

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM S-3

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

Riot Blockchain, Inc.

(Exact name of registrant as specified in its charter)

Nevada

(State or other jurisdiction of incorporation or organization)

84-1553387

(I.R.S. Employer Identification Number)

**202 6th Street, Suite 401
Castle Rock, CO 80104
303-794-2000**

(Address, including zip code, and telephone number, including area code of registrant's principal executive offices)

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(Name, address, including zip code, and telephone number, including area code, of agent for service)

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Approximate date of commencement of proposed sale to the public: From time to time after the effective date of this registration statement.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box: If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box: If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box. If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

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 the definitions of "large accelerated filer", "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

(do not check if smaller reporting company)

The aggregate market value of the common stock, no par value, held by non-affiliates of the registrant, based on the closing sale price of registrant's common stock as quoted on the Nasdaq Stock Market LLC on June 30, 2020 (the last business day of the registrant's most recently completed second fiscal quarter), was approximately \$78 million. Accordingly, the registrant qualifies under the SEC's revised rules as a "smaller reporting 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.

CALCULATION OF REGISTRATION FEE

Title of each class of Securities to be registered	Amount to be registered ⁽¹⁾	Proposed maximum offering price per unit ⁽²⁾	Proposed maximum aggregate offering price ⁽²⁾	Amount of registration fee ⁽³⁾
Common stock, no par value per share	—	—	—	—
Preferred stock, no par value per share	—	—	—	—
Warrants ⁽⁴⁾	—	—	—	—
Units	—	—	—	—
Total ⁽⁵⁾			\$ 100,000,000	\$ 12,980

- (1) There are being registered hereunder such indeterminate number of shares of common stock, preferred stock, such indeterminate number of warrants to purchase common stock or preferred stock and such indeterminate number of units consisting of any combination of the securities registered hereunder, as shall have an aggregate initial offering price not to exceed \$100,000,000. The securities registered also include such indeterminate amounts and numbers of common stock and preferred stock as may be issued upon conversion of or exchange for preferred stock that provide for conversion or exchange, upon exercise of warrants, issuance of units, or pursuant to the anti-dilution provisions of any such securities.
- (2) In no event will the aggregate initial offering price of all securities issued from time to time pursuant to this registration statement exceed \$100,000,000.
- (3) Calculated pursuant to Rule 457(o) under the Securities Act based on the maximum aggregate offering price, \$100,000,000.
- (4) Includes warrants to purchase common stock and warrants to purchase preferred stock.
- (5) Any of the securities registered hereunder may be sold separately, or as units with other securities registered hereby. We will determine the proposed maximum offering price per unit when we issue the above listed securities. The proposed maximum per unit and aggregate offering prices per class of securities will be determined from time to time by the registrant in connection with the issuance by the registrant of the securities registered under this registration statement and is not specified as to each class of security pursuant to General Instruction II.D of Form S-3 under the Securities Act.

The registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until the Registration Statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

EXPLANATORY NOTE

This Registration Statement on Form S-3 contains two prospectuses:

1. A base prospectus covering the offering, issuance and sale by us of up to \$100,000,000 of our common stock, preferred stock, warrants, and units; and
2. A sales agreement prospectus covering the offering, issuance and sale by us of up to a maximum aggregate offering price of \$100,000,000 of our common stock that may be issued and sold by our sales agent, H.C. Wainwright & Co., LLC, pursuant to the At The Market Offering Agreement between Riot Blockchain, Inc. and H.C. Wainwright & Co., LLC, dated May 24, 2019, as amended by the First Amendment to the At The Market Offering Agreement, dated effective as of the date this registration statement is declared effective by the Securities and Exchange Commission.

The base prospectus immediately follows this explanatory note. The specific terms of the securities offered pursuant to the base prospectus are specified in the sales agreement prospectus immediately following the base prospectus.

The information in this prospectus is not complete and may be changed. We may not sell these securities until the registration statement relating to these securities that has been filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED OCTOBER 6, 2020

PROSPECTUS

\$100,000,000

RIOT BLOCKCHAIN, INC.

**Common Stock
Preferred Stock
Warrants
Units**

We may from time to time, in one or more offerings at prices and on terms that we will determine at the time of each offering, sell common stock, preferred stock, warrants, units or a combination of these securities for an aggregate initial offering price of up to \$100,000,000. This prospectus provides you with a general description of the securities we may offer, which is not meant to be a complete description of each of the securities. Each time we offer to sell securities, we will provide you with a prospectus supplement that will contain specific information about the terms of that offering. Any prospectus supplement may also add, update, or change information contained in this prospectus. You should carefully read this prospectus and the applicable prospectus supplement as well as the documents incorporated or deemed to be incorporated by reference in this prospectus and the applicable prospectus supplement before you purchase any of the securities offered.

This prospectus may not be used to offer and sell securities unless accompanied by a prospectus supplement.

Our common stock is currently traded on the NASDAQ Capital Market under the symbol "RIOT". On October 2, 2020, the last reported sales price for our common stock was \$2.60 per share. We will apply to list any shares of common stock sold by us under this prospectus and any prospectus supplement on the NASDAQ Capital Market. The prospectus supplement will contain information, where applicable, as to any other listing of the securities on the NASDAQ Capital Market or any other securities market or exchange covered by the prospectus supplement.

We may offer the securities directly or through agents or to or through underwriters or dealers. If any agents or underwriters are involved in the sale of the securities, their names, and any applicable purchase price, fee, commission or discount arrangement between or among them, will be set forth, or will be calculable from the information set forth, in an accompanying prospectus supplement. We can sell the securities through agents, underwriters, or dealers only with delivery of a prospectus supplement describing the method and terms of the offering of such securities. See "Plan of Distribution" section on page 16 of this prospectus for further information.

The securities offered by this prospectus involve a significant degree of risk. See "Risk Factors" beginning on page 8 of this prospectus and in the other documents incorporated by reference in this prospectus. We may also include specific risk factors in an applicable prospectus supplement under the heading "Risk Factors" on the prospectus supplement. These risks could materially affect our business, results of operations or financial condition and affect the value of our securities. You could lose all or part of your investment. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also affect our business, results of operations or financial condition. For more information, see the section entitled "Where You Can Find More Information" on page 18 of this prospectus.

You should carefully review these Risk Factors prior to investing in our securities.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus is October 6, 2020

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement on Form S-3 that we filed with the Securities and Exchange Commission (the “Commission” or the “SEC”) using a “shelf” registration process. Under this shelf registration process, we may sell common shares, preferred shares (including convertible preferred shares), warrants for equity securities, and units comprised of any combination thereof from time to time in one or more offerings for up to an initial aggregate offering price of \$100,000,000. This prospectus provides you with a general description of the securities we may offer, which is not meant to be a complete description of each of the securities.

Each time we offer to sell securities, we will provide a prospectus supplement that will contain specific information about the terms of that offering. The prospectus supplement may also add, update, or change information contained in this prospectus or in documents incorporated by reference in this prospectus. A prospectus supplement which contains specific information about the terms of the securities being offered may also include a discussion of certain U.S. Federal income tax consequences and any risk factors or other special considerations applicable to the securities offered under this registration statement. To the extent that any statement that we make in a prospectus supplement is inconsistent with statements made in this prospectus or in documents incorporated by reference in this prospectus, you should rely on the information contained in the prospectus supplement. You should carefully read this prospectus and any prospectus supplement together with the additional information described under “Where You Can Find More Information” before buying any securities in this offering.

THIS PROSPECTUS MAY NOT BE USED TO CONSUMMATE A SALE OF SECURITIES UNLESS IT IS ACCOMPANIED BY A PROSPECTUS SUPPLEMENT.

This prospectus and the information incorporated by reference in this prospectus contain summaries of provisions of certain other documents, but reference is made to the actual documents for complete information. All of the summaries are qualified in their entirety by the actual documents. Copies of some of the documents referred to in this prospectus have been filed, will be filed or will be incorporated by reference as exhibits to the registration statement of which this prospectus is a part, and you may obtain copies of those documents as described below under the heading “Where You Can Find More Information” on page 18 of this prospectus.

You should only rely on the information contained or incorporated by reference in this prospectus, any prospectus supplement, or any related free writing prospectus. We have not authorized anyone to provide you with information different from what is contained or incorporated by reference into this prospectus, applicable prospectus supplement or any related free writing prospectus. If any person does provide you with information that differs from what is contained or incorporated by reference in this prospectus, applicable prospectus supplement or any related free writing prospectus, you should not rely on it.

No dealer, salesperson or other person is authorized to give any information or to represent anything not contained in this prospectus, applicable prospectus supplement or any related free writing prospectus.

You should assume that the information contained in this prospectus, any prospectus supplement or any related free writing prospectus is accurate only as of the date on the front of the document and that any information contained in any document we have incorporated by reference therein is accurate only as of the date on its face, regardless of the time of delivery of this prospectus, any prospectus supplement, any related free writing prospectus or any sale of a security under this registration statement.

These documents are not an offer to sell or a solicitation of an offer to buy these securities in any circumstances under which the offer or solicitation is unlawful, nor does this prospectus, any applicable supplement to this prospectus, or any related free writing prospectus constitute an offer to sell or the solicitation of an offer to buy securities in any jurisdiction to any person to whom it is unlawful to make such offer or solicitation in such jurisdiction.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus, including the documents that we incorporate by reference, contains 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”). Such forward-looking statements include those that express plans, anticipation, intent, contingency, goals, targets or future development and/or otherwise are not statements of historical fact. We believe these forward-looking statements are reasonable; however, you should not place undue reliance on any forward-looking statements, which are based on current expectations. These forward-looking statements are based on our current expectations and projections about future events and they are subject to risks and uncertainties known and unknown that could cause actual results and developments to differ materially from those expressed or implied in such statements.

In some cases, you can identify forward-looking statements by terminology, such as “expects,” “anticipates,” “intends,” “estimates,” “plans,” “believes,” “seeks,” “may,” “should,” “could” or the negative of such terms or other similar expressions. Accordingly, these statements involve estimates, assumptions and uncertainties that could cause actual results to differ materially from those expressed in them. Any forward-looking statements are qualified in their entirety by reference to the factors discussed throughout this prospectus. We intend for these forward-looking statements to be covered by the safe harbor provisions for forward-looking statements contained in the Private Securities Litigation Reform Act of 1995, and we are including this statement for purposes of complying with these safe harbor provisions.

You should read this prospectus and the documents that we reference herein and therein and have filed as exhibits to the registration statement, of which this prospectus and any prospectus supplement is part, completely and with the understanding that our actual future results may be materially different from what we expect. You should assume that the information appearing in this prospectus is accurate as of the date on the front cover of this prospectus or such prospectus supplement only. Because the risk factors referred to above, as well as the risk factors incorporated herein by reference, could cause actual results or outcomes to differ materially from those expressed in any forward-looking statements made by us or on our behalf, you should not place undue reliance on any forward-looking statements. Further, any forward-looking statement speaks only as of the date on which it is made, and we undertake no obligation to update any forward-looking statement to reflect events or circumstances after the date on which the statement is made or to reflect the occurrence of unanticipated events, except as may be required under applicable law. New factors emerge from time to time, and it is not possible for us to predict which factors will arise. In addition, we cannot assess the impact of each factor 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 qualify all of the information presented in this prospectus and particularly our forward-looking statements, by these cautionary statements.

SUMMARY

This summary highlights selected information from this prospectus and does not contain all of the information that you should consider in making your investment decision. You should carefully read the entire prospectus, the applicable prospectus supplement and any related free writing prospectus, including the risks of investing in our securities discussed under the heading “Risk Factors” contained in the applicable prospectus supplement and any related free writing prospectus, and under similar headings in the documents that are incorporated by reference into this prospectus. You should also carefully read the information incorporated by reference into this prospectus, including our financial statements, and the exhibits to the registration statement of which this prospectus is a component.

In this prospectus, “Riot Blockchain,” “the Company,” “we,” “us,” and “our” refer to Riot Blockchain, Inc., a Nevada corporation, unless the context otherwise requires.

ABOUT RIOT BLOCKCHAIN

Riot’s Business

Riot Blockchain, Inc. is one of the few publicly traded cryptocurrency mining companies in North America. The Company concentrates its cryptocurrency mining operations on supporting the bitcoin blockchain and, therefore, the primary cryptocurrency it mines is bitcoin. The Company also supports other cryptocurrency blockchain-focused technologies and initiatives. The Company has invested in several companies and internal initiatives with the intent of building and supporting the cryptocurrency blockchain technologies ecosystem.

Overview

Blockchain and Cryptocurrency Mining

The Company has built and continues to expand a cryptocurrency mining operation, which uses specialized computers (also known as “miners”) that generate cryptocurrency (primarily bitcoin). These miners are primarily manufactured in China by Bitmaintech PTE LTD (“Bitmain”), as well as several other smaller competitors, and make use of application-specific integrated circuit (“ASIC”) chips, which enable the miners to apply greater computational power (known in the industry as “hash rate”) to provide transaction verification services (known in the industry as “solving a block”) which helps support the bitcoin blockchain. For every block added, the bitcoin blockchain awards a bitcoin award equal to a set number of bitcoins per block. These bitcoin awards are subject to periodic “halving,” whereby the bitcoin award per block is reduced by half in order to control the supply of bitcoins on the market. Generally speaking, miners with greater hash rate have a higher chance of solving a block and receiving a bitcoin award. Accordingly, the Company has concentrated its efforts on acquiring and deploying the latest-generation bitcoin miners from Bitmain in an effort to increase its overall hash rate.

Mining Equipment

Riot measures our mining performance and competitive position based on the aggregate hash rate produced by our miners. We believe that our current inventory of 4,000 S17-Pro Antminers, 1,040 S19 Antminers, and 2,000 S19-Pro Antminers establishes us among the top public companies in the United States mining bitcoin. The Company’s current fleet of 7,040 miners were acquired from Bitmain pursuant to sale and purchase agreements between Bitmain and the Company as follows:

- 4,000 model S17-Pro Antminers purchased in December 2019 for approximately \$6.4 million;
- 1,000 model S19-Pro Antminers purchased in April 2020 for approximately \$2.4 million;
- 1,040 model S19 Antminers purchased in May 2020 for approximately \$1.94 million; and
- 1,000 model S19-Pro Antminers purchased in June 2020 for approximately \$2.3 million.

As disclosed by the Company on its current reports on Form 8-K filed on August 18, 2020, August 27, 2020, and October 6, 2020, the Company has recently entered into three additional purchase agreements with Bitmain for the acquisition of 15,600 model S19-Pro Antminers (110 TH/s) for an aggregate purchase price of \$35.3 million, payable in installments as described in the agreements as disclosed. The Company expects delivery of the first 2,500 of these new miners to occur in December 2020, with the remaining 13,100 miners to be delivered in monthly installments starting during the first half of 2021.

With the full deployment of these 15,600 additional S19-Pro miners, our total fleet will comprise 22,640 total miners. These 22,640 advanced miners have a substantially greater hash rate capacity and electric power 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. To our knowledge, these miners, both in terms of aggregate hash rate and energy efficiency, 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.

Mining Facility

After evaluating the Company's lease arrangement and power costs at the Oklahoma mining facility (the "OKC Facility"), the Company made the strategic decision to explore alternative mining locations to reduce its overhead and operating costs. On 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 terminate by its terms as of June 30, 2020.

Pursuant to the terms of the Coinmint Agreement, Coinmint agreed to provide power and to perform all maintenance necessary to operate Riot's Miners at the Coinmint Facility. In exchange, Coinmint will receive a performance fee based on the net cryptocurrencies generated by Riot's Miners deployed at the Coinmint Facility and be reimbursed for direct production expenses. Riot expects that the relocation to the Coinmint Facility will reduce its overhead and operating costs, increase the overall uptime of its Miners, and provide it with the opportunity to continue to expand its total hash rate capacity with potential access to additional megawatts of electric power. The initial six (6) month term of the Coinmint Agreement ends on October 8, 2020, and automatically renews for subsequent three (3) month terms until terminated. The Company is currently discussing 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.

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 original equipment used for mining bitcoin utilized the Central Processing Unit (CPU) of a computer to mine various forms of cryptocurrency. Due to performance limitations, CPU mining was rapidly replaced by the Graphics Processing Unit (GPU), which offers significant performance advantages over CPUs. General purpose chipsets like CPUs and GPUs have since been replaced in the mining industry by Application Specific Integrated Circuits (ASIC) chips like those found in the Bitmain S9 Antminers and the next generation Bitmain S17 Pro Antminers, S19 Antminers, and S19 Pro Antminers Riot uses to mine bitcoin. These ASIC chips are designed specifically to maximize the rate of hashing operations.

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, system wide, there is a total has rate of all miners seeking to mine each specific type of coin. The higher total hash rate of a specific miner, relative to the system wide total hash rate, generally results over time in a corresponding higher success rate in coin rewards as compared to miners with relatively lower total hash rates. Therefore, achieving greater hash rate power by deploying increasingly sophisticated miners in ever greater quantities has become the bitcoin mining industry's great "arms race." As these miners get more powerful and as more miners are deployed, however, more electric power is consumed, which generally increases the cost of mining bitcoin. The Company's goal, therefore, is to deploy as powerful of a fleet of miners as possible, while operating as energy-efficiently as possible.

Revenue Recognition

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

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

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

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

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

- Variable consideration;
- Constraining estimates of variable consideration;
- The existence of a significant financing component in the contract;
- Noncash consideration; 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 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.

Competition

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

We believe, based on currently available information, in terms of both market share and total hash rate capacity, we are, as of the date of this prospectus, among the top bitcoin miners in North America whose stock is traded on the Nasdaq exchange. Further, we believe, based on available data, we will continue to have a total hash rate capacity which places our Company in the highest echelons of bitcoin miners anywhere; however, new entrants into the market, changes in the availability of new mining equipment, or other factors which we cannot reasonably predict, may affect our expectations.

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

- Marathon Patent Group, Inc.;
- Argo Blockchain PLC;
- Hive Blockchain Technologies Inc.;
- Hut 8 Mining Corp.;
- Bitfarms Technologies Ltd. (formerly Blockchain Mining Ltd);
- HashChain Technology, Inc.;
- MGT Capital Investments, Inc.;
- DPW Holdings, Inc. (through its ownership of Digital Farms Inc.);
- Layer1 Technologies, Inc.;
- Golden Bull Ltd.;
- Northern Data AG;
- Overstock.com Inc.;
- Bitcoin Investment Trust;
- Blockchain Industries, Inc. (formerly Omni Global Technologies, Inc.);
- DMG Blockchain Solutions Inc.; and
- Digihost International, Inc.

The cryptocurrency industry is a highly competitive and evolving industry and new competitors and/or emerging technologies could enter the market and affect our competitiveness in the future.

Blockchain and Cryptocurrencies Generally

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

- acting as a fraud deterrent, as cryptocurrencies are digital and cannot be counterfeited or reversed arbitrarily by a sender;
- immediate settlement;
- elimination of counterparty risk;
- no trusted intermediary required;
- lower fees;
- identity theft prevention;
- accessible by everyone;

- transactions are verified and protected through a confirmation process, which prevents the problem of double spending;
- decentralized – no central authority (government or financial institution); and
- recognized universally and not bound by government imposed or market exchange rates.

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

Government Regulation

Government regulation of blockchain and cryptocurrency is being actively considered by the United States federal government via its agencies and regulatory bodies, as well as similar entities in other countries and transnational organizations, such as the European Union. State and local regulations also may apply to our activities such and other activities in which we participate or 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 SEC has taken an active role in regulating the use of public offerings of proprietary coins (so-called “Initial Coin Offerings”) and has made statements and official promulgations as to the status of certain cryptocurrencies as “securities” subject to regulation by the SEC.

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. As the regulatory and legal environment evolves, we may become subject to new laws, further regulation by the SEC and other agencies, which may affect our mining and other activities. For additional discussion regarding our belief about the potential risks existing and future regulation pose to our business, see the Section entitled “Risk Factors” herein and in our other SEC filings, which are incorporated by reference 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.

Corporate Background

The Company was originally incorporated on July 24, 2000 in the State of Colorado under the name AspenBio, Inc., which was changed, along with its state of incorporation, to Bioptix, Inc., a Nevada corporation. On October 19, 2017, we changed our name to “Riot Blockchain, Inc.” to reflect our strategic decision to concentrate on cryptocurrency mining operations and investing in blockchain-focused technologies. In connection with this concentration, the Company invested in several companies and internal initiatives with the intent of building and supporting blockchain technologies ecosystem.

Legacy Life Sciences Business

The Company experienced large accumulated historical losses from pre-2017 efforts to obtain regulatory approval for new medical devices and the manufacture and distribution of specialized medical equipment. These historical human life sciences businesses, excluding the animal health business, were shuttered following the adoption of the Company’s strategic plan to shift to blockchain and cryptocurrency business.

Principal Executive Offices

Our principal executive offices are located at 202 6th Street, Suite 401, Castle Rock, CO 80104, and our telephone number is (303) 794-2000. Our website address is www.riotblockchain.com. The information contained on, or accessible through, our website is not part of this prospectus.

RISK FACTORS

Investing in our securities involves a high degree of risk. Before making an investment decision, you should consider carefully the risks, uncertainties and all risk factors set forth in the applicable prospectus supplement and the documents incorporated by reference in this prospectus, including the risk factors discussed under the heading “Risk Factors” in our most recent Annual Report on Form 10-K for the year ended December 31, 2019, as amended, and each subsequently filed quarterly report on Form 10-Q and current reports on Form 8-K, which may be amended, supplemented or superseded from time to time by the other reports we file with the SEC in the future. These risks could materially affect our business, results of operations or financial condition and affect the value of our securities. You could lose all or part of your investment. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also affect our business, results of operations or financial condition. For more information, see the section entitled “Where You Can Find More Information” on page 18 of this prospectus.

In addition to those risk factors incorporated by reference herein, the Company has identified the following uncertainties and risk factors which may affect our business:

If, pursuant to our co-location mining services agreement (the “Coinmint Agreement”) with Coinmint LLC (“Coinmint”), Coinmint cannot or will not supply sufficient electric for us to operate our new miners, we may be required to relocate some or all of our miners to an alternative facility, which may have a less advantageous cost structure and our business and results of operations may suffer as a result.

We have made a significant capital investment in new next generation miners because we believe we will be able to operate them to mine bitcoin at prices advantageous to us. We believe, based on information presently available to us, that the Coinmint Agreement provides many advantages to us as opposed to other alternative arrangements. If we are required to deploy or move our miners from Coinmint to another mining facility, we may be forced to accept less advantageous terms. Further, during relocation to a new mining facility, we will not be able to operate our miners and therefore we will not be able to generate revenue.

Currently, we anticipate requiring approximately 71 MW of electric power to operate all of our anticipated fleet of 22,640 model S17 Pro, S19, and S19 Pro miners once the balance of 15,600 S19 Pro miners have been received by July 2021. If we are unable to secure sufficient power from Coinmint through an amended agreement, or if Coinmint is unable to supply sufficient electric power, we may be forced to seek out an alternative mining facility. Should this occur, our operations may be disrupted, and our business results may suffer.

If our co-location mining services agreement with Coinmint is terminated, we may be forced to seek a replacement facility to operate our miners on acceptable terms; should this occur, our operations may be disrupted, and our business results may suffer.

The current term of the existing agreement with Coinmint for use of its Massena, New York cryptocurrency mining facility expires in October 2020. The agreement is automatically renewed for successive three months unless earlier terminated by either Riot or Coinmint; however, Coinmint’s owners are subject to ongoing litigation seeking its dissolution which may affect Coinmint’s operations for an indeterminable amount of time. If Coinmint’s operations are stalled or if Coinmint is dissolved as a result of this litigation, we will be forced to exercise our right to terminate the Coinmint Agreement and we will be required to identify an alternative solution to Coinmint. Further, the litigation may require the temporary closure of the mine and, while our agreement with Coinmint clearly provides us with unrestricted access to our miners should this occur, we cannot guarantee that we will be able to successfully retrieve our miners from Coinmint’s facility.

If we are forced to relocate to a new mining facility, we may not be successful in identifying adequate replacement facilities to house our miners. And even if we do identify such facilities, we may not be able to secure use of those facilities at rates that are economically viable to support our mining activities. Relocating our mine will require us to incur costs to transition to a new facility including, but not limited to, transportation expenses and insurance, downtime while we are unable to mine, legal fees to negotiate the new lease, 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. If we are required to move our miners, or if the ongoing litigation at Coinmint affects our miners, our business may suffer and the results of our operations may be adversely affected.

Failure to effectively manage our growth could place strains on our managerial, operational and financial resources and could adversely affect our business and operating results.

Our growth has placed, and is expected to continue to place, a strain on our managerial, operational, and financial resources and systems, as well as on our management team. Any further growth or increase in the number of our strategic relationships may place additional strain on our managerial, operational, and financial resources and systems. Although we may not grow as we expect, if we fail to manage our growth effectively or to develop and expand our managerial, operational, and financial resources and systems, our business and financial results would be materially harmed.

Significant contributors to the bitcoin network could propose amendments to its protocols and software which, if accepted and authorized, could negatively impact our business and operations.

A small group of individuals contribute to the Bitcoin Core Project on GitHub.com, which is a leading source of quasi-governance that works to ensure that the bitcoin blockchain remains decentralized and governed by consensus. According to its website, “Bitcoin Core is an open source project which maintains and releases Bitcoin client software called “Bitcoin Core”. It is a direct descendant of the original Bitcoin software client released by Satoshi Nakamoto after he published the famous Bitcoin whitepaper.” Bitcoin Core is powered by an open-source development community, but it maintained by a small group of maintainers and leading contributors.

This group of contributors is currently headed by Wladimir J. van der Laan, the current lead maintainer. These individuals can propose refinements or improvements to the bitcoin network’s source code through one or more software upgrades that alter the protocols and software that govern the bitcoin network and the properties of bitcoin, including the irreversibility of transactions and limitations on the mining of new bitcoin. Proposals for upgrades and discussions relating thereto take place on online forums. For example, there is an ongoing debate regarding altering the blockchain by increasing the size of blocks to accommodate a larger volume of transactions.

The open-source structure of the bitcoin network protocol may result in inconsistent and perhaps even ineffective changes to the bitcoin protocol. Failed upgrades or maintenance to the protocol could damage the bitcoin network, which could adversely affect our business and the results of our operations.

The bitcoin network operates based on an open-source protocol maintained by contributors, largely on the Bitcoin Core project on GitHub. As an open source project, bitcoin is not represented by an official organization or authority. As the bitcoin network protocol is not sold and its use does not generate revenues for contributors, contributors are generally not compensated for maintaining and updating the bitcoin network protocol. Although the MIT Media Lab’s Digital Currency Initiative funds the current maintainer Wladimir J. van der Laan, among others, this type of financial incentive is not typical. The lack of guaranteed financial incentive for contributors to maintain or develop the bitcoin network and the lack of guaranteed resources to adequately address emerging issues with the bitcoin network may reduce incentives to address the issues adequately or in a timely manner. Changes to a digital asset network which we are mining on may adversely affect an investment in us.

If demand for bitcoin declines, or if another cryptocurrency replaces bitcoin as the most prominent cryptocurrency, our business and the results of our operations could suffer materially.

Although bitcoin is presently the most prominent cryptocurrency, it is possible that another cryptocurrency could supplant it as the most prominent cryptocurrency, which could have a materially negative effect of the demand for bitcoin and, therefore, on its conversion spot price. Alternatively, the demand for bitcoin may fall for other reasons unknown to the Company. Bitcoin represents Riot’s largest cryptocurrency asset, so any substantial and sustained reduction in its conversion spot price would negatively impact its value as an asset.

Further, Riot exclusively utilizes miners manufactured by Bitmaintech PTE LTD. These miners make use of application-specific integrated circuit (ASIC) chips, which are currently designed only to mine for bitcoin. If the demand for bitcoin experiences a sustained and substantial reduction and the conversion spot price of bitcoin falls correspondingly, we may not be able to continue to mine bitcoin and we may be forced to reconfigure our existing miners or acquire replacement miners capable of mining other, more profitable cryptocurrencies at that time. We expect to incur significant costs in connection with any such reconfiguration or to acquire replacement miners; further, we will likely be unable to continue to operate our miners during any such reconfiguration or replacement process. These added costs and such an interruption to our business operations could have a material negative effect on our business, and our stock price may suffer.

Our ability to adopt technology in response to changing security needs or trends poses a challenge to the safekeeping of our digital assets.

The history of digital asset exchanges has shown that exchanges and large holders of digital assets must adapt to technological change in order to secure and safeguard their digital assets. We rely on third party storage solutions and “cold storage” of our digital wallets to safeguard our digital assets from theft, loss, destruction or other issues relating to hackers and technological attack; however, malicious actors may be able to intercept our digital assets in the process of selling them. Further, we may move our digital assets to various exchanges to exchange them for fiat currency, which will require us to rely on the security protocols of these exchanges to safeguard our digital assets. While these exchanges purport to be secure, and while we believe them to be so, no security system is perfect and malicious actors may be able to intercept our digital assets while we are in the process of selling them via such exchanges. Given the growth in their size and their relatively unregulated nature, we believe these exchanges will become a more appealing target for malicious actors. To the extent we are unable to identify and mitigate or stop new security threats, our digital assets may be subject to theft, loss, destruction or other attack, which could adversely affect an investment in us.

The limited rights of legal recourse against us, and our lack of insurance protection expose us and our shareholders to the risk of loss of our digital assets for which no person is liable.

The digital assets held by us are not insured. Further, banking institutions will not accept our digital assets; they are therefore not insured by the Federal Deposit Insurance Corporation (“FDIC”) or the Securities Investor Protection Corporation (“SIPC”). Therefore, a loss may be suffered with respect to our digital assets which is not covered by insurance and we may not be able to recover any of our carried value in these digital assets if they are lost or stolen or suffer significant and sustained reduction in conversion spot price. If we are not otherwise able to recover damages from a malicious actor in connection with these losses, our business and results of operations may suffer, which may have a material negative impact on our stock price.

If regulatory changes or interpretations of our activities require our registration as a money services business (“MSB”) under the regulations promulgated by FinCEN under the authority of the U.S. Bank Secrecy Act, or otherwise under state laws, we may incur significant compliance costs, which could be substantial or cost-prohibitive. If we become subject to these regulations and our costs in complying with them may have a material negative effect on our business and the results of our operations.

To the extent that the activities of Riot cause it to be deemed an MSB under the regulations promulgated by FinCEN under the authority of the U.S. Bank Secrecy Act, we may be required to comply with FinCEN regulations, including those that would mandate us to implement anti-money laundering programs, make certain reports to FinCEN and maintain certain records.

To the extent that the activities of Riot cause it to be deemed a “money transmitter” (“MT”) or equivalent designation, under state law in any state in which Riot operates, Riot may be required to seek a license or otherwise register with a state regulator and comply with state regulations that may include the implementation of anti-money laundering programs, maintenance of certain records and other operational requirements. Currently, the NYSDFS has finalized its “BitLicense” framework for businesses that conduct “virtual currency business. Riot will continue to monitor for developments in such legislation, guidance or regulations.

Such additional federal or state regulatory obligations may cause Riot to incur extraordinary expenses, possibly affecting an investment in the Shares in a material and adverse manner. Furthermore, Riot and its service providers may not be capable of complying with certain federal or state regulatory obligations applicable to MSBs and MTs. If Riot is deemed to be subject to and determines not to comply with such additional regulatory and registration requirements, we may act to dissolve and liquidate Riot. Any such action may adversely affect an investment in us.

Current regulation of the exchange of bitcoins under the CEA by the CFTC is unclear; to the extent we become subject to regulation under the CFTC in connection with our exchange of bitcoin, we may incur additional compliance costs, which may be significant.

Current legislation, including the Commodities Exchange Act of 1936, as amended (the “CEA”) is unclear with respect to the exchange of bitcoins. Changes in the CEA or the regulations promulgated thereunder, as well as interpretations thereof and official promulgations by the Commodities Futures Tradition Commission (“CFTC”), which oversees the CEA much like the SEC oversees the Securities Act and the Exchange Act, may impact the classification of bitcoins and therefore may subject them to additional regulatory oversight by the CFTC.

Presently, bitcoin derivatives are not excluded from the definition of a “commodity future” by the CFTC. We cannot be certain as to how future regulatory developments will impact the treatment of bitcoins under the law. Bitcoins have been deemed to fall within the definition of a commodity and, we may be required to register and comply with additional regulation under the CEA, including additional periodic report and disclosure standards and requirements. Moreover, we may be required to register as a commodity pool operator and to register us as a commodity pool with the CFTC through the National Futures Association. Such additional registrations may result in extraordinary, non-recurring expenses, thereby materially and adversely impacting an investment in us. If we determine not to comply with such additional regulatory and registration requirements, we may seek to cease certain of our operations. Any such action may adversely affect an investment in us. As of the date of this prospectus, no CFTC orders or rulings are applicable to our business.

Unfavorable global economic, business or political conditions could adversely affect our business, financial condition or results of operations.

Our results of operations could be adversely affected by general conditions in the global economy and in the global financial markets, including conditions that are outside of our control, including the U.S. presidential election and the impact of health and safety concerns, such as those relating to the current COVID-19 outbreak. The most recent global financial crisis caused extreme volatility and disruptions in the capital and credit markets. A severe or prolonged economic downturn could result in a variety of risks to our business, including weakened demand for bitcoin and our ability to raise additional capital when needed on acceptable terms, if at all. Any of the foregoing could harm our business and we cannot anticipate all the ways in which the current economic climate and financial market conditions could adversely impact our business.

To date, the COVID-19 outbreak has not had a material adverse impact on our operations. However, the future impact of the COVID-19 outbreak is highly uncertain, cannot be predicted and there is no assurance that the COVID-19 outbreak will not have a material adverse impact on the future results of the Company. The extent of the impact, if any, will depend on future developments, including actions taken to contain the coronavirus.

The outcome of the United States’ 2020 Presidential election cycle may result in unpredictable and potentially adverse impacts on our business

As of the date hereof, the Trump administration has called for, and in some cases has implemented, significant changes to U.S. trade, healthcare, immigration, foreign and government regulatory policy. Additional sweeping policy changes may be implemented following the 2020 U.S. presidential election. The election has created significant uncertainty with respect to legislation, regulation and government policy at the federal, state and local levels, as well as a climate of heightened uncertainty, and has introduced difficult-to-quantify macroeconomic and political risks with potentially far-reaching implications. To the extent the U.S. Congress or the presidential administration implements additional changes to U.S. policy, those changes may impact, among other things, the U.S. and global economy, international trade and relations, unemployment, immigration, corporate taxes, healthcare, the U.S. regulatory environment and inflation, among other areas.

Two areas of potential changes in regulation affecting our business are with respect to the U.S. oversight of cryptocurrencies and U.S. trade relations with China, which supplies all of our miners and the vast majority of the world’s supply. The Trump administration has stated (via the President’s Twitter® account in July 2019) that it is “not a fan of Bitcoin and other Cryptocurrencies, which are not money, and whose value is highly volatile and based on thin air.” Subsequently, the President has tweeted that “Unregulated Crypto Assets can facilitate unlawful behavior, including drug trade and other illegal activity...We have only one real currency in the USA, and it is stronger than ever, both dependable and reliable.” The President’s position on cryptocurrencies has been echoed by Jerome Powell, current chairman of the U.S. Federal Reserve, told U.S. Congress to block Facebook’s plan to develop its proprietary cryptocurrency, Libra. Finally, the President’s budget for 2020 allocates control of oversight of cryptocurrencies to the Secret Service in a report which labeled bitcoin as a “challenge to National Security.” The Democratic candidate for President, Joe Biden, has been largely silent on the subject of cryptocurrencies.

Further, the Trump administration has suggested that the U.S. may withdraw from or renegotiate various trade agreements, and take other actions that would change current trade policies of the U.S., and has imposed tariffs on certain foreign goods. Until any additional policy changes are finalized, it cannot be known whether the Fund and its investments or future investments may be positively or negatively affected, or the impact of continuing uncertainty.

Global macroeconomic conditions and U.S. trade policy may adversely affect our business.

The United States is seeking to implement more protective trade measures. The current U.S. President was elected on a platform promoting trade protectionism. The outcome of the 2016 presidential election has, thus, created significant uncertainty about the future relationship between the United States and China and other exporting countries with respect to trade policies, treaties, government regulations and tariffs. In January 2017, the U.S. President signed an executive order withdrawing the United States from the Trans-Pacific Partnership, a global trade agreement intended to include the United States, Canada, Mexico, Peru and a number of Asian countries. In March 2018, the U.S. President announced tariffs on imported steel and aluminum into the United States, which were in January 2020 expanded to include certain products made of steel and aluminum, that could have a negative impact on international trade generally. These tariffs, or, if the current U.S. President is reelected, additional tariffs, may negatively impact our ability to obtain new miners and replacement parts for our existing fleet. Further, existing protectionist trade policies may adversely affect delivery of the 15,600 next generation S19 Pro miners we purchased from Bitmain in August and October of 2020, as well as additional miners we may acquire in the future.

Protectionist developments, or the perception that they may occur, may have a material adverse effect on global economic conditions, and may significantly reduce global trade. Moreover, increasing trade protectionism may cause an increase in (i) the cost of goods exported from regions globally, particularly the Asia Pacific region, (ii) the length of time required to transport goods and (iii) the risks associated with exporting goods. Such increases will likely be passed on from the suppliers, such as Bitmain, to the consumers, such as Riot. These increased costs and the reduced demand which may result in response to these tariffs may affect our ability to obtain new miners or replacement parts for our existing fleet. If we are unable to continue to acquire new and improved miners, we may not be able to continue to compete with other bitcoin miners internationally, who may not be affected by these tariffs. Existing tariffs and potential future tariffs, as well as U.S. trade protectionism, generally, may have a material adverse effect on our business, results of operations, financial condition and cash flows.

USE OF PROCEEDS

Unless otherwise indicated in a prospectus supplement, we intend to use the net proceeds from the sale of the securities under this prospectus for general corporate purposes, which may include capital expenditures, funding potential acquisitions of additional new mining equipment, other potential acquisitions, and general working capital. We will set forth in a prospectus supplement relating to a specific offering any intended use for the net proceeds received from the sale of securities in that offering. We will have significant discretion in the use of any net proceeds. Investors will be relying on the judgment of our management regarding the application of the proceeds of any sale of securities. We may invest the net proceeds temporarily until we use them for their stated purpose, as applicable.

DESCRIPTION OF COMMON STOCK

General

We are authorized to issue 170,000,000 shares of common stock, at no par value per share.

Holders of the Company's common stock are entitled to one vote for each share on all matters submitted to a stockholder vote. Holders of common stock do not have cumulative voting rights. Therefore, holders of a majority of the shares of common stock voting for the election of directors can elect all of the directors. Holders of the Company's common stock representing a third of the voting power of the Company's capital stock issued, outstanding and entitled to vote, represented in person or by proxy, are necessary to constitute a quorum at any meeting of stockholders. A vote by the holders of a majority of the Company's outstanding shares is required to effectuate certain fundamental corporate changes such as liquidation, merger or an amendment to the Company's certificate of incorporation.

Holders of the Company's common stock are entitled to share in all dividends that the board of directors, in its discretion, declares from legally available funds. In the event of a liquidation, dissolution or winding up, each outstanding share entitles its holder to participate pro rata in all assets that remain after payment of liabilities and after providing for each class of stock, if any, having preference over the common stock. The Company's common stock has no pre-emptive rights, no conversion rights and there are no redemption provisions applicable to the Company's common stock.

Classified Board of Directors

Our Bylaws provide for our Board to be divided into three classes, with each class serving a staggered three-year term. We believe that a classified board structure, if implemented, would help to ensure the continuity and stability of the Board and our business strategies and policies. The classified board structure could have the effect of making the removal of incumbent directors more time consuming and difficult, and, therefore may discourage a third party from making a tender offer or otherwise attempting to obtain control of us, even though such an attempt might be beneficial to us and our stockholders.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is Equiniti Trust Company, d/b/a "EQ by Equiniti," Mendota Heights, Michigan.

Listing

Our common stock is currently traded on the NASDAQ Capital Market under the symbol "RIOT".

DESCRIPTION OF PREFERRED STOCK

General

The Company's articles of incorporation authorize the issuance of 15,000,000 shares of "blank check" preferred stock, no par value per share, in one or more series, subject to any limitations prescribed by law, without further vote or action by the stockholders. Each such series of preferred stock shall have such number of shares, designations, preferences, voting powers, qualifications, and special or relative rights or privileges as shall be determined by our board of directors, which may include, among others, dividend rights, voting rights, liquidation preferences, conversion rights and preemptive rights.

Preferred stock is available for possible future financings or acquisitions and for general corporate purposes without further authorization of stockholders unless such authorization is required by applicable law, the rules of the NASDAQ Capital Market or other securities exchange or market on which our stock is then listed or admitted to trading.

Our board of directors may authorize the issuance of preferred stock with voting or conversion rights that could adversely affect the voting power or other rights of the holders of common stock. The issuance of preferred stock, while providing flexibility in connection with possible acquisitions and other corporate purposes could, under some circumstances, have the effect of delaying, deferring or preventing a change in control of the Company.

A prospectus supplement relating to any series of preferred stock being offered will include specific terms relating to the offering. Such prospectus supplement will include:

- the title and stated or par value of the preferred stock;
- the number of shares of the preferred stock offered, the liquidation preference per share and the offering price of the preferred stock;
- the dividend rate(s), period(s) and/or payment date(s) or method(s) of calculation thereof applicable to the preferred stock;
- whether dividends shall be cumulative or non-cumulative and, if cumulative, the date from which dividends on the preferred stock shall accumulate;
- the provisions for a sinking fund, if any, for the preferred stock;
- any voting rights of the preferred stock;
- the provisions for redemption, if applicable, of the preferred stock;
- any listing of the preferred stock on any securities exchange;
- the terms and conditions, if applicable, upon which the preferred stock will be convertible into our common stock, including the conversion price or the manner of calculating the conversion price and conversion period;
- if appropriate, a discussion of Federal income tax consequences applicable to the preferred stock;
- and any other specific terms, preferences, rights, limitations or restrictions of the preferred stock.

The terms, if any, on which the preferred stock may be convertible into or exchangeable for our common stock will also be stated in the preferred stock prospectus supplement. The terms will include provisions as to whether conversion or exchange is mandatory, at the option of the holder or at our option, and may include provisions pursuant to which the number of shares of our common stock to be received by the holders of preferred stock would be subject to adjustment.

Series B Preferred Stock

We have designated 1,750,001 shares of preferred stock as “0% Series B Convertible Preferred Stock.” The shares of Series B Preferred Stock are convertible into shares of common stock based on a conversion calculation equal to the stated value of the Series B Preferred Stock, plus all accrued and unpaid dividends, if any, on such Series B Preferred Stock, as of such date of determination, divided by the conversion price. The stated value of each share of Series B Preferred Stock is \$6.80 and the initial conversion price is \$6.80 per share, each subject to adjustment for stock splits, stock dividends, recapitalizations, combinations, subdivisions or other similar events.

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

We are prohibited from effecting a conversion of the Series B Preferred Stock to the extent that, as a result of such conversion, the holder would beneficially own more than 4.99% percent of the number of shares of common stock outstanding immediately after giving effect to the issuance of shares of common stock upon conversion of the Series B Preferred Stock, which beneficial ownership limitation may be increased by the holder up to, but not exceeding, 9.99% percent. The Series B Preferred Stock contain no voting rights.

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

As of the date of this prospectus, there are 4,199 shares of Series B Convertible Preferred Stock outstanding, convertible into 4,199 shares of common stock which represents less than 1% of the shares of our common stock as of the date of this prospectus.

DESCRIPTION OF WARRANTS

We may issue warrants for the purchase of preferred stock or common stock. Warrants may be issued independently or together with any preferred stock or common stock, and may be attached to or separate from any offered securities. Each series of warrants will be issued under a separate warrant agreement to be entered into between a warrant agent specified in the agreement and us. The warrant agent will act solely as our agent in connection with the warrants of that series and will not assume any obligation or relationship of agency or trust for or with any holders or beneficial owners of warrants. This summary of some provisions of the securities warrants is not complete. You should refer to the securities warrant agreement, including the forms of securities warrant certificate representing the securities warrants, relating to the specific securities warrants being offered for the complete terms of the securities warrant agreement and the securities warrants. The securities warrant agreement, together with the terms of the securities warrant certificate and securities warrants, will be filed with the Securities and Exchange Commission in connection with the offering of the specific warrants.

The applicable prospectus supplement will describe the following terms, where applicable, of the warrants in respect of which this prospectus is being delivered:

- the title of the warrants;
- the aggregate number of the warrants;
- the price or prices at which the warrants will be issued;
- the designation, amount and terms of the offered securities purchasable upon exercise of the warrants;
- if applicable, the date on and after which the warrants and the offered securities purchasable upon exercise of the warrants will be separately transferable;
- the terms of the securities purchasable upon exercise of such warrants and the procedures and conditions relating to the exercise of such warrants;
- any provisions for adjustment of the number or amount of securities receivable upon exercise of the warrants or the exercise price of the warrants;
- the price or prices at which and currency or currencies in which the offered securities purchasable upon exercise of the warrants may be purchased;
- the date on which the right to exercise the warrants shall commence and the date on which the right shall expire;
- the minimum or maximum amount of the warrants that may be exercised at any one time;
- information with respect to book-entry procedures, if any;
- if appropriate, a discussion of Federal income tax consequences; and
- any other material terms of the warrants, including terms, procedures and limitations relating to the exchange and exercise of the warrants.

Warrants for the purchase of common stock or preferred stock will be offered and exercisable for U.S. dollars only. Warrants will be issued in registered form only. Upon receipt of payment and the warrant certificate properly completed and duly executed at the corporate trust office of the warrant agent or any other office indicated in the applicable prospectus supplement, we will, as soon as practicable, forward the purchased securities. If less than all of the warrants represented by the warrant certificate are exercised, a new warrant certificate will be issued for the remaining warrants.

Prior to the exercise of any securities warrants to purchase preferred stock or common stock, holders of the warrants will not have any of the rights of holders of the common stock or preferred stock purchasable upon exercise, including in the case of securities warrants for the purchase of common stock or preferred stock, the right to vote or to receive any payments of dividends on the preferred stock or common stock purchasable upon exercise.

DESCRIPTION OF UNITS

As specified in the applicable prospectus supplement, we may issue units consisting of shares of common stock, shares of preferred stock or warrants or any combination of such securities.

The applicable prospectus supplement will specify the following terms of any units in respect of which this prospectus is being delivered:

- the terms of the units and of any of the common stock, preferred stock and warrants comprising the units, including whether and under what circumstances the securities comprising the units may be traded separately;
- a description of the terms of any unit agreement governing the units; and
- a description of the provisions for the payment, settlement, transfer or exchange of the units.

RATIO OF EARNINGS TO FIXED CHARGES

If we offer debt securities and/or preference equity securities under this prospectus, we will, if required at that time, provide a ratio of earnings to fixed charges and/or ratio of earnings to combined fixed charges and preference dividends to earnings, respectively, in the applicable prospectus supplement for such offering.

PLAN OF DISTRIBUTION

We may sell the securities offered through this prospectus (i) to or through underwriters or dealers, (ii) directly to purchasers, including our affiliates, (iii) through agents, (iv) via so called “at-the-market” or “ATM” offerings, or (v) through a combination of any of these methods. The securities may be distributed at a fixed price or prices, which may be changed, market prices prevailing at the time of sale, prices related to the prevailing market prices, or negotiated prices. The prospectus supplement will include the following information:

- the terms of the offering;
- the names of any underwriters or agents;
- the name or names of any managing underwriter or underwriters;
- the purchase price of the securities;
- any over-allotment options under which underwriters may purchase additional securities from us;
- the net proceeds from the sale of the securities;
- any delayed delivery arrangements;
- any underwriting discounts, commissions and other items constituting underwriters’ compensation;
- any initial public offering price;
- any discounts or concessions allowed or reallocated or paid to dealers;
- any commissions paid to agents; and
- any securities exchange or market on which the securities may be listed.

Agents, underwriters, and dealers may be entitled, under agreements entered into with us, to indemnification by us against certain liabilities, including liabilities under the Securities Act. Our agents, underwriters, and dealers, or their affiliates, may be customers of, engage in transactions with or perform services for us, in the ordinary course of business.

Sale through Underwriters or Dealers

Only underwriters named in the prospectus supplement are underwriters of the securities offered by the prospectus supplement.

If underwriters are used in the sale, the underwriters will acquire the securities for their own account, including through underwriting, purchase, security lending or repurchase agreements with us. The underwriters may resell the securities from time to time in one or more transactions, including negotiated transactions. Underwriters may sell the securities in order to facilitate transactions in any of our other securities (described in this prospectus or otherwise), including other public or private transactions and short sales. Underwriters may offer securities to the public either through underwriting syndicates represented by one or more managing underwriters or directly by one or more firms acting as underwriters. Unless otherwise indicated in the prospectus supplement, the obligations of the underwriters to purchase the securities will be subject to certain conditions, and the underwriters will be obligated to purchase all the offered securities if they purchase any of them. The underwriters may change from time to time any initial public offering price and any discounts or concessions allowed or reallocated or paid to dealers.

If dealers are used in the sale of securities offered through this prospectus, we will sell the securities to them as principals. They may then resell those securities to the public at varying prices determined by the dealers at the time of resale. The prospectus supplement will include the names of the dealers and the terms of the transaction.

Direct Sales and Sales through Agents

We may sell the securities offered through this prospectus directly. In this case, no underwriters or agents would be involved. Such securities may also be sold through agents designated from time to time. The prospectus supplement will name any agent involved in the offer or sale of the offered securities and will describe any commissions payable to the agent. Unless otherwise indicated in the prospectus supplement, any agent will agree to use its reasonable best efforts to solicit purchases for the period of its appointment.

We may sell the securities directly to institutional investors or others who may be deemed to be underwriters within the meaning of the Securities Act with respect to any sale of those securities. The terms of any such sales will be described in the prospectus supplement.

Delayed Delivery Contracts

If the prospectus supplement indicates, we may authorize agents, underwriters or dealers to solicit offers from certain types of institutions to purchase securities at the public offering price under delayed delivery contracts. These contracts would provide for payment and delivery on a specified date in the future. The contracts would be subject only to those conditions described in the prospectus supplement. The applicable prospectus supplement will describe the commission payable for solicitation of those contracts.

Continuous Offering Program

Without limiting the generality of the foregoing, we may enter into a continuous offering program equity distribution agreement with a broker-dealer, under which we may offer and sell shares of our common stock from time to time through a broker-dealer as our sales agent. If we enter into such a program, sales of the shares of common stock, if any, will be made by means of ordinary brokers' transactions on the NASDAQ Capital Market at market prices, block transactions and such other transactions as agreed upon by us and the broker-dealer. Under the terms of such a program, we also may sell shares of common stock to the broker-dealer, as principal for its own account at a price agreed upon at the time of sale. If we sell shares of common stock to such broker-dealer as principal, we will enter into a separate agreement with such broker-dealer, and we will describe this agreement in a separate prospectus supplement or pricing supplement.

Market Making, Stabilization and Other Transactions

Unless the applicable prospectus supplement states otherwise, other than our common stock all securities we offer under this prospectus will be a new issue and will have no established trading market. We may elect to list offered securities on an exchange or in the over-the-counter market. Any underwriters that we use in the sale of offered securities may make a market in such securities, but may discontinue such market making at any time without notice. Therefore, we cannot assure you that the securities will have a liquid trading market.

Any underwriter may also engage in stabilizing transactions, syndicate covering transactions and penalty bids in accordance with Rule 104 under the Exchange Act. Stabilizing transactions involve bids to purchase the underlying security in the open market for the purpose of pegging, fixing or maintaining the price of the securities. Syndicate covering transactions involve purchases of the securities in the open market after the distribution has been completed in order to cover syndicate short positions.

Penalty bids permit the underwriters to reclaim a selling concession from a syndicate member when the securities originally sold by the syndicate member are purchased in a syndicate covering transaction to cover syndicate short positions. Stabilizing transactions, syndicate covering transactions and penalty bids may cause the price of the securities to be higher than it would be in the absence of the transactions. The underwriters may, if they commence these transactions, discontinue them at any time.

LEGAL MATTERS

The validity of the issuance of the securities offered by this prospectus will be passed upon for us by Lewis Roca Rothgerber Christie LLP, Las Vegas, Nevada. If certain legal matters in connection with an offering of the securities covered by this prospectus and a related prospectus supplement are passed upon by counsel for the underwriters, if any, of such offering, that counsel will be named in the related prospectus supplement for such offering.

EXPERTS

The consolidated financial statements of Riot Blockchain, Inc. and Subsidiaries as of December 31, 2019 and 2018 and for each of the two years in the period ended December 31, 2019, and Riot Blockchain, Inc.'s and Subsidiaries internal controls over financial reporting as of December 31, 2019, have been audited by Marcum LLP, independent registered public accounting firm, as stated in their reports, which are incorporated herein by reference. Marcum, LLP's report on Riot Blockchain, Inc.'s and Subsidiaries internal controls over financial reporting as of December 31, 2019 expressed an adverse opinion because of the existence of material weaknesses identified therein. Such consolidated financial statements of Riot Blockchain, Inc. and Subsidiaries are incorporated in this prospectus by reference in reliance on the report of such firm given upon their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and special reports, along with other information with the SEC. Our SEC filings are available to the public over the Internet at the SEC's website at <http://www.sec.gov>. You may also read and copy any document we file at the SEC's Public Reference Room at 100 F Street, NE, Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the Public Reference Room. Our SEC filings are also available on our website, <https://ir.riotblockchain.com/under> the heading "Investors." The information on this website is expressly not incorporated by reference into, and does not constitute a part of, this prospectus.

This prospectus is part of a registration statement on Form S-3 that we filed with the SEC to register the securities offered hereby under the Securities Act of 1933, as amended. This prospectus does not contain all of the information included in the registration statement, including certain exhibits and schedules. You may obtain the registration statement and exhibits to the registration statement from the SEC at the address listed above or from the SEC's internet site.

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

This prospectus is part of a registration statement filed with the SEC. The SEC allows us to "incorporate by reference" into this prospectus the information that we file with them, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be part of this prospectus, and information that we file later with the SEC will automatically update and supersede this information. The following documents are incorporated by reference and made a part of this prospectus:

- Annual Report on Form 10-K for the year ended December 31, 2019, filed on March 25, 2020, as amended by Amendment No. 1 to the Annual Report on Form 10-K/A, filed on April 29, 2020;
- Annual Report on Form 10-K for the year ended December 31, 2018, filed on April 2, 2019 pursuant to Rule 12b-25 extension, as amended by Amendment No. 1 to the Annual Report on Form 10-K/A, filed on April 23, 2019;
- Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2020, filed on May 8, 2020;
- Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2020, filed on August 10, 2020;
- Definitive Proxy Statement and definitive additional materials on Schedule 14A filed on September 20, 2019;
- Current Reports on Form 8-K or Form 8-K/A (excluding any reports or portions thereof that are deemed to be furnished and not filed) filed on January 13, 2020, February 3, 2020, February 11, 2020, February 14, 2020, February 26, 2020, April 14, 2020, April 20, 2020, May 5, 2020, May 12, 2020, June 5, 2020, June 16, 2020, July 21, 2020, August 18, 2020, August 27, 2020, and October 6, 2020;
- The Description of our common stock contained in our registration statement on Form 8-A filed on August 27, 2007 and as amended by Form 8-A / Amendment No. 1 filed on August 27, 2007.

We also incorporate by reference all additional documents that we file with the Securities and Exchange Commission under the terms of Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act that are made after the date of the initial registration statement but prior to effectiveness of the registration statement and after the date of this prospectus but prior to the termination of the offering of the securities covered by this prospectus. We are not, however, incorporating, in each case, any documents or information that we are deemed to furnish and not file in accordance with Securities and Exchange Commission rules.

You may request, and we will provide you with, a copy of these filings, at no cost, by calling us at (303) 794-2000 or by writing to us at the following address:

Riot Blockchain, Inc.
202 6th Street, Suite 401
Castle Rock, CO 80104
(303) 794-2000

The information in this prospectus supplement is not complete and may be changed. We may not sell the securities pursuant to this prospectus supplement until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus supplement is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED OCTOBER 6, 2020

**Prospectus Supplement
(to Prospectus dated October 6, 2020)**

Registration No. 333-_____

**\$100,000,000
Common Stock**



We have entered into the First Amendment (the "First Amendment") to the At The Market Offering Agreement, dated May 24, 2019 and included as Exhibit 10.1 to our current report on Form 8-K filed with the Securities and Exchange Commission (the "Commission") on May 24, 2019 (the "2019 Agreement"), with H.C. Wainwright & Co., LLC (our "Sales Agent" or "Wainwright") as our sales agent for the offering of our securities covered by this prospectus supplement. The First Amendment is included as Exhibit 1.1 of the registration statement on Form S-3, of which this prospectus supplement, and the prospectus to which it relates, forms a part, filed with the Commission on October 6, 2020 (the "Registration Statement"). Effective as of the date of effectiveness of the Registration Statement, the First Amendment supplements and amends the terms of the 2019 Offering Agreement, as set forth therein, with respect to the offering of our securities covered by this prospectus supplement. In this prospectus supplement, we refer to the First Amendment and the 2019 Offering Agreement collectively as the "At The Market Offering Agreement"

In accordance with the terms of the At The Market Offering Agreement, upon the effectiveness of the Registration Statement we may offer and sell shares of our common stock having an aggregate offering price of up to \$100,000,000 from time to time through Wainwright acting as our sales agent. Sales of common stock, if any, under this prospectus supplement and the accompanying prospectus may be made in transactions that are deemed to be "at the market" offerings as defined in Rule 415 under the Securities Act of 1933, as amended, or the Securities Act, including sales made directly on or through the Nasdaq Capital Market, the existing trading market for our common stock, or any other existing trading market in the United States for our common stock, sales made to or through a market maker other than on an exchange or otherwise, directly to the sales agent as principal, in negotiated transactions at market prices prevailing at the time of sale or at prices related to such prevailing market prices, and/or in any other method permitted by law. If we and Wainwright agree on any method of distribution other than sales of shares of our common stock into the Nasdaq Capital Market or another existing trading market in the United States at market prices, we will file a further prospectus supplement providing all information about such offering as required by Rule 424(b) under the Securities Act. Wainwright will make all sales using commercially reasonable efforts consistent with its normal trading and sales practices, on mutually agreed terms between Wainwright and us. There is no arrangement for funds to be received in any escrow, trust or similar arrangement.

We will pay Wainwright a commission of up to 3% of the gross sales price of all of the shares of common stock issued by us and sold through it as our sales agent under the At The Market Offering Agreement. In connection with the sale of the common stock on our behalf, Wainwright will be deemed to be an "underwriter" within the meaning of the Securities Act and the compensation of Wainwright will be deemed to be underwriting commissions or discounts.

The securities offered by this prospectus supplement involve a significant degree of risk. Before making an investment decision, you should carefully review and consider all the information in this prospectus supplement, the accompanying base prospectus and the documents incorporated by reference herein and therein, including the risks and uncertainties described under "Risk Factors" on page S-4 of this prospectus supplement and under similar headings in the prospectus to which this prospectus supplement relates, and the other documents that are incorporated by reference into this prospectus supplement. These risks could materially affect our business, results of operations or financial condition and affect the value of our securities. You could lose all or part of your investment. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also affect our business, results of operations or financial condition. For more information, see the section entitled "Where You Can Find More Information" on page S-9 of this prospectus supplement.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

H.C. Wainwright & Co.

The date of this prospectus supplement is October 6, 2020.

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ABOUT THIS PROSPECTUS SUPPLEMENT

This prospectus supplement and the accompanying base prospectus to which it relates form a part of and are filed with the Registration Statement on Form S-3 (the “Registration Statement”) we filed with the Securities Exchange Commission (the “Commission” or the “SEC”) on October 6, 2020, using a “shelf” registration process to register our securities for sale for up to an aggregate offering price of \$100,000,000. We may not sell any of our securities under this prospectus supplement until the Registration Statement is declared effective by the Commission. As explained more thoroughly under the section of this prospectus supplement entitled “Plan of Distribution” starting on page S-6 hereof, we intend to offer up to \$100,000,000 of shares of our common stock to the public from time to time at prevailing market prices via an “at-the-market” offering conducted by our Sales Agent pursuant to the terms of the At The Market Offering Agreement, as amended.

This document consists of two parts. The first part is this prospectus supplement, which describes the specific terms of this offering. The second part, the accompanying prospectus, gives more general information, some of which may not apply to this offering. Generally, when we refer only to the “prospectus,” we are referring to both parts combined. This prospectus supplement may add to, update or change information in the accompanying prospectus and the documents incorporated by reference into this prospectus supplement or the accompanying prospectus. To the extent there is a conflict between the information contained in this prospectus supplement and the information contained in the accompanying prospectus or any document incorporated by reference therein filed prior to the date of this prospectus supplement, you should rely on the information in this prospectus supplement; provided that if any statement in one of these documents is inconsistent with a statement in another document having a later date — for example, a document incorporated by reference in the accompanying prospectus — the statement in the document having the later date modifies or supersedes the earlier statement.

We further note that the representations, warranties and covenants made by us in any agreement that is filed as an exhibit to any document that is incorporated by reference herein were made solely for the benefit of the parties to such agreement, including, in some cases, for the purpose of allocating risk among the parties to such agreements, and should not be deemed to be a representation, warranty or covenant to you. Moreover, such representations, warranties or covenants were accurate only as of the date when made. Accordingly, such representations, warranties and covenants should not be relied on as accurately representing the current state of our affairs.

Neither we nor the Sales Agent have authorized anyone to provide information different from that contained in this prospectus supplement and the accompanying prospectus, including any free writing prospectus that we have authorized for use in this offering. When you make a decision about whether to invest in our common stock, you should not rely upon any information other than the information in this prospectus supplement or the accompanying prospectus, including any free writing prospectus that we have authorized for use in this offering. Neither the delivery of this prospectus supplement or the accompanying prospectus, including any free writing prospectus that we have authorized for use in this offering, nor the sale of our common stock means that information contained in this prospectus supplement and the accompanying prospectus, including any free writing prospectus that we have authorized for use in this offering, is correct after their respective dates. It is important for you to read and consider all information contained in this prospectus supplement and the accompanying prospectus, including the information incorporated by reference into this prospectus supplement and the accompanying prospectus, and any free writing prospectus that we have authorized for use in connection with this offering in making your investment decision. You should also read and consider the information in the documents to which we have referred you in the sections entitled “Where You Can Find More Information” and “Incorporation of Certain Information by Reference” in this prospectus supplement.

We are offering to sell, and seeking offers to buy, shares of our common stock only in jurisdictions where offers and sales are permitted. The distribution of this prospectus supplement and the accompanying prospectus and the offering of the common stock in certain jurisdictions may be restricted by law. Persons outside the United States who come into possession of this prospectus supplement and the accompanying prospectus must inform themselves about, and observe any restrictions relating to, the offering of the common stock and the distribution of this prospectus supplement and the accompanying prospectus outside the United States. This prospectus supplement and the accompanying prospectus do not constitute, and may not be used in connection with, an offer to sell, or a solicitation of an offer to buy, any securities offered by this prospectus supplement and the accompanying prospectus by any person in any jurisdiction in which it is unlawful for such person to make such an offer or solicitation.

Unless otherwise stated, all references in this prospectus to “we,” “us,” “our,” “Riot,” the “Company” and similar designations refer to Riot Blockchain, Inc., a Nevada corporation, and its affiliated subsidiaries.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus supplement and the base prospectus to which it relates, including the documents that we incorporate by reference into both, contains 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”). Such forward-looking statements include those that express plans, anticipation, intent, contingency, goals, targets or future development and/or otherwise are not statements of historical fact. We believe these forward-looking statements are reasonable; however, you should not place undue reliance on any forward-looking statements, which are based on current expectations. These forward-looking statements are based on our current expectations and projections about future events and they are subject to risks and uncertainties known and unknown that could cause actual results and developments to differ materially from those expressed or implied in such statements.

In some cases, you can identify forward-looking statements by terminology, such as “expects,” “anticipates,” “intends,” “estimates,” “plans,” “believes,” “seeks,” “may,” “should,” “could” or the negative of such terms or other similar expressions. Accordingly, these statements involve estimates, assumptions and uncertainties that could cause actual results to differ materially from those expressed in them. Any forward-looking statements are qualified in their entirety by reference to the factors discussed throughout this prospectus supplement. We intend for these forward-looking statements to be covered by the safe harbor provisions for forward-looking statements contained in the Private Securities Litigation Reform Act of 1995, and we are including this statement for purposes of complying with these safe harbor provisions.

You should read this prospectus supplement and the documents that we reference herein and therein and have filed as exhibits to the registration statement, of which this prospectus supplement, the prospectus to which it relates, and any subsequent prospectus supplement is part, completely and with the understanding that our actual future results may be materially different from what we expect. You should assume that the information appearing in this prospectus supplement is accurate as of the date on the front cover of this prospectus supplement or such prospectus supplement only. Because the risk factors referred to above, as well as the risk factors incorporated herein by reference, could cause actual results or outcomes to differ materially from those expressed in any forward-looking statements made by us or on our behalf, you should not place undue reliance on any forward-looking statements. Further, any forward-looking statement speaks only as of the date on which it is made, and we undertake no obligation to update any forward-looking statement to reflect events or circumstances after the date on which the statement is made or to reflect the occurrence of unanticipated events, except as may be required under applicable law. New factors emerge from time to time, and it is not possible for us to predict which factors will arise. In addition, we cannot assess the impact of each factor 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 qualify all of the information presented in this prospectus supplement and particularly our forward-looking statements, by these cautionary statements.

SUMMARY

This summary highlights selected information from this prospectus supplement and does not contain all of the information that you should consider in making your investment decision. You should carefully read this entire prospectus supplement, the prospectus to which it relates, and any applicable subsequent prospectus supplements or related free writing prospectuses. Before making an investment decision, you should carefully review and consider the risks and uncertainties associated with investing in our securities we have identified, which are discussed under the heading “Risk Factors” on page S-4 of this prospectus supplement, as well as those risk factors discussed under the heading “Risk Factors” in the prospectus to which this relates, and those discussed under similar headings contained in any applicable prospectus supplement, any related free writing prospectus, and under similar headings in the documents that are incorporated by reference into this prospectus supplement. You should also carefully read the information incorporated by reference into this prospectus supplement, including our financial statements, and the exhibits to the registration statement of which this prospectus supplement is a component. For more information, see the section entitled “Where You Can Find More Information” on page S-8 of this prospectus supplement.

THE OFFERING

Issuer:	Riot Blockchain, Inc.
NASDAQ Capital Market Symbol:	RIOT
Common Stock Offered by Us:	Up to \$100,000,000 of shares of our common stock.
Shares of Common Stock outstanding after completion of the Offering ⁽¹⁾ :	Assuming a sales price of \$2.60 per share (the last reported sales price per share of our stock on October 2, 2020) we will have 87,384,328 shares of Common Stock outstanding after completion of this Offering. The actual number of shares issued and outstanding will vary depending on the price at which shares of our Common Stock are sold in the Offering.
Form of Offering:	The Sales Agent may, according to the terms of the At The Market Offering Agreement, sell the shares of our common stock offered under this prospectus supplement in an “at the market” offering for a maximum aggregate initial sales price of \$100,000,000.
Use of Proceeds:	We intend to use the net proceeds from issuances and sales of our common stock through the Sales Agent, and under any terms agreement, for working capital, capital expenditures and other general corporate purposes, which may include the repayment and refinancing of debt. See “Use of Proceeds” and “Risk Factors.”
Transfer Agent and Registrar:	The transfer agent and registrar for our common stock is Equiniti Trust Company, d/b/a “EQ by Equiniti,” Mendota Heights, Michigan.
Risk Factors:	An investment in our common stock involves certain risks. We urge you to carefully consider all of the information described in the section entitled “Risk Factors” beginning on page S-4 of this prospectus supplement and the risk factors incorporated by reference from the accompanying prospectus and our filings with the SEC.

⁽¹⁾ The number of shares of our common stock to be outstanding immediately after this offering as shown above is based upon 48,922,780 shares outstanding as of October 2, 2020, and, unless otherwise indicated does not include: (i) 1,708,144 shares issuable upon the exercise of vested and exercisable warrants to acquire shares at an exercise price of \$1.94 per share issued in January 2019 to investors in the private placement transaction we reported on our current report on Form 8-K, filed on February 2, 2019 (the “January 2019 Warrants”); (ii) 1,646,113 shares issuable upon the exercise of vested and exercisable warrants to purchase shares of our common stock at an exercise price of \$40.00 per share, which were issued to investors in the December 21, 2017 private placement we reported in our current report on Form 8-K, filed on December 21, 2017 (the “December 2017 Warrants”); (iii) 1,416,816 shares issuable upon settlement of 1,416,816 restricted stock units (“RSUs”) granted under the Company’s 2019 Equity Incentive Plan (the “2019 Plan”), of which 103,361 are vested and 1,313,455 remain unvested subject to regular vesting schedules; and (iv) 561,809 shares of common stock reserved for future issuance under our 2019 Plan.

RISK FACTORS

Investing in our securities involves a high degree of risk. Before making an investment decision, you should consider carefully the risks, uncertainties and all risk factors set forth in the applicable prospectus supplement and the documents incorporated by reference in this prospectus supplement, including the risk factors discussed under the heading “Risk Factors” in the prospectus to which this prospectus supplement forms a part, as well as those disclosed under the same heading in our most recent Annual Report on Form 10-K for the year ended December 31, 2019, as amended, and each subsequently filed quarterly report on Form 10-Q and current reports on Form 8-K, which may be amended, supplemented or superseded from time to time by the other reports we file with the SEC in the future.

In addition to those risk factors incorporated by reference herein, the Company has identified the following uncertainties and risk factors which may affect our business:

Risks Relating to this Offering

Future sales or other issuances of our common stock could depress the market for our common stock.

Sales of a substantial number of shares of our common stock, or the perception by the market that those sales could occur, whether through this offering or other offerings of our securities, could cause the market price of our common stock to decline or could make it more difficult for us to raise funds through the sale of equity in the future.

The issuance and sale of a significant number of our securities will cause our current stockholders’ holdings to be significantly diluted. In addition, our current stockholders’ holdings may also be diluted if we enter into arrangements with third parties permitting us to issue shares of common stock in lieu of certain cash payments upon the achievement of milestones.

We have broad discretion to use the net proceeds from this offering and our investment of these proceeds pending any such use may not yield a favorable return.

Our management has broad discretion as to how to spend the proceeds from this offering and may spend these proceeds in ways with which our stockholders may not agree. We may use a substantial portion of the proceeds we receive from the sales of our Common Stock made pursuant to this prospectus supplement by our Sales Agent to purchase new application-specific integrated circuit (ASIC) chip cryptocurrency mining computers (“miners”), which are subject to significant fluctuations in market price. Management cannot guarantee that its decisions regarding its use of the proceeds from the sales of our common stock under this prospectus supplement will produce gainful returns or will result in any appreciation in the value of the Company.

This offering is being conducted on a “commercially reasonable efforts” basis; we cannot guarantee our success in raising additional capital in this offering.

The Sales Agent will be attempting to sell the shares of our common stock offered under this prospectus supplement on a “commercially reasonable efforts” basis, and the Sales Agent is under no obligation to purchase any shares of our common stock offered under this prospectus supplement for their own account. Neither we nor the Sales Agent is required to sell any specific number or dollar amount of shares of common stock in this offering but will use its commercially reasonable efforts to sell the shares of our common stock offered in this prospectus supplement at management’s direction. As a “commercially reasonable efforts” offering, there can be no assurance that the offering contemplated hereby will ultimately be consummated and, accordingly, we may not raise any additional capital.

If we are unable to raise additional capital through the offering contemplated in this prospectus supplement, we may not be able to continue to fund our operations and we may have to reduce or even halt our operations entirely. Our failure to raise additional capital through the offering contemplated in this prospectus supplement may cause us to cease as a going concern and investors in our securities may lose their entire investment.

Purchasers in this offering will experience immediate and substantial dilution in the book value of their investment.

The public offering price of our common stock is substantially higher than the net tangible book value per share of our common stock as of June 30, 2020, before giving effect to this offering. At an assumed public offering price of \$2.60 per share (which was the last reported sales price per share of our stock on October 2, 2020), we will have 87,384,328 shares of Common Stock issued and outstanding after completion of this offering. After deducting estimated offering expenses and estimated sales agent commissions payable by us, our pro forma, as adjusted, net tangible book value per share after giving effect to the sale of shares of our Common Stock in the aggregate amount of \$100,000,000 at the assumed offering price would be \$1.74. Accordingly, purchasers of shares of our Common Stock in this offering will incur immediate and substantial dilution of approximately \$0.86 per share, representing the difference between the pro forma net tangible book value per share of our securities after the offering and the pro forma net tangible book value per share of our securities prior to the offering. If the price at which the shares of our common stock are sold in this offering increases, the dilution experienced by such purchasers will increase proportionately. Furthermore, if previously issued and outstanding options or warrants are exercised, or if additional derivative securities are issued, you could experience further dilution upon their conversion into shares of our Common Stock. For a further description of the dilution that our stockholders will experience immediately after this offering, see the section in this prospectus supplement entitled “Dilution” on page S-5 of this prospectus supplement.

The common stock offered hereby will be sold in "at-the-market" offerings, and investors who buy shares at different times will likely pay different prices.

Investors who purchase shares in this offering at different times will likely pay different prices, and so may experience different outcomes in their investment results. We will have discretion, subject to market demand, to vary the timing, prices and numbers of shares sold, and there is no minimum or maximum sales price. Investors may experience a decline in the value of their shares as a result of share sales made at prices lower than the prices they paid.

The actual number of shares we will issue under the sales agreement, at any one time or in total, is uncertain.

Subject to certain limitations in the At The Market Offering Agreement and in compliance with applicable law, we have the discretion to deliver a sales notice to Wainwright at any time throughout the term of the At The Market Offering Agreement. The number of shares that are sold by Wainwright after we deliver a sales notice will fluctuate based on the market price of the common stock during the sales period and limits we set with Wainwright. Because the price per share of each share sold will fluctuate based on the market price of our common stock during the sales period, it is not possible at this stage to predict the number of shares that will be ultimately issued.

USE OF PROCEEDS

Unless otherwise indicated in a subsequent prospectus supplement, we intend to use the net proceeds from the sale of shares of our common stock by the Sales Agent under this prospectus supplement for general corporate purposes, which may include capital expenditures, funding potential acquisitions of additional new mining equipment, other potential acquisitions, and general working capital. We will have significant discretion in the use of any net proceeds. Investors will be relying on the judgment of our management regarding the application of the proceeds of any sale of securities. We may invest the net proceeds temporarily until we use them for their stated purpose, as applicable.

The expected use of the net proceeds from the sale of common stock offered by this prospectus supplement represents our intentions based upon our current plans. The amounts and timing of our actual expenditures of such proceeds may vary significantly depending on numerous factors and, as a result, our management will retain broad discretion over the allocation of the net proceeds from this offering.

Dividend policy

We did not declare or pay any cash dividends on our common stock in 2019 or in 2020, and, as of the date of this prospectus supplement, and we do not anticipate paying any cash dividends in the foreseeable future. Any future determination to pay dividends will be at the discretion of our board of directors.

DILUTION

If you invest in our common stock, your ownership interest will be immediately diluted to the extent of the difference between the offering price per share of our common stock and the as adjusted net tangible book value per share of our common stock after this offering.

As of June 30, 2020, our net tangible book value was approximately \$20,151,000, or \$0.55 per share of common stock. Such net tangible book value per share represents the amount of our total tangible assets, less total liabilities, divided by the total number of shares of our common stock issued and outstanding as of June 30, 2020, which was 36,559,279 shares.

After giving effect to the 12,363,511 shares of our common stock and related net proceeds issued subsequent to June 30, 2020 through October 2, 2020, our pro forma net tangible book value as of June 30, 2020 would have been \$54,260,226, or \$1.11 per share, based on 48,922,780 shares issued and outstanding. These 12,363,511 shares of our common stock and related net proceeds were issued as follows: (i) 12,028,964 shares issued under our registration statement on Form S-3 (Registration Number 333-226111) to purchasers of shares of our common stock in a public offering pursuant to the terms of the 2019 Offering Agreement with our Sales Agent, Wainwright; (ii) 200,000 shares issued to a holder of the January 2019 Warrants upon the holder's exercise of its right to purchase 200,000 shares; and (iii) 134,547 net shares issued in settlement of vested RSUs, net of tax, issued under our 2019 Plan.

After giving further effect to the sale of shares of our common stock in the aggregate amount of \$100,000,000 in this offering at an assumed public offering price of \$2.60 per share (which was the last reported sale price of shares of our common stock on October 2, 2020) and after deducting estimated offering expenses and after deducting estimated sales agent commissions payable by us, our pro forma net tangible book value as of June 30, 2020, as adjusted, would have been approximately \$151,682,247 or \$1.74 per share of common stock, based on 87,384,328 shares issued and outstanding (assuming all \$100,000,000 of shares are sold at the assumed offering price of \$2.60 per share). This would represent an immediate change in pro forma net tangible book value, as adjusted, of \$0.63 per share to existing stockholders and of \$(0.86) per share to new investors purchasing shares of common stock in this offering. The following table illustrates this dilution:

Assumed public offering price per share		\$ 2.60
Net tangible book value per share as of June 30, 2020	\$ 0.55	
Increase in net tangible book value per share attributable to the shares and related net proceeds issued subsequent to June 30, 2020	\$ 0.56	
Pro forma net tangible book value per share as of June 30, 2020	\$ 1.11	
Increase in net tangible book value per share, as adjusted, attributable to this offering	\$ 0.63	
Pro forma net tangible book value per share as of June 30, 2020, as adjusted after giving effect to this offering		\$ 1.74
Dilution in pro forma net tangible book value per share to new investors participating in this offering, as adjusted		\$ 0.86

This table assumes, for illustrative purposes only, the sale of shares of our common stock in the aggregate amount of \$100,000,000 at the assumed offering price of \$2.60 per share, which was the last reported sale price of shares of our common stock on October 2, 2020.

This offering is being made pursuant to Rule 415(a) of the Securities Act and the actual sales price of shares of our common stock will vary from time to time based on prevailing market prices. Accordingly, the actual dilution experienced by purchasers of our common stock, as well as the total number of shares sold, may increase or decrease with the actual price per share of our common stock sold in this offering. For example, a decrease in the price at which the shares are actually sold in this offering of \$1.00 per share from the assumed offering price of \$2.60 per share shown in the table above (assuming all of our common stock in the aggregate amount of \$100,000,000 is sold at that reduced price) would result in an adjusted pro forma net tangible book value per share after the offering of \$1.36 and result in an immediate dilution in the adjusted pro forma net tangible book value of \$0.24 per share to new purchasers of our common stock in this offering. Conversely, assuming all of our common stock in the aggregate amount of \$100,000,000 is sold, an increase in the price at which the shares are actually sold in this offering of \$1.00 per share from the assumed offering price of \$2.60 per share would result in an adjusted pro forma net tangible book value after the offering of \$1.98 per share and an immediate dilution in adjusted pro forma net tangible book value of \$1.62 per share to purchasers of our common stock in this offering.

The above computation is based on 48,922,780 shares of our common stock issued and outstanding at October 2, 2020 and does not include the following:

- 1,708,144 shares issuable to holders of the vested and exercisable January 2019 Warrants upon the exercise of their right to acquire shares;
- 1,646,113 shares issuable to holders of vested and exercisable December 2017 Warrants;
- 1,416,816 shares issuable upon settlement of 1,416,816 RSUs granted under our 2019 Plan, of which 103,361 are vested and 1,313,455 remain unvested subject to regular vesting schedules; and
- 561,809 shares of common stock reserved for future issuance under our 2019 Plan.

To the extent we issue, subsequent to the date of this prospectus supplement, shares in connection with the exercise of these warrants, in settlement of these RSUs, or if we otherwise issue additional shares, there will be further dilution to investors participating in this offering.

PLAN OF DISTRIBUTION

We have entered into an At The Market Offering Agreement, dated as of May 24, 2019 and as amended on October 6, 2020, with Wainwright under which we may issue and sell up to \$100,000,000 of shares of our common stock from time to time under this Registration Statement through Wainwright as our sales agent pursuant to this prospectus supplement. The At The Market Offering Agreement provides that sales of our common stock, if any, under this prospectus supplement may be made in sales deemed to be “at-the-market” equity offerings as defined in Rule 415(a)(4) promulgated under the Securities Act. If we and Wainwright agree on any method of distribution other than sales of shares of our common stock into the Nasdaq Capital Market or another existing trading market in the United States at market prices, we will file a further prospectus supplement providing all information about such offering as required by Rule 424(b) under the Securities Act.

From time to time during the term of the At The Market Offering Agreement, we may deliver a sales notice to the Sales Agent specifying the length of the selling period, the amount of common stock to be sold and the minimum price below which sales may not be made. Upon receipt of a sales notice from us, and subject to the terms and conditions of the At The Market Offering Agreement, the Sales Agent agrees to use its commercially reasonable efforts consistent with its normal trading and sales practices and applicable law and regulations to sell such shares of our common stock on such terms. We or the Sales Agent may suspend the offering of our common stock at any time upon proper notice to the other, at which time the sales notice will immediately terminate. Settlement for sales of our common stock will occur at 10:00 a.m. (New York City time), or at some other time that is agreed upon by us and Wainwright in connection with a particular transaction, on the second trading day following the date any sales were made, unless we otherwise agree with the Sales Agent. The obligation of the Sales Agent under the At The Market Offering Agreement to sell shares of our common stock pursuant to any sales notice is subject to a number of conditions, which the Sales Agent may waive in its sole discretion. Sales of our common stock as contemplated in this prospectus supplement will be settled through the facilities of The Depository Trust Company or by such other means as we and Wainwright may agree upon. There is no arrangement for funds to be received in an escrow, trust or similar arrangement.

We will pay the Sales Agent a placement fee of up to 3% of the gross sales price of the shares of our common stock that the Sales Agent sells pursuant to the At The Market Offering Agreement. Because there is no minimum offering amount required as a condition to close this offering, the actual total public offering amount, commissions and proceeds to us, if any, are not determinable at this time. Pursuant to the At The Market Offering Agreement, we have also agreed to reimburse Wainwright for certain specified expenses, including the fees and disbursements of its legal counsel in an amount not to exceed \$50,000 and for the fees and disbursements of its legal counsel in connection with Wainwright's ongoing diligence, drafting and other filing requirements arising from this offering in an amount not to exceed \$2,500 in the aggregate per calendar quarter. We estimate that the total expenses for the offering, excluding compensation and reimbursements payable to Wainwright under the terms of the At The Market Offering Agreement, will be approximately \$60,000.

To the extent required by Regulation M, Wainwright will not engage in any market making activities involving our shares of common stock while the offering is ongoing under this prospectus supplement. Wainwright and its affiliates may in the future provide various investment banking and other financial services for us and our affiliates, for which services they may in the future receive customary fees.

In connection with the sale of the common stock on our behalf, Wainwright will be deemed to be an "underwriter" within the meaning of the Securities Act and the compensation of Wainwright will be deemed to be underwriting commissions or discounts. We have agreed to provide indemnification and contribution to Wainwright against certain civil liabilities, including liabilities under the Securities Act.

We will report at least quarterly the number of shares of our common stock sold through the Sales Agent, as our agent, in this offering and, to the extent applicable, the number of shares of our common stock issued upon settlement of any terms agreements, and the net proceeds to us in connection with such sales of our common stock.

The offering of our common stock pursuant to the At The Market Offering Agreement will terminate upon the earlier of: (1) the sale of all of our common stock subject to the At The Market Offering Agreement; (2) termination of the At The Market Offering Agreement by either us or the Sales Agent at any time upon five (5) business days' notice in the respective party's sole discretion; (3) the expiration of the Registration Statement of which this prospectus supplement and the accompanying prospectus forms a part; or (4) by the mutual agreement of the parties to the At The Market Offering Agreement.

The foregoing description of the At The Market Offering Agreement is qualified in its entirety by the 2019 Offering Agreement, as amended by the First Amendment. The 2019 Offering Agreement between the Company and Wainwright, dated as of May 24, 2019, is included as Exhibit 1.01 to the Company's current report on Form 8-K filed with the Commission on May 24, 2019. The First Amendment to the 2019 Offering Agreement between the Company and Wainwright, dated as of the date of effectiveness of the Registration Statement on Form S-3 of which this prospectus supplement and the associated prospectus form a part, is included as Exhibit 1.1 to the Registration Statement, as filed with the Commission on October 6, 2020.

DESCRIPTION OF COMMON STOCK

General

We are authorized to issue 170,000,000 shares of common stock, at no par value per share.

Holders of the Company's common stock are entitled to one vote for each share on all matters submitted to a stockholder vote. Holders of common stock do not have cumulative voting rights. Therefore, holders of a majority of the shares of common stock voting for the election of directors can elect all of the directors. Holders of the Company's common stock representing a third of the voting power of the Company's capital stock issued, outstanding and entitled to vote, represented in person or by proxy, are necessary to constitute a quorum at any meeting of stockholders. A vote by the holders of a majority of the Company's outstanding shares is required to effectuate certain fundamental corporate changes such as liquidation, merger or an amendment to the Company's certificate of incorporation.

Holders of the Company's common stock are entitled to share in all dividends that the board of directors, in its discretion, declares from legally available funds. In the event of a liquidation, dissolution or winding up, each outstanding share entitles its holder to participate pro rata in all assets that remain after payment of liabilities and after providing for each class of stock, if any, having preference over the common stock. The Company's common stock has no pre-emptive rights, no conversion rights and there are no redemption provisions applicable to the Company's common stock.

Classified Board of Directors

Our Bylaws provide for our Board to be divided into three classes, with each class serving a staggered three-year term. We believe that a classified board structure, if implemented, would help to ensure the continuity and stability of the Board and our business strategies and policies. The classified board structure could have the effect of making the removal of incumbent directors more time consuming and difficult, and, therefore may discourage a third party from making a tender offer or otherwise attempting to obtain control of us, even though such an attempt might be beneficial to us and our stockholders.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is Equiniti Trust Company, d/b/a "EQ by Equiniti," Mendota Heights, Michigan.

Listing

Our common stock is currently traded on the NASDAQ Capital Market under the symbol "RIOT".

LEGAL MATTERS

The validity of the issuance of the securities offered by this prospectus supplement have been passed upon for us by Lewis Roca Rothgerber Christie LLP, Las Vegas, Nevada. Additionally, Rogers Towers, P.A., counsel to the Company, has passed upon certain legal matters pertaining to the filing of this prospectus supplement and the At The Market Offering Agreement referenced herein. Ellenoff Grossman & Schole LLP is counsel to the Sales Agent in connection with this offering.

EXPERTS

The consolidated financial statements of Riot Blockchain, Inc. and Subsidiaries as of December 31, 2019 and 2018 and for each of the two years in the period ended December 31, 2019, and Riot Blockchain, Inc.'s and Subsidiaries internal controls over financial reporting as of December 31, 2019, have been audited by Marcum LLP, independent registered public accounting firm, as stated in their reports, which are incorporated herein by reference. Marcum, LLP's report on Riot Blockchain, Inc.'s and Subsidiaries internal controls over financial reporting as of December 31, 2019 expressed an adverse opinion because of the existence of material weaknesses identified therein. Such consolidated financial statements of Riot Blockchain, Inc. and Subsidiaries are incorporated in this prospectus supplement by reference in reliance on the report of such firm given upon their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and special reports, along with other information with the SEC. Our SEC filings are available to the public over the Internet at the SEC's website at <http://www.sec.gov>. You may also read and copy any document we file at the SEC's Public Reference Room at 100 F Street, NE, Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the Public Reference Room. Our SEC filings are also available on our website, <https://ir.riotblockchain.com/under> the heading "Investors." The information on this website is expressly not incorporated by reference into, and does not constitute a part of, this prospectus supplement.

This prospectus supplement is part of a registration statement on Form S-3 that we filed with the SEC to register the securities offered hereby under the Securities Act of 1933, as amended. This prospectus supplement does not contain all of the information included in the registration statement, including certain exhibits and schedules. You may obtain the registration statement and exhibits to the registration statement from the SEC at the address listed above or from the SEC's internet site.

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

This prospectus supplement is part of a registration statement on Form S-3 filed with the SEC. The SEC allows us to "incorporate by reference" into this prospectus supplement the information that we file with them, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be part of this prospectus supplement, and information that we file later with the SEC will automatically update and supersede this information. The following documents are incorporated by reference and made a part of this prospectus supplement:

- Annual Report on Form 10-K for the year ended December 31, 2019, filed on March 25, 2020, as amended by Amendment No. 1 to the Annual Report on Form 10-K/A, filed on April 29, 2020;
- Annual Report on Form 10-K for the year ended December 31, 2018, filed on April 2, 2019 pursuant to Rule 12b-25 extension, as amended by Amendment No. 1 to the Annual Report on Form 10-K/A, filed on April 23, 2019;
- Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2020, filed on May 8, 2020;
- Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2020, filed on August 10, 2020;
- Definitive Proxy Statement and definitive additional materials on Schedule 14A filed on September 20, 2019;
- Current Reports on Form 8-K or Form 8-K/A (excluding any reports or portions thereof that are deemed to be furnished and not filed) filed on January 13, 2020, February 3, 2020, February 11, 2020, February 14, 2020, February 26, 2020, April 14, 2020, April 20, 2020, May 5, 2020, May 12, 2020, June 5, 2020, June 16, 2020, July 21, 2020, August 18, 2020, August 27, 2020, and October 6, 2020;
- The Description of our common stock contained in our registration statement on Form 8-A filed on August 27, 2007 and as amended by Form 8-A / Amendment 1 filed on August 27, 2007.

We also incorporate by reference all additional documents that we file with the Securities and Exchange Commission under the terms of Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act that are made after the date of the initial registration statement but prior to effectiveness of the registration statement and after the date of this prospectus supplement but prior to the termination of the offering of the securities covered by this prospectus supplement. We are not, however, incorporating, in each case, any documents or information that we are deemed to furnish and not file in accordance with Securities and Exchange Commission rules.

Riot Blockchain, Inc.
202 6th Street, Suite 401
Castle Rock, CO 80104
(303) 794-2000

RIOT BLOCKCHAIN, INC.

\$100,000,000

Common Stock



PROSPECTUS SUPPLEMENT

H.C. Wainwright & Co.

_____, 2020

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution.

The following table sets forth the costs and expenses payable by the Registrant in connection with this offering, other than underwriting commissions and discounts, all of which are estimated except for the SEC registration fee.

<u>Item</u>	<u>Amount</u>
SEC registration fee	\$ 12,980
Printing and engraving expenses	5,000
Legal fees and expenses	35,000
Accounting fees and expenses	15,000
Transfer agent and registrar's fees and expenses	5,000
Miscellaneous expenses	5,000
Total	<u>\$ 77,980</u>

Item 15. Indemnification of Directors and Officers.

Nevada Revised Statutes Sections 78.7502 and 78.751 provide us with the power to indemnify any of our directors and officers. The director or officer must have conducted himself/herself in good faith and reasonably believe that his/her conduct was in, or not opposed to, our best interests. In a criminal action, the director, officer, employee or agent must not have had reasonable cause to believe his/her conduct was unlawful.

Under Nevada Revised Statutes Section 78.751, advances for expenses may be made by agreement if the director or officer affirms in writing that he/she believes he/she has met the standards and will personally repay the expenses if it is determined such officer or director did not meet the standards.

Our Articles of Incorporation provide that our officers and directors shall be indemnified and held harmless to the fullest extent legally permissible under the laws of the State of Nevada against all expenses, liability and loss (including attorneys' fees, judgments, fines and amounts paid or to be paid in settlement) reasonably incurred or suffered by them in connection with any civil, criminal, administrative or investigative action, suit or proceeding related to their service as an officer or director. Such right of indemnification shall be a contract right which may be enforced in any manner desired by such person. We must pay the expenses of officers and directors incurred in defending a civil or criminal action, suit or proceeding as they are incurred and in advance of the final disposition of the action, suit or proceeding, upon receipt of an undertaking by or on behalf of the director or officer to repay the amount if it is ultimately determined by a court of competent jurisdiction that he is not entitled to be indemnified by us. Such right of indemnification shall not be exclusive of any other right which such directors or officers may have or hereafter acquire.

Our Articles of Incorporation provide that we may adopt bylaws to provide at all times the fullest indemnification permitted by the laws of the State of Nevada, and may purchase and maintain insurance on behalf of any of officers and directors. The indemnification provided in our Articles of Incorporation shall continue as to a person who has ceased to be a director, officer, employee or agent, and shall inure to the benefit of the heirs, executors and administrators of such person.

Our Bylaws provide that a director or officer shall have no personal liability to us or our stockholders for damages for breach of fiduciary duty as a director or officer, except for damages for breach of fiduciary duty resulting from (a) acts or omissions which involve intentional misconduct, fraud, or a knowing violation of law, or (b) the payment of dividends in violation of Nevada Revised Statutes Section 78.300.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers or persons controlling the registrant pursuant to the foregoing provisions, the registrant has been informed that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is therefore unenforceable.

Item 16. Exhibits.

Exhibit Number	Description of Document
1.1	First Amendment to the At The Market Offering Agreement, dated May 24, 2019, with H.C. Wainwright & Co., LLC.*
1.2	At The Market Offering Agreement, dated May 24, 2019, with H.C. Wainwright & Co., LLC.**
4.1	Articles of Incorporation filed September 20, 2017 (incorporated by reference from the Registrant's Current Report on Form 8-K, filed September 25, 2017).
4.2	Bylaws, effective September 20, 2017 (incorporated by reference from the Registrant's Current Report on Form 8-K, filed September 25, 2017).
4.3	Amendment to Bylaws (incorporated by reference to 8-K filed March 12, 2018).
4.4	Form of Certificate of Designation.** †
4.5	Form of Preferred Stock Certificate.** †
4.6	Form of Warrant Agreement.** †
4.7	Form of Warrant Certificate.** †
4.8	Form of Stock Purchase Agreement.** †
4.9	Form of Unit Agreement.** †
5.1	Opinion of Lewis Roca Rothgerber Christie LLP.*
23.1	Consent of Marcum LLP.*
23.3	Consent of Lewis Roca Rothgerber Christie LLP (contained in Exhibit 5.1).
24.1	Power of Attorney (included on the signature page of this registration statement).

*Filed herewith.

**Filed as Exhibit 1.01 to the Current Report on Form 8-K filed on May 24, 2019.

†To be filed by amendment or by a Current Report on Form 8-K and incorporated by reference herein.

Item 17. Undertakings

(a) The undersigned registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

- (i) include any prospectus required by section 10(a)(3) of the Securities Act of 1933;
- (ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement.
- (iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

provided, however, Paragraphs (a)(1)(i), (a)(1)(ii) and (a)(1)(iii) of this section do not apply if the registration statement is on Form S-3 and the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to section 13 or section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement.

- (2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

- (4) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser:
- (i) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and
 - (ii) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date; or
- (5) That, for the purpose of determining liability of the registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities, the undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:
- (i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;
 - (ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;
 - (iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and
 - (iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.
- (b) The registrant hereby undertakes that for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to section 13(a) or section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- (c) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.
- (d) The registrant hereby undertakes that:
- (1) For purposes of determining any liability under the Securities Act, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.
 - (2) For the purpose of determining any liability under the Securities Act, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on this Form S-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Castle Rock, State of Colorado on the 6th day of October, 2020.

/s/ Jeffrey G. McGonegal

Jeffrey G. McGonegal

Chief Executive Officer and Chief Financial Officer

(Principal Executive, Financial, and Accounting Officer)

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below appoints Jeffrey G. McGonegal as his true and lawful attorney-in-fact and agent, with full power of substitution and re-substitution, for him and in his name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this Registration Statement and any Registration Statement (including any amendment thereto) for this offering that is to be effective upon filing pursuant to Rule 462(b) under the Securities Act of 1933, as amended, and to file the same, with all exhibits thereto, and all other documents in connection therewith, with the Securities and Exchange Commission, granting unto 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, as fully to all intents and purposes as he might or would do in person, hereby ratifying and confirming all that said attorney-in-fact and agent may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

<u>Name</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Jeffrey G. McGonegal</u> Jeffrey G. McGonegal	Chief Executive Officer and Chief Financial Officer (Principal Executive, Financial, and Accounting Officer)	October 6, 2020
<u>/s/ Remo Mancini</u> Remo Mancini	Director; Chairman	October 6, 2020
<u>/s/ Benjamin Yi</u> Benjamin Yi	Director	October 6, 2020
<u>/s/ Jason Les</u> Jason Les	Director	October 6, 2020

October 6, 2020

Riot Blockchain, Inc.
202 6th Street, Suite 401
Castle Rock, Colorado 80104
Attention: Jeffrey G. McGonegal, Chief Executive Officer
Email:jmcgonegal@riotblockchain.com

Dear Mr. McGonegal:

Reference is made to the At The Market Offering Agreement, dated as of May 24, 2019 (the "ATM Agreement"), between Riot Blockchain, Inc. (the "Company") and H.C. Wainwright & Co., LLC (the "Wainwright"). This letter (the "Amendment") constitutes an agreement between the Company and Wainwright to amend the ATM Agreement as set forth herein. This Amendment shall be effective on the date of effectiveness of the Company's shelf registration statement on Form S-3 registering \$100,000,000 of securities of the Company and filed on or about October 6, 2020 with Commission (the "New Shelf Effectiveness Date"). Defined terms that are used but not defined herein shall have the meanings ascribed to such terms in the ATM Agreement. In consideration of the mutual covenants of the parties contained herein, and for other good and valuable consideration, the receipt and sufficiency of which the Company and Wainwright hereby acknowledge, the parties hereby agree to this Amendment of the ATM Agreement as set forth herein.

1. The defined term "Agreement" in the ATM Agreement is hereby amended to mean the ATM Agreement, as amended by this Amendment.
2. The defined term "Business Day" in the ATM Agreement is amended and restated as follows:

"Business Day" shall mean any day other than a Saturday, a Sunday or a legal holiday or other day on which banking institutions or trust companies are authorized or obligated by law to close in New York City; provided, however, for purposes of clarity, banking institutions or trust companies shall not be deemed to be authorized or required by law to remain closed due to "stay at home", "shelter-in-place", "non-essential employee" or any other similar orders or restrictions or the closure of any physical branch locations at the direction of any governmental authority so long as the electronic funds transfer systems (including for wire transfers) of banking institutions in New York City generally are open for use by customers on such day."
3. The defined term "Prospectus Supplement" in the ATM Agreement is amended and restated as follows:

"Prospectus Supplement" shall mean each prospectus supplement relating to the Shares prepared and filed pursuant to Rule 424(b) from time to time, including, without limitation, any prospectus supplement relating to the Shares in the Second Registration Statement at the time of effectiveness."

4. The defined term “Registration Statement” in the ATM Agreement is amended and restated as follows:

““Registration Statement” shall mean, collectively, (i) for the period from May 24, 2019 until the Second Shelf Effective Date (as defined herein), the shelf registration statement (File Number 333-226111) on Form S-3 (the “First Registration Statement”) that was initially declared effective on May 2, 2019 and (ii) for the period from the Second Shelf Effective Date and thereafter, a new shelf registration statement on Form S-3 registering \$100,000,000 of securities of the Company and filed on or about October 6, 2020 with Commission (the “Second Registration Statement”) and that was filed prior to the expiration of the First Registration Statement and that was declared effective by the Commission (such date of effectiveness of the Second Registration Statement, the “Second Shelf Effective Date”), including exhibits and financial statements and any prospectus supplement relating to the Shares that is filed with the Commission pursuant to Rule 424(b) and deemed part of such registration statement pursuant to Rule 430B, as amended on each Effective Date and, in the event any post-effective amendment thereto becomes effective, shall also mean such registration statement as so amended.”

5. The first sentence of Section 2 of the ATM Agreement is hereby amended and restated as follows:

“The Company proposes to issue and sell through or to the Manager, as sales agent and/or principal, from time to time during the term of this Agreement and on the terms set forth herein, up to the Maximum Amount (as defined below), which is equal to the lesser of such number of shares (the “Shares”) of the Company’s common stock, no par value per share (“Common Stock”), that (a) equals the number or dollar amount of shares of Common Stock registered on the Registration Statement pursuant to which the offering is being made, (b) equals the number of authorized but unissued shares of Common Stock (less the number of shares of Common Stock issuable upon exercise, conversion or exchange of any outstanding securities of the Company or otherwise reserved from the Company’s authorized capital stock), or (c) would cause the Company or the offering of the Shares to not satisfy the eligibility and transaction requirements for use of Form S-3, including, if applicable, General Instruction I.B.6 of Registration Statement on Form S-3 (the lesser of (a), (b) and (c), the “Maximum Amount”).”

6. The first sentence of Section 2(b)(v) of the ATM Agreement is hereby amended and restated as follows:

“The compensation to the Manager for sales of the Shares under this Section 2(b) shall be a placement fee of up to 3% of the gross sales price of the Shares sold pursuant to this Section 2(b) (“Broker Fee”).”

7. A new Section 2(b)(ix) of the ATM Agreement is hereby inserted as follows:

“If the Company shall declare or make any dividend or other distribution of its assets (or rights to acquire its assets) to holders of shares of Common Stock, by way of return of capital or otherwise (including, without limitation, any distribution of cash, stock or other securities, property or options by way of a dividend, spin off, reclassification, corporate rearrangement, scheme of arrangement or other similar transaction) (a “Distribution” and the record date for the determination of stockholders entitled to receive the Distribution, the “Record Date”), the Company hereby covenants that, in connection with any sales of Shares pursuant to a Sales Notice on the Record Date, the Company covenants and agrees that the Company shall issue and deliver such Shares to the Manager on the Record Date and the Record Date shall be the Settlement Date and the Company shall cover any additional costs of the Manager in connection with the delivery of Shares on the Record Date.”

8. The Company and Wainwright hereby agree that the Company’s dissolution and complete liquidation of its former subsidiaries, Logical Brokerage Corp. and Kairos Global Technology, Inc., was in the ordinary course of its business and in no way a breach of its obligations under the ATM Agreement. Accordingly, all references to “Subsidiaries” in the ATM Agreement are hereby amended to “Subsidiary” and Section 3(a) of the ATM Agreement is hereby amended and restated to remove any reference thereto as follows:

“Subsidiaries. For purposes of this Agreement, the term “Subsidiary” refers only to Riot Blockchain Canada, Inc. The Company owns, directly or indirectly, greater than 50% of the capital stock or other equity interests of its Subsidiary free and clear of any “Liens” (which for purposes of this Agreement shall mean a lien, charge, encumbrance, right of first refusal, preemptive right or other restriction on the ownership of such capital stock, but shall specifically exclude any general security interest over the assets of the Company and/or its Subsidiary), and all the issued and outstanding shares of capital stock of each Subsidiary are validly issued and are fully paid, non-assessable and free of preemptive and similar rights to subscribe for or purchase securities.”

9. Clause (x) of Section 5 of the ATM Agreement is hereby amended and restated as follows:

“(x) the reasonable fees and expenses of the Manager’s counsel, not to exceed \$50,000 (excluding any periodic due diligence fees provided for under Section 4(n)), which shall be paid upon the Execution Time, and any amounts reimbursable to the Manager therefor under any amendment to this Agreement;”

10. In connection with the amendment to the ATM Agreement set forth herein, the Company shall reimburse Wainwright for the fees and expenses of Wainwright’s counsel in an amount not to exceed \$50,000, which shall be paid on the New Shelf Effectiveness Date.

11. The Company and Wainwright hereby agree that the New Shelf Effectiveness Date shall be a Representation Date under the ATM Agreement and the Company shall deliver the deliverables pursuant to Sections 4(k), 4(l) and 4(m) of the ATM Agreement on the New Shelf Effectiveness Date.

12. Except as expressly set forth herein, all of the terms and conditions of the ATM Agreement shall continue in full force and effect after the execution of this Amendment and shall not be in any way changed, modified or superseded by the terms set forth herein.

13. This Amendment may be executed in two or more counterparts and by facsimile or “.pdf” signature or otherwise, and each of such counterparts shall be deemed an original and all of such counterparts together shall constitute one and the same agreement.

[remainder of page intentionally left blank]

In acknowledgment that the foregoing correctly sets forth the understanding reached by the Company and Wainwright, please sign in the space provided below, whereupon this Amendment shall constitute a binding amendment to the ATM Agreement as of the date indicated above.

Very truly yours,

H.C. WAINWRIGHT & CO., LLC

By /s/ Edward D. Silvera
Name: Edward D. Silvera
Title: COO

Accepted and Agreed:

RIOT BLOCKCHAIN, INC.

By: /s/ Jeffrey McGonegal
Name: Jeffrey G. McGonegal
Title: Chief Executive Officer

[SIGNATURE PAGE TO RIOT AMENDMENT TO ATM AGREEMENT]



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October 6, 2020

Riot Blockchain, Inc.
Attn: Jeffrey G. McGonegal
202 6th Street, Suite 401
Castle Rock, CO 80140

RE: Riot Blockchain, Inc.; Registration Statement on Form S-3

Ladies and Gentlemen:

We have acted as special Nevada counsel to Riot Blockchain, Inc., a Nevada corporation (the "Company"), in connection with the registration by the Company under the Securities Act of 1933, as amended (the "Act"), and pursuant to the Registration Statement on Form S-3 (the "Registration Statement"), of an indeterminate number of: (i) shares of Company common stock without par value (the "Common Stock"), (ii) shares of Company preferred stock without par value (the "Preferred Stock"), (iii) warrants to purchase Common Stock, Preferred Stock or Debt Securities of Company (the "Warrants"), and (iv) the units of any of the foregoing (the "Units" and together with the Common Stock, the Preferred Stock and the Warrants, the "Securities"), as shall have an aggregate offering price not to exceed \$100,000,000. This opinion is being furnished in connection with the requirements of Item 601(b)(5) of Regulation S-K under the Act.

As such counsel, we have examined such matters of fact and questions of law as we have considered appropriate for purposes of this letter. With your consent, we have relied upon corporate records, certificates and other assurances of officers of the Company and others as to factual matters without having independently verified such factual matters. We are opining herein as to the Corporation Law of the State of Nevada, Nevada Revised Statutes Chapter 78 ("Nevada Corporation Law"), and we express no opinion with respect to any other laws, including any federal securities law, or any state securities or "blue sky" laws or regulations.

In rendering the opinion as set forth below, we have assumed: (a) the authenticity of all documents submitted to us as originals; (b) the conformity to the originals of all documents submitted to us as copies; (c) the genuineness of all signatures; (d) the legal capacity of natural persons; (e) the truth, accuracy, and completeness of the factual statements contained in all of such documents; (f) the legal, valid, and binding effect of all such documents on the parties thereto; (g) that the Company will act in accordance with its representations and warranties as set forth in the documents; (h) all Securities will be issued and sold in compliance with applicable federal and state securities laws and in the manner specified in the Registration Statement; (i) each person executing relevant documents (other than persons executing documents on behalf of Company) has the legal capacity and authority to do so; (j) the Registration Statement, and any amendments thereto (including post-effective amendments), will have become effective, and no stop order suspending its effectiveness will have been issued and remain in effect; and (k) all Securities will be issued and sold in compliance with applicable federal and state securities laws and in the manner specified in the Registration Statement.

Subject to the foregoing and the other matters set forth herein, it is our opinion that, as of the date hereof:

1. The issuance and sale by the Company of up to an aggregate offering price of \$100,000,000 of the Securities as provided in the Registration Statement have been duly and validly authorized by all necessary corporate action of the Company.

2. When certain conditions are fully satisfied, those conditions being:

a. the issuance of the Common Stock has been duly authorized by appropriate corporate action and certificates evidencing such shares of Common Stock have been duly executed and delivered against payment of the authorized consideration therefor,

b. the issuance of any series of Preferred Stock has been duly authorized by appropriate corporate action, the amendment to Company's articles of incorporation has been filed in the State of Nevada and certificates evidencing such shares of Preferred Stock have been duly executed and delivered against payment of the authorized consideration therefor,

c. the issuance of the Warrants and approval of the final terms thereof, including any related warrant agreement and warrant certificates under which the Warrants are to be delivered, have been duly authorized by appropriate corporate action, and the Warrants and any related warrant agreement and warrant certificates have been duly executed and delivered against payment of the authorized consideration therefor, and

d. the issuance of the Units and approval of the final terms thereof have been duly authorized by appropriate corporate action, including authorization of each of the constituent Securities, and the related agreements under which the Securities comprising the Units are to be delivered, as applicable, and the Units have been duly executed and delivered against payment of the authorized consideration therefor;

then, subject to the final terms being in compliance with then-applicable law, (i) the Common Stock and Preferred Stock will be validly issued, fully paid and non-assessable shares of Common Stock and Preferred Stock, respectively, of Company, (ii) the Warrants will constitute valid and legally binding obligations of Company, and (iii) the Units will constitute valid and legally binding obligations of Company, and each of the Securities comprising the Units shall also be the subject of the applicable opinion under clauses (i) – (ii) above.

In rendering the foregoing opinions, we have assumed that the Company will comply with any and all applicable notice requirements regarding uncertificated shares pursuant to the Nevada Corporation Law. This opinion is given as of the date hereof, and we assume no obligation to advise you after the date hereof of facts or circumstances that come to our attention, or changes in law that occur, that could affect the opinions contained herein.

This opinion is for your benefit in connection with the Registration Statement and may be relied upon by you and by persons entitled to rely upon it pursuant to the applicable provisions of the Act. We consent to your filing this opinion as exhibit 5.1 to the Registration Statement. In giving such consent, we do not thereby admit that we are in the category of persons whose consent is required under Section 7 of the Act or the rules and regulations of the Commission thereunder.

Very truly yours,

/s/ LEWIS ROCA ROTHGERBER CHRISTIE LLP

INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM'S CONSENT

We consent to the incorporation by reference in this Registration Statement of Riot Blockchain, Inc. and Subsidiaries (the "Company") on Form S-3 of our report dated March 25, 2020, with respect to our audits of the consolidated financial statements of Riot Blockchain, Inc. and Subsidiaries as of December 31, 2019 and 2018 and for each of the two years in the period ended December 31, 2019 and our report dated March 25, 2020 with respect to our audit of internal control over financial reporting of Riot Blockchain, Inc. and Subsidiaries as of December 31, 2019 appearing in the Annual Report on Form 10-K of Riot Blockchain, Inc. and Subsidiaries for the year ended December 31, 2019. We also consent to the reference to our firm under the heading "Experts" in such Prospectus.

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

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

/s/ Marcum Ilp

Marcum Ilp
New York, NY
October 6, 2020