RanchiMall

Blockchain and Crypto:
Applications in Steel Industry

ROHIT TRIPATHY
Founder, RanchiMall

30th November 2021
Talk given to Steel Authority
of India Limited - Ranchi

Without king or dictator or government or a chief, mankind had not known how to create trust between adversaries and untrusting entities who had incentive to cheat each other.

RANCHIMALL
BLOCKCHAIN

All of it changed 13 years and 1 month back when Satoshi Nakamoto released the first design of blockchain on 31st October, 2008

RANCHIMALL
BLOCKCHAIN

Satoshi used blockchain to create trust between random strangers, so that they can collectively create digital money and also account for who owns how much of that money.

RANCHIMALL
BLOCKCHAIN

A truly global money was not possible until this innovation because there is no government or chief of the world.

But with invention of blockchain, that was no longer a constraint.

RANCHIMALL
BLOCKCHAIN

But just creating digital money and settling who owns how much of that money was not sufficient.

Because it was certain governments were going to oppose it, it was necessary that this technology also had to be unstoppable and uncorruptible even if most participants are arrested.

Satoshi achieved unstoppablity and uncorruptability by ensuring every participant had full information to continue the system even if all other participants are not active.

As long as just one participant is operating, the system will continue.

RANCHIMALL
BLOCKCHAIN

So until now I have explained that

1. Satoshi created a system of trust among untrusting entities.

2. He used this system to create digital money, and accounting who owns how much of this money.

3. He also made it unstoppable by governments.

RANCHIMALL
BLOCKCHAIN

But still something else was needed for this system to survive.

Why should untrusting participants spend efforts and money to operate this ?

RANCHIMALL
BLOCKCHAIN

To solve "why to participate" issue, Satoshi created an economic incentive system for participants such that they got paid for doing their duties using this digital money itself.

RANCHIMALL
BLOCKCHAIN

His digital money system was designed in such a way that if it got value for first time, the value will always keep on increasing.

This was consequence of contant reduction in supply of this digital money as time went passed.

RANCHIMALL
BLOCKCHAIN

It took one and half years for this digital money to get value for the first time.

10000 units of this digital money was exchanged for one pizza on May 22, 2010.

And Bitcoin value has increased ever since as time went by.

RANCHIMALL
BLOCKCHAIN

Bitcoin supply schedule is designed to reduce supply of new Bitcoins by half every 4 years.

Thats why I think the best way to analyze price performance is to see how it performed after every 4 years.

RANCHIMALL
BLOCKCHAIN

Bitcoin Price Performance

November 26 every 4 years since 2009

2009: 0
2013: $928
2017: $9,330
2021: $54,250

RANCHIMALL
BLOCKCHAIN

The other distinctive aspect is Bitcoin prices have very high variability on day to day basis.

And the explanation for that is: high returns must accompany a high risk profile.

Since risk of default is non existent in Bitcoin system, the only way risk can express itself is by high price volatility.

RanchiMall
Blockchain and Crypto:
Applications in Steel Industry

Bitcoin Prices Every November since 2009

2009: 0 cents
2010: 35 cents
2011: $18
2012: $6

2013: $928
2014: $368
2015: $352
2016: $735

2017: $9,330
2018: $3,779
2019: $7,218
2020: $17,150

2021: $54,250

RANCHIMALL
BLOCKCHAIN

We are in 2021 November.

Everyone realizes now that blockchain and crypto is something that needs to be watched out for.

And it is obvious curiosity what else can blockchain technology do in addition to create digital money that gains value.

RANCHIMALL
BLOCKCHAIN

Now it is becoming clear that blockchain may rewrite and restructure all businesses that we see.

The newer businesses would be based on collaboration of untrusted entities bound together by rules of blockchain.

RANCHIMALL
BLOCKCHAIN

We could for instance create new entities engaged in production and distribution of steel with untrusting participants all over the world collaborating under rules of blockchain.

RANCHIMALL
BLOCKCHAIN

Those entities

1. will be bigger,
2. more economically efficient
3. can do more functions than current steel giants
4. they will have a bigger catchment area of participants
5. participant efforts would be lower than present day steel companies.

Lets explore these ideas deeper.

Because blockchain operates by creating trust between strangers, it expands the boundary of your steel company.

RANCHIMALL
BLOCKCHAIN

This can possibly happen in 3 ways:

1. Your company expands itself on blockchain and opens up to new particpants.

2. A group of steel companies come together to form a new blockchain company.

3. An entirely new blockchain company is formed with fresh rules just like Bitcoin started from scratch.

RANCHIMALL
BLOCKCHAIN

How can a company expand itself on blockchain:

1. FINANCE: It can use blockchain for cheaper sources of funding
2. VENDOR MANAGEMENT: It can use blockchain for more efficient vendor management
3. SOURCE OF ORIGIN: It can use blockchain to guarantee source of origin of its product

RANCHIMALL
BLOCKCHAIN

How can a company expand itself on blockchain:

4. SOURCING OF RAW MATERIAL: Company can use blockchain for getting access to cheaper sources of coal, and ore

5. RESEARCH: Company can track its research efforts and funding on the blockchain.

How can a company expand itself on blockchain:

6. CORPORATE SOCIAL RESPONSIBILITY:
   All CSR initiatives can be tracked through blockchain

RANCHIMALL
BLOCKCHAIN

The key principle is: More the external entities, more the benefits of blockchain.

If all entities are inside the company, then blockchain is of limited use.

The core function of blockchain is to create trust between untrustworthy entities.

RANCHIMALL
BLOCKCHAIN

Now if a group of steel companies come together to form a steel blockchain company, blockchain will be more impactful.

Reason: Number of powerful external entities are more.

The incentive to do this will lie only with second and third tier steel companies who want to achieve dominant position.

There is no visible incentive for dominant steel company to do this unfortunately because they would not like to open up to share their customer or vendor database.

RANCHIMALL
BLOCKCHAIN

But the most powerful use case theoretically is when a new steel company is started from scratch by strangers all across the world united just by rules of the blockchain.

That will be the equivalent of bitcoin creating new money out of pure strangers and challenging large government issued money.

In this new company, investors, producers, consumers and vendors are incentivised by the rules of blockchain, and the best performers in each category are meritocratically evaluated.

RANCHIMALL
BLOCKCHAIN

Now I will talk about what RanchiMall did in blockchain.

We incorporated in blockchain so that our investors can come from all over the world under the rules we committed in blockchain.

RANCHIMALL
BLOCKCHAIN

We also created the technology enhancements needed to enable these ideas that we discussed here.

Our major focus was on simplification of user access to blockchain technology.

RANCHIMALL
BLOCKCHAIN

We are the first ones to use blockchain directly from webpage without wallets.

RANCHIMALL
BLOCKCHAIN

We also expanded the technology such that your blockchain ID can do transactions just not on blockchain, but outside the blockchain.

This has enabled us to extract more power out of single blockchain ID.

RANCHIMALL
BLOCKCHAIN

I have tried to give you a top level overview without getting too technical.

If you have any questions, technical or non-technical, lets discuss.

RANCHIMALL
BLOCKCHAIN

Contact:

Rohit Tripathy Founder, RanchiMall

Know more about RanchiMall at
medium.com/ranchimall

Email: rohit.tripathy@gmail.com
Message: facebook.com/ranchimall

RANCHIMALL
BLOCKCHAIN