BLOCKCHAIN

What is it, why is it so important for us to understand it, and how can it impact our industry?
My three main objectives from this presentation are:

1) Explain the blockchain technology in an easy-going way.
2) Describe blockchain's impact and potential in general.
3) Delineate blockchain's impact and potential in the translation and localization industry.
I will cover from the Origins of Blockchain, what is it exactly, types of Cryptocurrencies, Key concepts, and the impact and possible implications in our Industry, both in the short and long term.

Blockchain is to talk about Technology, Economy and Ideology.
The themes of decentralization of power, getting rid of all the inefficiencies of centralized systems, removing the middlemen like governments and banks, and cryptographically enhanced transparency, dominate the blockchain discourse.
If we see the Economic Implications, according to statista.com, global spending on blockchain solutions in 2024 will reach 18 billion U.S. dollars. An analysis by PwC shows that the blockchain technology has the potential to boost GDP by $1.76 trillion US Dollars over the next decade.

Blockchain has the potential to change almost every industry out there. It is affecting industries and sectors such as the US Airforce, Voting, Healthcare, Banking, Security, Legal industry, and many more.
ORIGINS OF BLOCKCHAIN
- Blockchain technology was first described in 1991. Scientists Stuart Haber and W. Scott Stornetta introduced a computationally practical solution for time-stamping digital documents. The system used a cryptographically secured chain of blocks to store the time-stamped documents.

- Movement in the '90s known as “Cypherpunk”.
- **Global Financial Crisis:** White paper called "Bitcoin: a peer-to-peer electronic cash system."

- **Harold Thomas Finney** introduced a system called RPoW, Reusable Proof Of Work in 2004.

- The first Blockchain (called Bitcoin) was invented by a person, or a group, that goes by the name of Satoshi Nakamoto in 2009.
CONCEPTS OF BITCOIN WHITE PAPER
Trust without Intermediaries: Peer-to-Peer electronic cash.

Transparency with decentralization.

Security guaranteed by clever code.

Honesty: “Game theory.”

A trusted financial system thanks to a “Distributed Ledger.”
Built in Scarcity within the system.

“Proof of Work.”

Bitcoin is written in a programming language.
TYPES OF CRYPTOCURRENCIES
There are thousands of Cryptocurrencies called “Altcoins”, “Alt” standing for alternative.

Some of the most important Cryptocurrencies other than Bitcoin are:

1. Ethereum (ETH)  
2. Litecoin (LTC)  
3. Cardano (ADA)  
4. Polkadot (DOT)  
5. Bitcoin Cash (BCH)  
6. Stellar (XLM)  
7. Chainlink  
8. Binance Coin (BNB)  
9. Tether (USDT)  
10. Monero (XMR)
Open source / Descentralized: Considered the “true blockchains.”

Corporate: Bank-operated blockchains.

National / Governamental.
BUT WHAT IS BLOCKCHAIN?
“The blockchain is an incorruptible digital ledger of economic transactions that can be programmed to record not just financial transactions but virtually everything of value.”
Don and Alex Tapscott, authors of Blockchain Revolution.

The internet was designed to move information from person to person, but not value. Blockchain is the internet of value.

Blockchain isn’t money, it’s a platform of trust.
Andreas Antonopolous’ vision about money. He says that money is one of the oldest technologies that humanity has, preceding even writing.

In the history of money that spans tens of thousands of years, there have been five major changes:

From pure barter exchange, to the introduction of the first abstractions of value like shells, feathers, salt, nuts, stones, and precious metals. Then paper money, and plastic money, and now network money.

Money is a language, a linguistic abstraction that we use to communicate value to each other.
KEY CONCEPTS OF BLOCKCHAIN
A Blockchain is a database capable of registering any type of global operation through the internet between two people and without intermediaries.

It is the safest system known to date, transparent and indelible, where any data entered is public.

Bitcoin's ledger was the first blockchain, but the technology has begun to spread across the global economy. Let you keep thousands of strangers honest and consistent.

A Blockchain is one giant text file, computers compete to solve math problems and add a new block of text to the end of the file.
This process is what we mentioned before as “Proof of Work”.

“Distributed Ledger”. With blockchain, there are no transactions that are independent of the history of the blockchain. Anyone can access the history of that financial system. This brings transparency to the system.

“51% attack”: the true state of the entire financial ledger, is determined by 51% consensus of all participating.
The anatomy of a crypto transaction, it starts when address “A” wants to send a payment to address “B”.

The “Miners” are the people that are going to try to compete in this math contest. Miners grab as many of those transaction details that they can fit into a new block that has a limit of 1 megabyte.

The solution to the math problem is correct, then they would award the new block.
There's a new block and whichever transactions were included in that block, are now officially part of the history of the blockchain. The miner gets their block reward and the transaction is officially complete, and address “B” would see that now they have the funds that were sent by address “A”.
Bitcoin is programmed so that a new block is added to the blockchain every 10 minutes in average. If computers are guessing the correct number too quickly.

The network does is it automatically adjusts itself to make the test more difficult. That measure is called “Difficulty”.

When mining started, people could do this on their own computers. Nowadays this is what we have: “Mining Farms”.
BLOCKCHAIN IN THE TRANSLATION INDUSTRY