

Q2. What is the core problem blockchain trying to solve?

Cross-Border Payments

Blockchain helps streamline the entire process by cutting out any and all middlemen, and lengthy procedures, thereby the burden of unnecessary time delays.

By using its secure and sophisticated distributed ledger, once a transaction gets recorded, the payment is almost instantaneously transferred to the receiving party. Since the transaction can't be reversed or changed, it also ensures better accountability and security than the currently employed system.

And when you include the benefits of added security and transparency into the mix, Blockchain is surely a better solution for global monetary transactions

Supply Chain Management

One of the key benefits that blockchain brings to Supply Chain Management would be interoperability.

The transparency in data sharing makes sure that everyone is on the same page – starting from the manufacturers to retailers, vendors, and even the contractors. In turn, this helps to reduce any conflict and delay in operations.

Furthermore, since all the products can be tracked in real-time, it reduces the risks of

misplacement or goods getting stuck in the supply chain.

Accountability Issues With Traditional Contracts and Agreements

blockchains allow for something known as Smart Contracts, an ingenious solution and future replacement for traditional contracts and agreements.

smart contract is basically a few lines of codes that you can store on a Blockchain. These are programmed to execute certain actions – ideally process a transaction, as soon as the terms and conditions specified in the lines of code are met.

Identity Theft

Blockchain offers a novel solution to the problem. In a decentralized platform, you

get access to a private key and a public key. The public key is made available to the public.

And because of the open transparent nature of Blockchain, everyone can access your public records. However, it offers concrete security as no one can change or edit your data.

Managing And Protecting Patient Data in Health Care Organizations

Blockchain can help create a decentralized log of patient data that is transparent and public for all hospitals to access. Furthermore, there is no way to corrupt the

data, so the entire problem of interhospital communication is resolved.

Next comes security. Despite being transparent and public, Blockchain can also help keep your data private by concealing your identity with secure codes that will protect all your sensitive data. If and even necessary, you need to provide a private key, and only then will the information be accessible.

Digital Copyright And Piracy

Blockchain can help artists and creators digitize the metadata of their content like timestamps, and IP (Intellectual Property) rights in immutable ledgers.

Now, the creator can safely put their content on a publicly open market but

immediately knows once a copyright infringement occurs, and thus, take legal proceedings.

The blockchain can record every time the content gets accessed or used. This creates a sort of transparent real-time tracking which also opens the possibility for consumption-based pricing mechanisms, which will be better for the consumer.

Government Systems And Public Sectors

Blockchain-based government models allow businesses, governments, and individuals to securely share resources within the distributed ledger with complete peace of mind. Since the structure is immutable, you don't need to worry about fraud or data manipulation following the decentralized nature of blockchain, it makes government operations more transparent, thereby reinforcing the people's trust in the system.

using technologies like Smart Contracts, many labor-intensive tasks can be automated which can streamline the process helping in reduced time and cost.

Crowdfunding and Fundraising

Blockchain-based systems allow for securities or Initial crowdfunding. In essence, it is similar to public offerings where a company or startup will issue tokens that will function as the company's share, but without equity exchange.

A user can buy the tokens using fiat currencies like USD and thereby support the startup or company.

Real Estate

digitize your property and real estate assets, and store them in a blockchain. This makes it immutable so it can't be tampered with. Furthermore, each succeeding transaction gets stored for future references.

All this makes it impossible for a person to cheat and sell your property that isn't theirs. Similarly, once you own a property, it is recorded right there in the blockchain and can't be altered or denied.

Furthermore, the decentralized nature of blockchain coupled with the use of smart contracts, you can automate most of the time-consuming legalities and streamline the entire process.

Sports and ESports

blockchain can be used to create new revenue models by tokenizing teams and introducing loyalty programs. It also allows for creating new markets where people can start betting on their favorite teams.

Similarly, individual athletes can create crowdfunding options by leveraging smart contracts where they can start earning money for delivering better performance.

A blockchain-based system can even help track user engagement and interaction which can then be used to create incentive programs to promote even more audience interaction and engagement.