facility. In exchange, Coinmint is reimbursed for direct production expenses and receives a performance fee based on the net cryptocurrencies generated by Riot's miners deployed at the Coinmint facility. The initial term of the Coinmint Agreement was six months with automatic renewals for subsequent three (3) month terms until and unless terminated as provided in the agreement.

The Company determined the agreement with Coinmint does not meet the definition of a lease in accordance with Accounting Standards Codification (“ASC”) 842, Leases.

**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 leased approximately 107,600 square foot warehouse located in Oklahoma City, Oklahoma. Pursuant to the terms of the OKC Lease and subsequent amendments, the OKC Lease provided the following:

- extended the initial term of the lease through June 30, 2020;
- monthly base rent of $230,000 for January 2019 and $190,000 per month thereafter for the duration of the OKC Lease, including any renewals thereof; and
- changes the monthly electricity usage charges.

On June 30, 2020 the OKC Lease expired under its terms. During the three months ended June 30, 2020, the Company had relocated its miners to the Coinmint facility and vacated the OKC facility. Subsequent to the expiration the Company received a full refund of its $0.7 million lease deposit, less applicable electricity charges on July 2, 2020.
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 leased 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 was for thirty-nine (39) months expiring on August 9, 2021. During May 2020, an agreement was reached to terminate the Florida Lease, and the Company expensed the termination payments for the Florida Lease.

Operating Leases

At December 31, 2020, the Company did not have any significant operating lease liabilities or right of use assets.

The following summarizes quantitative information about the Company’s operating leases:

<table>
<thead>
<tr>
<th>Lease cost</th>
<th>Years Ended</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>December 31,</td>
</tr>
<tr>
<td></td>
<td>2020</td>
</tr>
<tr>
<td>Operating lease cost</td>
<td>$1,240</td>
</tr>
<tr>
<td>Variable lease cost</td>
<td>$1,040</td>
</tr>
<tr>
<td>Operating lease expense</td>
<td>$2,280</td>
</tr>
<tr>
<td>Short-term lease rent expense</td>
<td>20</td>
</tr>
<tr>
<td><strong>Total rent expense</strong></td>
<td><strong>$2,300</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Other information</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating cash flows from operating leases</td>
<td>$1,207 $2,377</td>
</tr>
<tr>
<td>Right of use assets exchanged for new operating lease liabilities</td>
<td>$ - $2,664</td>
</tr>
<tr>
<td>Weighted-average remaining lease term – operating leases</td>
<td>- 0.5 years</td>
</tr>
<tr>
<td>Weighted-average discount rate – operating leases</td>
<td>N/A 10%</td>
</tr>
</tbody>
</table>

Rent expense including electric power costs, recorded on a straight-line basis, was approximately $2.3 million (up to the OKC lease termination as of June 30, 2020) and $6 million for the years ended December 31, 2020 and 2019, respectively.

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 estimable, then an accrual for the cost to resolve or settle these claims is recorded by 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, 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 information, the Company does not believe there is a reasonably possible possibility that, other than with regard to the Class Action described below, any material loss, if any, will result from any claims, lawsuits and proceedings to which the Company is subject to either individually, or in the aggregate.

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Shareholder Class Action Suit

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.

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.


On April 30, 2020, the court granted the motions to dismiss, which resulted in the dismissal of all claims without prejudice. On December 24, 2020, Lead Plaintiff filed another amended complaint. Defendants filed multiple motions to dismiss the amended complaint starting on February 8, 2021. 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 August 10, 2021 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 unspecified 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 unspecified 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, another 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 unspecified 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.

On December 13, 2018, another shareholder derivative complaint was filed on behalf of the Company in the United District Court for the Northern District of New York (Monts v. O’Rourke, et al., Case No. 1:18-cv-01443). The shareholder plaintiffs allege claims for violation of Section 14(a) of the Securities Exchange Act of 1934, breach of fiduciary duties, unjust enrichment, waste of corporate assets, and aiding and abetting 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 unspecified 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.

Indemnification Demands

On April 3, 2020, a complaint was filed against Riot Blockchain by Barry C. Honig and GRQ Consultants, Inc. (“GRQ”) in the United States District Court for the Southern District of New York, Honig v. Riot Blockchain, Inc., Case No. 20-cv-02808-NRB. Mr. Honig and GRQ allege that Riot has failed to indemnify them pursuant to terms of the Securities Purchase Agreement (“SPA”) and Registration Rights Agreement (“RRA”), both dated March 16, 2017. Mr. Honig and GRQ allege declaratory judgment and breach of contract claims, seeking fees and expenses they incurred in connection with litigation and a SEC investigation involving Riot. On July 9, 2020, Riot filed a motion to dismiss both of the claims. On November 20, 2020, the Court granted Riot Blockchain’s motion to dismiss all claims and awarded Riot Blockchain attorneys’ fees as the prevailing party.

In addition to the suit filed by Mr. Honig and GRQ, other purported parties and beneficiaries of the SPA and RRA have also recently demanded indemnification from Riot Blockchain related to the same litigation and SEC investigation. For the reasons set forth in the Court’s order dismissing Mr. Honig’s and GRQ’s indemnification claims, Riot Blockchain believes that it does not owe an indemnification obligation to the other purported parties and beneficiaries of the SPA and RRA that have made an indemnification demand. Riot Blockchain intends to vigorously contest similar demands for indemnification.
Kashwise Demand

On February 18, 2020, the Company received a demand letter from Kashwise Global Funding, Inc. (“Kashwise”) for the payment of fees pursuant to an alleged arrangement between the Company and Kashwise in connection with the January 2019 private exempt offering of the Company’s securities to a group of accredited investors (the “Kashwise Demand”). The Company timely responded to the Kashwise Demand; however, on April 13, 2020, Kashwise Global Funding Solutions, Inc. filed suit against the Company in the Circuit Court of the 17th Judicial Circuit in and for Broward County, Florida (the “Kashwise Suit”) alleging substantially similar claims as in the Kashwise Demand. The Company has removed the Kashwise Suit to Federal District Court in and for the Southern District of Florida where it remains pending with a scheduled trial date (if not delayed by the COVID-19 pandemic) in June of 2021. The Company continues to vigorously dispute the allegations made in the Kashwise Suit. However, the Company cannot reasonably estimate the likelihood of an unfavorable outcome or the magnitude of such an outcome, if any.

SEC Subpoena and Other Matters

SEC Subpoena

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 had as of the date of the letter, it did not intend to recommend an enforcement action against Riot.

Registration Rights Penalty

During December 2017, the Company closed on the sale of approximately $37 million of units comprised of 1,646,113 shares of its common stock and warrants to purchase up to 1,646,113 shares of its common stock (the “Units”) in a private exempt offering (the “December 2017 Private Placement”) to certain accredited investors (the “December 2017 Investors”), as previously disclosed by the Company on its Current Report on Form 8-K filed with the SEC on December 19, 2017. In connection with the December 2017 Private Placement, the Company entered into registration rights agreements (the “December 2017 Registration Rights Agreements”) with the December 2017 Investors, pursuant to which the Company agreed to take certain steps to register the shares underlying the Units. The Company accounted for the December 2017 Registration Rights Agreements in accordance with ASC 825-20, “Registration Payment Arrangements.” ASC 825-20 addresses an issuer’s accounting for registration payment arrangements and, in accordance with ASC 450-20 “Loss Contingencies,” the Company recorded approximately $1,358,000 for this contingent liability in 2018.
On January 5, 2018, pursuant to December 2017 Registration Rights Agreements, the Company filed a registration statement on Form S-3 to register the shares underlying the Units.

Subsequently, in April 2018, the Company received a subpoena from the SEC as part of an investigation, requesting documents and information. In July 2018, the SEC issued an Order Directing Examination and Designating Officers Pursuant to Section 8(e) of the Securities Act with respect to certain of the Company’s registration statements, including the registration statement on Form S-3 it filed pursuant to the December 2017 Registration Rights Agreements. On October 12, 2018, the Company filed for withdrawal of this registration statement on Form S-3, as well as other of its registration statements. On October 22, 2018, the Company was notified by SEC staff that the SEC had terminated the Section 8(e) examination with respect to the above-referenced registration statements. 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 had as of the date of the letter, it did not intend to recommend an enforcement action against Riot.

Following the conclusion of the SEC’s activities as described above, the Company has evaluated its performance of its obligations under the December 2017 Registration Rights Agreements and has determined that it substantially complied with its requirements, and that its ultimate inability to cause the registration of the shares underlying the Units as required by the December 2017 Registration Rights Agreements was due to actions taken by the SEC. The Company has therefore determined to reverse the accrual pursuant to ASC 450-20 related to the December 2017 Registration Rights Agreements for its 2020 consolidated financial statements.

**Note 16. Subsequent Events:**

**Financing**

During January 2021, in connection with the Company’s Sales Agreement, as amended with H.C. Wainwright, the Company received gross proceeds of approximately $84.8 million from the sale of 4,433,468 shares of common stock, with an average fair value of $19.13 per share, in the December 2020 ATM Offering. With the sale and issuance of these shares, all $200 million in shares of the Company’s common stock registered under the December 2020 Registration Statement had been issued and the Company completed the December 2020 ATM Offering. Under the terms of the December 2020 ATM Offering, the Company only issued shares of its common stock.

**Common Stock**

Subsequent to December 31, 2020, 242,645 shares of common stock were issued to members of the Company’s board of directors, officers, employees and advisors of the Company in settlement of an equal number of fully vested restricted stock units awarded to such individuals by the Company pursuant to grants made under the Company’s 2019 Equity Plan. The Company withheld 40,250 of these shares at a fair value of approximately $0.3 million, to cover the withholding taxes related to the settlement of these vested restricted stock units.

Subsequent to December 31, 2020, for 2021 services the Company awarded 41,440 restricted shares of common stock to directors, employees and advisors generally vesting over a one-year period.

Subsequent to December 31, 2020, the Company issued 415,657 shares of its common stock in connection with the exercise of 415,657 common stock warrants for net proceeds of approximately $0.8 million.

Subsequent to December 31, 2020, warrants to purchase 1,257,235 shares of common stock were exercised on a cashless basis for 543,686 shares of common stock.

Subsequent to December 31, 2020, 2,000 shares of the Company’s Series B preferred stock were converted into 2,000 shares of its common stock, leaving 2,199 shares outstanding.
Commitments

Executive Employment Agreements

On February 8, 2021, Mr. Jason Les, agreed to serve as the Company’s Chief Executive Officer (“CEO”), effective on the same date. Mr. Les and the Company entered into an Executive Employment Agreement, pursuant to which Mr. Les has agreed to serve as the Company’s CEO for a five (5) year term, which renews for successive one (1) year terms after the expiration of the initial term. As CEO, Mr. Les will receive a prorated annual salary of $240,000 and ten (10) bitcoin. Pursuant to the Les Employment Agreement, Mr. Les was also awarded an initial equity award of 25,000 restricted stock units (RSUs) under and pursuant to the 2019 Equity Incentive Plan (the “Plan”), which RSUs are eligible to vest in four (4) equal quarterly installments on the first day following the end of each fiscal quarter following his appointment as CEO.

On February 8, 2021, Mr. Jeffrey McGonegal, who was appointed CEO in early 2019, agreed to focus on his long-standing position as the Company’s Chief Financial Officer (“CFO”), effective as of the same date the Company and Mr. McGonegal entered into the First Amendment to the Amended and Restated Executive Employment Agreement (the “Amended McGonegal Employment Agreement”), pursuant to which Mr. McGonegal agreed to continue to serve as the Company’s CFO through February 7, 2022. Under the Amended McGonegal Employment Agreement, Mr. McGonegal will receive a prorated annual salary of $360,000. Pursuant to the Amended McGonegal Employment Agreement, Mr. McGonegal was also awarded an initial equity award of 20,000 RSUs pursuant to the 2019 Equity Plan, which RSUs are eligible to vest in four (4) equal quarterly installments.

Cryptocurrency Miner Purchases

Pursuant to a purchase agreement dated effective as of March 11, 2021, with Bitmain, the Company acquired an additional 1,500 model S19j (90 TH/S) Antminers, for a total purchase price of approximately $7.3 million, of which $3.6 million was paid to Bitmain as a partially-refundable deposit on the acquisition of these 1,500 new model S19j miners, which are scheduled to be delivered in October 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 (principal executive officer) and our Chief Financial Officer (principal financial 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 and Chief Financial 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 and Chief Financial Officer have concluded that our disclosure controls and procedures were not effective at the reasonable assurance level as of December 31, 2020 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. 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, 2020, 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, 2020. 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, and (iii) 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.

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.

Our independent registered public accounting firm, Marcum LLP, is not required to formally attest to the effectiveness of our internal controls over financial reporting as we are a smaller reporting company for the year ended December 31, 2020.

Remediation

Our Board of Directors and management take internal control over financial reporting and the integrity of our financial statements seriously. Management continues to work to improve its controls related to our material weaknesses, specifically relating to user access and change management surrounding the Company’s IT systems and applications. Management will continue to implement measures to remediate material weaknesses, 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.

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.

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, 2020.
ITEM 9B. OTHER INFORMATION.
None.

PART III

ITEM 10. DIRECTORS, 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 2021 annual meeting of stockholders, which we intend to file within 120 days of the end of our fiscal year ended December 31, 2020.

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 2021 annual meeting of stockholders, which we intend to file within 120 days of the end of our fiscal year ended December 31, 2020.

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 2021 annual meeting of stockholders, which we intend to file within 120 days of the end of our fiscal year ended December 31, 2020.

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 2021 annual meeting of stockholders, which we intend to file within 120 days of the end of our fiscal year ended December 31, 2020.

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 2021 annual meeting of stockholders, which we intend to file within 120 days of the end of our fiscal year ended December 31, 2020.

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).


4.2 Amendment to Certificate of Designation of 0% Series B Convertible Preferred Stock of the Company (Incorporated by reference to Exhibit 3.1 of the Current Report on Form 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 to Exhibit 3.1 of the Current Report on Form 8-K filed November 3, 2017).


4.5 2019 Equity Incentive Plan (Incorporated by reference to Appendix A to the Definitive Proxy Statement on Schedule DEF14A filed September 20, 2019).


4.8 Form of Purchase Agreement by and between the Company and Tess Inc. dated as of October 16, 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 Quarterly Report on Form 10-Q for the quarter ended September 30, 2017 filed November 13, 2017).


4.18 Form 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).


4.20 Form of Escrow Deposit 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).


4.23 Form of Senior Secured Convertible Promissory Note dated as of January 28, 2019 (Incorporated by reference to Exhibit 4.1 of the Current Report on Form 8-K filed February 1, 2019).


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).
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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 Second Amendment to Lease, dated November 29, 2018 (Incorporated by reference to Exhibit 10.1 of the Current Report on Form 8-K filed December 6, 2018).


10.5 Fourth Amendment to Lease, dated effective as of April 10, 2020 (Incorporated by reference to Exhibit 10.1 of the Current Report on Form 8-K filed April 20, 2020).

10.6 Coinmint Co-Location Mining Services Agreement by and between Riot Blockchain, Inc. and Coinmint, LLC, dated effective as of April 8, 2020 (Incorporated by reference to Exhibit 10.1 of the Current Report on Form 8-K filed April 14, 2020).†

10.7 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).


10.10 First Amendment to the Amended and Restated McGonegal Employment Agreement by and between Riot Blockchain, Inc. and Jeffrey McGonegal, dated as of February 8, 2021 (Incorporated by reference to Exhibit 10.2 of the Current Report on Form 8-K filed February 10, 2021).


10.12 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).


10.16 Asset Purchase Agreement by and between Blockchain Mining Supply & Services, Ltd and the Company dated as of February 15, 2018 (Incorporated by reference to Exhibit 10.3 of the Current Report on Form 8-K filed February 16, 2018).

10.17 Escrow Agreement by and between Blockchain Mining Supply & Services, Ltd. and the Company dated as of February 15, 2018 (Incorporated by reference to Exhibit 10.4 of the Current Report on Form 8-K filed February 16, 2018).

10.18 Sale Purchase Agreement by and between Bitmaintech PTE, Ltd. and Riot Blockchain, Inc., dated as of December 2, 2019 (Incorporated by reference to Exhibit 10.1 of the Current Report filed on December 4, 2019).

10.19 Escrow Agreement by and between Blockchain Mining Supply & Services, Ltd. and the Company dated February 15, 2018 (Incorporated by reference to Exhibit 10.01 of the Current Report on Form 8-K filed February 16, 2018).†

10.20 Sale and Purchase Agreement by and between Bitmaintech PTE, Ltd. and Riot Blockchain, Inc. dated as of April 28, 2020 (Incorporated by reference to Exhibit 10.1 of the Current Report on Form 8-K filed May 5, 2020).†

10.21 Sale and Purchase Agreement by and between Bitmaintech PTE, Ltd and Riot Blockchain, Inc., dated as of May 6, 2020 (Incorporated by reference to Exhibit 10.1 of the Current Report on Form 8-K filed May 12, 2020).†

10.22 Sale and Purchase Agreement by and between Bitmaintech PTE, Ltd and Riot Blockchain, Inc., dated as of June 1, 2020 (Incorporated by reference to Exhibit 10.1 of the Current Report on Form 8-K filed June 5, 2020).†

10.23 Sale and Purchase Agreement by and between Bitmaintech PTE, Ltd and Riot Blockchain, Inc. dated as of August 12, 2020 (Incorporated by reference to Exhibit 10.1 of the Current Report on Form 8-K filed August 18, 2020).†

10.24 Amendment No. 1 to Sale and Purchase Agreement by and between Bitmaintech PTE, Ltd and Riot Blockchain, Inc. dated as of August 25, 2020 (Incorporated by reference to Exhibit 10.2 of the Current Report on Form 8-K filed August 27, 2020).†

10.25 Sale and Purchase Agreement by and between Bitmaintech PTE, Ltd and Riot Blockchain, Inc. dated as of August 24, 2020 (Incorporated by reference to Exhibit 10.1 of the Current Report on Form 8-K filed August 27, 2020).†

10.26 Sale and Purchase Agreement by and between Bitmaintech PTE, Ltd and Riot Blockchain, Inc. dated as of September 30, 2020 (Incorporated by reference to Exhibit 10.1 of the Current Report on Form 8-K filed October 6, 2020).†

10.27 Sale and Purchase Agreement by and between Riot Blockchain, Inc. and Bitmain Technologies Limited, dated as of December 18, 2020, for the acquisition of 3,000 S19 Pro (110 TH/s) Miners (Incorporated by reference to Exhibit 10.1 of the Current Report on Form 8-K filed December 22, 2020).†

10.28 Sale and Purchase Agreement by and between Riot Blockchain, Inc. and Bitmain Technologies Limited, dated as of December 18, 2020, for the acquisition of 12,000 S19j Pro (100 TH/s) Miners (Incorporated by reference to Exhibit 10.2 of the Current Report on Form 8-K filed December 22, 2020).†
10.29 Sale and Purchase Agreement by and between Riot Blockchain, Inc. and Bitmain Technologies Limited, dated as of March 11, 2021, for the acquisition of 1,500 S19j Pro (90 TH/s) Miners (Incorporated by reference to Exhibit 10.1 of the Current Report on Form 8-K filed March 17, 2020).†


10.32 Form of Securities Purchase Agreement dated as of January 28, 2019 (Incorporated by reference to Exhibit 10.01 of the Current Report on Form 8-K filed on February 1, 2019).

10.33 Form of Security Agreement dated as of January 28, 2019 (Incorporated by reference to Exhibit 10.02 of the Current Report on Form 8-K filed on February 1, 2019).

10.34 Form of Registration Rights Agreement dated as of January 28, 2019 (Incorporated by reference to Exhibit 10.03 of the Current Report on Form 8-K filed on February 1, 2019).

10.35 At 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 on Form 8-K filed on May 24, 2019).

10.36 First Amendment to the At The Market Offering Agreement, dated as of October 6, 2020, with H. C. Wainwright & Co., LLC (Incorporated by reference to Exhibit 1.01 of the Registration Statement on Form S-3 filed on December 4, 2020).

10.37 Second Amendment to the At The Market Offering Agreement, dated as of December 24, 2020, with H. C. Wainwright & Co., LLC (Incorporated by reference to Exhibit 1.01 of the Registration Statement on Form S-3 filed on December 4, 2020).


23 Consent of Independent Registered Public Accounting Firm.

31 Certifications.

31.1 Rule 13a-14(a)/15d-14(a) - Certification of Chief Executive Officer (principal executive officer).*

31.2 Rule 13a-14(a)/15d-14(a) - Certification of Chief Financial Officer (principal financial officer).*

32.1 Section 1350 Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (Principal Executive Officer). *

32.2 Section 1350 Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (Principal Financial Officer).*

101 Inline 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) Statements of Cash Flows and (v) the Notes to the Consolidated Financial Statements *

104 Cover Page Interactive Data File (formatted in Inline XBRL and contained in Exhibit 101).*

* Filed herewith.

† Portions of this exhibit have been omitted as confidential information.
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 31, 2021, by the undersigned thereunto duly authorized.

RIOT BLOCKCHAIN, INC.

/s/ Jason Les
Jason Les,
Chief Executive Officer

RIOT BLOCKCHAIN, INC.

/s/ Jeffrey G. McGonegal
Jeffrey G. McGonegal,
Chief Financial Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Jason Les and 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 31, 2021 in the capacities indicated.

/s/ Jason Les
Jason Les
Chief Executive Officer and Director (principal executive officer)

/s/ Jeffrey G. McGonegal
Jeffrey G. McGonegal
Chief Financial Officer (principal financial officer)

/s/ Benjamin Yi
Benjamin Yi, Director & Chairperson

/s/ Hubert Marleau
Hubert Marleau, Director

/s/ Hannah Cho
Hannah Cho, Director
We consent to the incorporation by reference in the Registration Statement of Riot Blockchain, Inc. on Form S-8 (File No. 333-235355) of our report dated March 31, 2021, with respect to our audits of the consolidated financial statements of Riot Blockchain, Inc. and Subsidiaries as of December 31, 2020 and 2019 and for each of the two years in the period ended December 31, 2020, which report is included in this Annual Report on Form 10-K of Riot Blockchain, Inc. for the year ended December 31, 2020.

/s/ Marcum LLP

Marcum LLP
Los Angeles, CA
March 31, 2021
CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER

I, Jason Les, certify that:

1. I have reviewed this annual report on Form 10-K of Riot Blockchain, Inc. for the year ended December 31, 2020;

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 xx, 2021

/s/ Jason Les
Jason Les,
Chief Executive Officer
PRINCIPAL EXECUTIVE OFFICER
CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER

I, Jeffrey G. McGonegal, certify that:

1. I have reviewed this annual report on Form 10-K of Riot Blockchain, Inc. for the year ended December 31, 2020;

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 xx, 2021

/s/ Jeffrey G. McGonegal
Jeffrey G. McGonegal,
Chief Financial Officer
PRINCIPAL FINANCIAL OFFICER
In connection with the Annual Report of Riot Blockchain, Inc. (the “Company”) on Form 10-K for the year ended December 31, 2020 as filed with the Securities and Exchange Commission on the date hereof (the “Report”), the undersigned Chief Executive Officer (principal executive officer) of the Company, Jason Les, 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 xx, 2021

/s/ Jason Les
Jason Les, Chief Executive Officer
PRINCIPAL EXECUTIVE OFFICER
In connection with the Annual Report of Riot Blockchain, Inc. (the “Company”) on Form 10-K for the year ended December 31, 2020 as filed with the Securities and Exchange Commission on the date hereof (the “Report”), the undersigned Chief Financial Officer (principal financial officer) of the Company, 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 xx, 2021

/s/ Jeffrey G. McGonegal
Jeffrey G. McGonegal, Chief Financial Officer
PRINCIPAL FINANCIAL OFFICER