**JCG | Mining Data Decentralization**
**Innovative Data Acquisition, Storage, and Distribution**
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**PROBLEM**

According to an Ernst and Young 2018 report on the top ten issues facing the mining industry, two of the top three issues deal with the handling of data and with cyber security [1]. In the last ten years, digitalization has become increasingly more important for every sector of business. This has been shown to be especially true for mining companies, whose profit margins are dependent on any number of factors such as government oversight, prior site data, and daily profitability [2]. These factors are all data driven, and with legacy systems, proprietary software, and global operations, it is difficult to consolidate and access this information in a reasonable amount of time. A lot of money, manpower, and time are lost to inefficiencies associated with current systems. Cyber security has also become more prominent in the last ten years as there has been an unprecedented number of cyber attacks ranging from individuals to whole cities being held hostage by malware [3].

**SOLUTION**

Decentralization utilizing blockchain technology makes data a part of a global network millions strong. Your data is encrypted and stored within thousands of unique shards spread across the globe, both backing up and protecting your data from cyber attacks. This also lowers your cost of storage, provides fast access to your data anywhere in the world, and gives you absolute control over permissions and accessibility of your data.

**UNIQUE VALUE PROPOSAL**

We propose that, by decentralizing data onto a blockchain based contract network, it is possible to significantly lower server costs and accessibility. By using a network based on blockchain you will have absolutely secure data that you are in control of and at all times. This will also make your data hacker proof while creating a more effective environment for mining data collection.

**MARKET/COMPETITIVE ADVANTAGE**

Typically, for solutions like this, one would normally offload data onto physical, internal servers using platforms such as Google Cloud Platform or Amazon Web Service. Unfortunately, with each of these options, there are risks inherent to the system. By keeping data internal, companies have to combat new cyber threats everyday with legacy software and systems. This can lead to malware attacks and being held ‘hostage’ by encryption attacks. By using existing platforms, users are not in absolute control of their information, as the services are allowed to comb through submitted data. This means they do not have the final say in who has access to it. These platforms also act as single points of failure, where if the servers fail all of the users data would be gone. Blockchain platforms allow us to harness the convenience of current cloud services while minimizing the vulnerabilities associated with them.

**ASK**

With the grant we would build applications and contracts capable of supporting the shift of data off of your shoulders and onto a new network that is more secure, more reliable, and less expensive. We believe we could build the platform’s Alpha in approximately a year, and this money would allow us to continue our research and development.

**CLOSING**

JCG appreciates the time and effort you have put into providing us with this opportunity and hope to work with you into the future.

## REFERENCES

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