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Blockchain Revolution in the Healthcare Industry

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What is the problem?



Healthcare industry is becoming more and more challenging!

- The prices for medical services are increasing rapidly, and it is *difficult to find the appropriate specialist* and treatment for a disease or it requires long waiting lists.
- There are limited possibilities for *easy and transparent payments* all over the world for healthcare services.
- We face now *lack of incentives and personalized information* about preventive care.
- Patients require *instant data access from any place on their mobile device*, with no risk of data mismanagement, access limitations to their patient records, and decentralization of all personal healthcare data..



Conclusion

Modern society requires new tools, e.g. distributed ledger & smart contracts for sharing data between patients and healthcare professionals by giving them control over the data and allowing smarter cooperation.

Our Solution: Blockchain

Blockchain technology can resolve integrity, data privacy, security and fraud issues, increase patient health autonomy and provide access to better services.



Blockchain for electronic medical records



Blockchain for tracking and tracing medical fraud



Blockchain for secure and guaranteed payments



Blockchain for medical research



Blockchain for artificial Intelligence of complex medical data



The advantages of blockchain technologies within healthcare ecosystem

For Healthcare Organizations and Insurance companies:

“Cost-saving by having a more complete picture of a patient’s health condition”



For Patients:

“Medical history right in the pocket and direct access to healthcare”

For healthcare professionals:

“A data sharing platform for providing a personalised medicine”

Global statistics

Healthcare has the most aggressive deployment plans of any industry:
35 % of respondents in that industry say their company *plans to deploy blockchain* into production within the next calendar year.

It will help to achieve insurance all over the world, having instant access to best healthcare professionals, getting a personalised medicine.

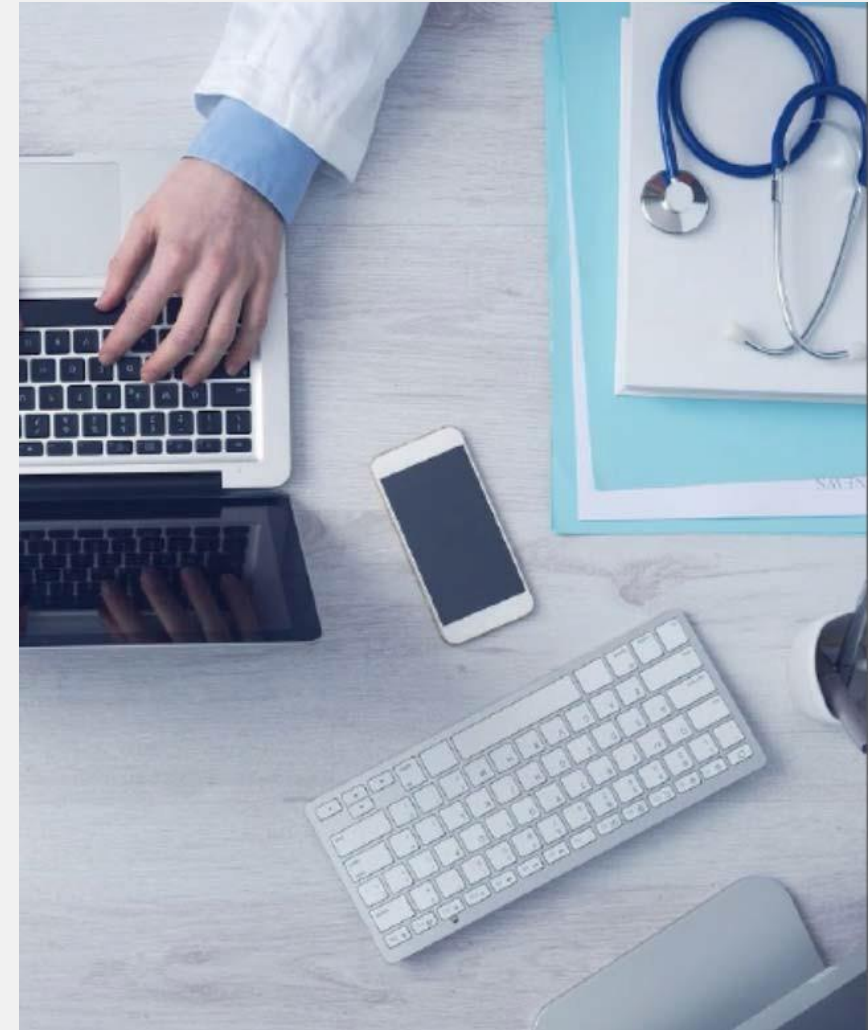
\$8.7 trillion
health spending
in the world
by 2020
*(increase from 2.4 %
to 7.5 %)*

10%
of global gross
domestic product
stored
on blockchains
by 2027

20-30 bln
connected
healthcare
IoT devices

Barriers to blockchain adoption in Russia

1. *Decentralized healthcare infrastructure* that can't be controlled by any person or group
2. *Patient information is stored in different places*, doctors don't want patients to access EHRs, patients take a *passive role* in managing and tracking their health
3. *No required regulatory base* and a need to provide targeted government-backed funding with a specific focus on remote medical services
4. A common opinion that blockchain technology is new, and its *advantages are unproven*
5. *Need of integration* of blockchain into existing healthcare programs.



Proposed Solution: smart contract & value-oriented approach to medical services



A record management system that can handle EHRs based on blockchain technology

Being decentralized, the technology of blockchain can ensure that data is stored securely in chronological order, in millions of servers and devices. Patients are able to access securely and move their medical records between different healthcare organizations. Blockchain takes control over the customer healthcare record, tracks all changes, and protects against mistakes and data mismatch.



Blockchain smart contracts will insure payments and paying healthcare providers for their contribution globally

Blockchain technology helps to create an ecosystem through smart contract and digital currency, so that all participants – patients, doctors, healthcare providers, researches and medical institutions, are financially motivated and secured. In this context «Smart» means «without intermediates» - e.g. banks, financial organizations or insurance company or brokers. Smart contract also means «technically executed» as without execution there is no payment.

Blockchain Digital Platform Flow Chart



Blockchain uses a digital platform that stores and verifies the entire history of transactions between users across the network in a tamper.

Transactions between users or counter-parties are broadcast across the network and are verified by cryptographic algorithms and grouped into blocks.

Every modification of data is agreed to by the participants on a network. Whenever required, the data from the various connected devices can be accessed using the unique key

All payments are made with cryptocurrency / Tokens. Once the conditions of the smart contract have been met, the payment will automatically be taken

Executive Summary

Blockchain provides a technology to build a positive healthcare ecosystem:

- *Healthcare organizations* can create individual healthcare plans based on personalized information, machine intelligence, save costs and improve medical services.
- *Doctors* can reach relevant patients, build online reputation, access to the latest technologies
- *Patients* get direct access to healthcare and services



Not only standards need to be in place, but there also should be a level of confidence and motivation from people before any organization can adopt new blockchain technology.

Any Questions

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