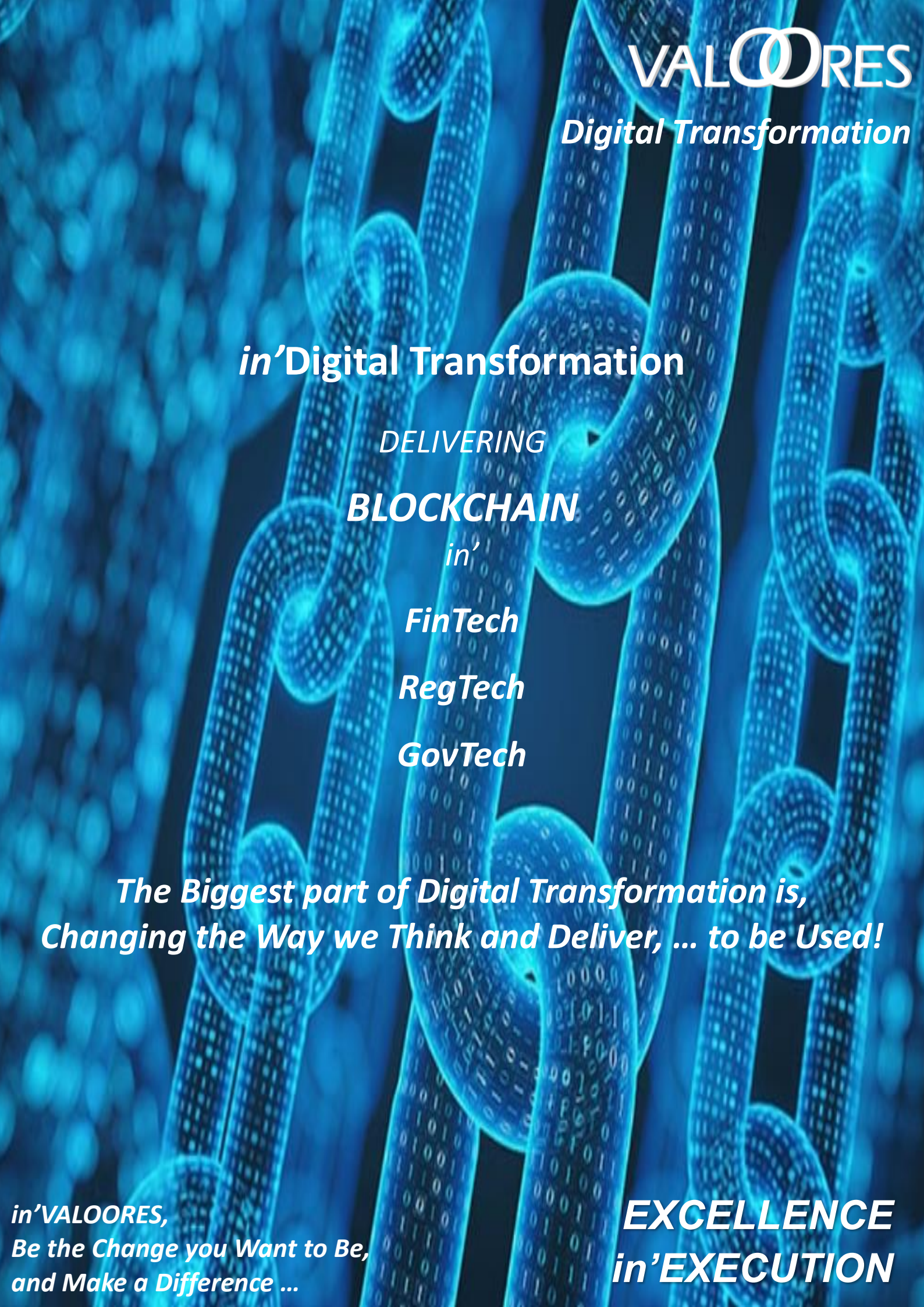

VALOORES
Digital Transformation
in'Digital Transformation
DELIVERING
BLOCKCHAIN
in'
FinTech
RegTech
GovTech
The Biggest part of Digital Transformation is,
Changing the Way we Think and Deliver, … to be Used!
in'VALOORES,
Be the Change you Want to Be,
and Make a Difference …
EXCELLENCE
in'EXECUTION

There is No Gain, without Pain,
… Based on a Solid Information Integrity

We Deliver Advanced Analytics-Based Governance, Risk, and Compliance Solutions to Financial Institutions, Central Banks, Banks, Insurance... It's been over 30 years of Success now.

VALOORES - A Brief Summary in few Lines

VALOORES empowers decision making, helping people and businesses around the globe reach their targets. Founded in 1989 in France, the Company is a pioneer in Master Data Governance, Retail & Merchandising, Supply Chain Optimization, KYC, Regulatory Compliance, Financial Crime - AML & Fraud, Predictive Analytics and Data Science to improve their on-going operations, executions and decisions.

VALOORES BLOCKCHAIN in FinTech, RegTech, & GovTech

VALOORES BLOCKCHAIN

VALOORES BLOCKCHAIN caters to multiple Lines of Business: Governments, Banks, Insurances, Financial Institutions, Regulators, Retail & Supply Chain organizations, Healthcare bodies, Registered agents, Lawyers, Corporate secretaries, Financial advisors, Venture capitalists, Capital markets, Securities Traders, and Public markets.

VALOORES though, believes that BLOCKCHAIN technology brings significant changes to the Banking and Finance landscape. Being distributed and immutable, BLOCKCHAIN has the capacity to disrupt current Banking processes, be it an exchange of values, cross border payments, customer identification, or securing users' financial data.

VALOORES BLOCKCHAIN presents multiple opportunities to transform the Financial industry.

Benefits of VALOORES BLOCKCHAIN Technology in Banking and Finance

VALOORES BLOCKCHAIN caters to the needs of the Banking and Finance sector by eliminating the need for intermediaries, enabling a significant amount of time and money being saved.

- Cheaper operational cost and enhanced capital optimization
- Traceability of settlements with the help of Smart Contracts
- Enhanced transparency within Financial Institutions
- Eliminating chances of human error in accounting
- Reduced transaction delay

Roadblocks that VALOORES BLOCKCHAIN can solve in the Banking and Finance spectra

BLOCKCHAIN holds the potential to reduce the overall cost and make things more secure.

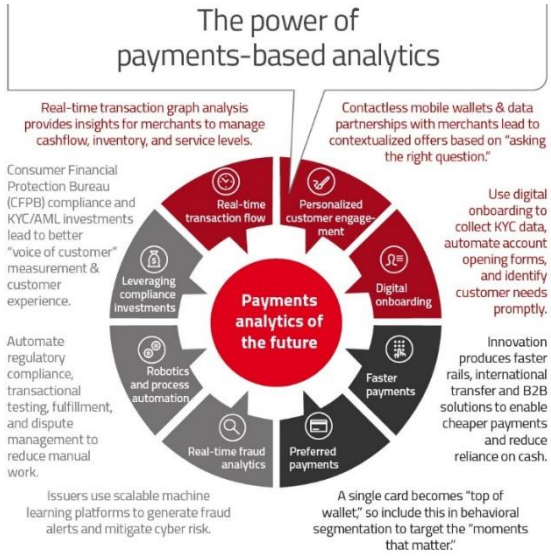
- Slow transaction speed
- Risk of Frauds and Hacks
- Expensive KYC Process
- Reliance on Intermediaries

Contemplating the impact of BLOCKCHAIN on the Banking and Finance industry, VALOORES

BLOCKCHAIN enables the development of new business opportunities and eliminated existing inefficiencies.

VALOORES BLOCKCHAIN - Payments

VALOORES BLOCKCHAIN, another way of paying each other, not depending on SWIFT and other payment schemes. VALOORES BLOCKCHAIN implementation leads to operational efficiencies and cost savings for Banks, alongside benefits for customers.



The world is striving towards faster online payments and exploring new dimensions of exchanging money. VALOORES BLOCKCHAIN eliminates major Payment hurdles and barriers faced by the Banking and Finance industry, such as fraud, slow & expensive cross-border transactions, and data vulnerability. The BLOCKCHAIN decentralized technology assists the current system with high speed payments, immutable ledger technology, and high transparency.

Payment systems are under pressure to modernize payments and address safety and security, as of the 2008 financial crash. The existing payment system has always gone through banks and central banks. VALOORES BLOCKCHAIN speeds up money transfers and helps banks operate continuously, 24 hours a day, to meet customers' expectations around omni-channel any time banking experience. It secures payments in real-time, with complete transparency, real-time AML & Fraud analysis and prevention, at a reasonable cost.

VALOORES BLOCKCHAIN Payment Complies with the FATF Guidance

VALOORES secures its BLOCKCHAIN Payment Compliance, while marching at the same drum with the FATF Guidance; a progressive and dynamic Risk-Based Approach (**RBA**) on Virtual Assets (**VA**) and Virtual Asset Service Providers (**VASP**), over an **AML/CFT** framework.

The FATF Guidance recognizes that "new" or innovative technologies or mechanisms for engaging in or that facilitate financial activity may not automatically constitute "better" approaches, and that jurisdictions should also assess the risks arising from and appropriately mitigate the risks such new methods of performing a traditional or already-regulated financial activity, such as the use of VAs in the context of payment services or securities activities, as well.

FATF Financial Action Task Force

As with many financial payments methods, for example, VAs can enable non-face-to-face business relationships. Further, VAs can be used to quickly move funds globally and to facilitate a range of financial activities from money or value transfer services to securities, commodities or derivatives-related activity, among others. Thus, the absence of face-to-face contact in VA financial activities or

operations may indicate higher ML/TF risks.

Similarly, VA products or services that facilitate pseudonymous or anonymity-enhanced transactions also pose higher ML/TF risks, particularly if they inhibit a VASP's ability to identify the beneficiary. The latter is especially concerning in the context of VAs, which are cross-border in nature. If customer identification and verification measures do not adequately address the risks associated with non-face-to-face or opaque transactions, the ML/TF risks increase, as does the difficulty in tracing the associated funds and identifying transaction counterparties.

The extent to which users can use VAs or VASPs globally for making payments or transferring funds is also an important factor that countries should take into account when determining the level of risk.

Illicit users of VAs, for example, may take advantage of the global reach and transaction speed that VAs provide as well as of the inadequate regulation or supervision of VA financial activities and providers across jurisdictions, which creates an inconsistent legal and regulatory playing field in the VA ecosystem.
As with other mobile or Internet-based payment services and mechanisms that can be used to transfer funds globally or in a wide geographical area with a large number of counterparties, VAs can be more attractive to criminals for ML/TF purposes than purely domestic business models.

VALOORES BLOCKCHAIN - Fraud Reduction

Fraud growth and cyber-attacks are among the main challenges facing the banking industry today. Banks and financial institutions use a centralized database that is more prone to hacks and cyberattacks (data breaches and fraud), as all information is located in one place; usually secured behind outdated legacy IT systems.

VALOORES partners with Banks and Regulators to roll out its FinTech and RegTech Services; pull together credible, decentralized ledgers enabling rapid adoption of global real-time payments and settlement.

As the BLOCKCHAIN is decentralized, it is less prone to this type of fraud. With BLOCKCHAIN, there's not only real-time execution of payments, but also complete transparency, which enables real-time fraud analysis and prevention.
VALOORES BLOCKCHAIN plays an integral role in Fraud Reduction, while offering solutions for the financial industry, such as data poisoning detection and fraudulence reduction (real-time analysis and verification during a transaction); BLOCKCHAIN is checked at every step of a transaction, with all data being open and publicly available.

VALOORES BLOCKCHAIN ledger provides a historical record of all shared documents, alongside the undertaken

compliance activities for each banking customer. Malicious attempts to view or change the data become part of the data itself, making third party hacks immediately obvious.

VALOORES BLOCKCHAIN - Know Your Customer (KYC)

Current Bottlenecks and Issues.

Global efforts to prevent Money Laundering and the Financing of Terrorism are incredibly expensive. It's estimated that Financial Firms' spending on Anti-Money Laundering (AML) Compliance alone amounts to billions of dollars.

Although Banks are pressured by investors and analysts to reduce costs, Compliance teams' budgets are expected to increase. While annual compliance costs are high, there are also large penalties for failing to properly follow KYC guidelines. Regulatory fines have followed an upward trend, with record-breaking fines levied during the past years.

Going forward, Know Your Customer (KYC) requests over inconsistent and slow KYC systems are delaying transactions, taking up to 50 days to get to a satisfactory level, not to mention the substantial effort duplication between firms.

How can VALOORES BLOCKCHAIN Help?

VALOORES is partnering with Central Banks, Banks, and other Payment / Money Transfer service providers, and gathering them around a common digital identity service. This interoperability, combined with the application of smart contracts, automates some aspects of the Compliance process (i.e. transactions are only released to parties for whom adequate KYC evidence exists on the BLOCKCHAIN).

The burden of KYC compliance is significantly reduced through the use of a shared database of client background documentation. In some respects, use of a BLOCKCHAIN for settlements and payments creates an even stronger case for tighter controls around KYC; exploring faster, cheaper, better ways of facilitating payments and improving KYC compliance. This also helps regulators stay on top of changes in process and technology.

VALOORES KYC statements, including a summary of the KYC documents, are stored on a private BLOCKCHAIN (to contain issues surrounding security and privacy of customer's KYC information), as data stored on a BLOCKCHAIN is irreversible; it provides a single source of truth, hence minimizing the risk of duplication or error.

Storing KYC documents on a BLOCKCHAIN reduces delays and saves money involved in the entire process. The KYC on a BLOCKCHAIN can be used by other banks and other accredited organizations (such as insurers, car rental firms, loan providers etc.) without asking the customer to undergo the KYC process all over again (customer only has to supply KYC documents once, until it needs to be updated).

KYC underlying information is not disclosed to any other party (except for the customer's own bank) as the other organizations won't need to see and check the ID documents, but will just rely on the BLOCKCHAIN verification.

Data on the BLOCKCHAIN will merely be

a reference point with a digital signature or cryptographic hash, which gives individuals access to the relevant client information, in a repository separate to the BLOCKCHAIN, ensuring a secure and private way of conducting and storing a customer's KYC information.

VALOORES BLOCKCHAIN KYC ensures that financial institutions only have permissioned access on a temporary basis, so that access to KYC information is only granted when strictly necessary for that purpose.

VALOORES BLOCKCHAIN has a major role in streamlining KYC and AML processes (with the appropriate cross-border consensus in place, around documentation and verification).

The use of a distributed ledger system, such as VALOORES BLOCKCHAIN, unlocks the following advantages.

- Automating processes and reducing Compliance errors (removing duplication of effort in carrying out KYC checks, and enabling encrypted client updates to be distributed to all banks in near real time).
- Evidence that a bank has acted in accordance with the regulator requirements; a historical record of all shared documents and compliance activities undertaken for each client.
- Identifying entities attempting to create fraudulent histories
- Data within it can be analyzed by Banks to spot irregularities and criminal activities.

VALOORES offers businesses, including Banks and Insurance companies, the ability to scan customer documents and identity information, then generate private and public keys to seal them before the data is encrypted and sent to the BLOCKCHAIN. VALOORES helps banks comply with KYC and AML regulations as they consider whether to provide banking services to crypto currency-related businesses.

Trading Platforms

Current Bottlenecks and Issues.

Online trading platforms, though a great place to trade and monitor stocks and commodities, are under the radar because of Fraud Risk, Double Spending, and Lack of Transparency.

How can VALOORES BLOCKCHAIN Help?

VALOORES BLOCKCHAIN platform enhances traceability and authenticity upon exchange assets, while eliminating the need for intermediaries, and that is by storing their value on the permanent ledger.

VALOORES BLOCKCHAIN reduces the Fraud Risk threat, and addresses operational risk and administrative costs as it's transparent and immutable; it maintains a digital and permanent record of an asset trade, alongside the physical trading of commodities, to promote fairness of transactions and simplified trade process.

Traceability and the permanent historic record backing up every asset or traded item of value provides assurance and authenticity all the way through the supply chain.

In practice: The Digital Token.

The challenge of maintaining data privacy is sorted out in BLOCKCHAIN where tokenisation, in the form of cryptography,

is used to protect the trade data with parties only allowed to access to permissioned information with the correct security key.

When a high-value item is first created, a corresponding Digital Token is issued by a trusted central authority which acts to authenticate the product's point of origin. Then, every time the product is bought and sold the digital token is moved in parallel so that a real-world chain of ownership is created and mirrored by the BLOCKCHAIN history of that digital token.

The Digital Token is acting as a virtual "authenticity certificate" that is far harder to steal or forge than a piece of paper. Upon receiving the Digital Token, the final recipient of the product will then be able to verify the chain of custody all the way back to the point of creation.

BLOCKCHAIN Technology Overview

BLOCKCHAIN technology is poised to significantly alter financial markets, within a cryptographic ecosystem that has the potential to impact trusted computing activities and cybersecurity concerns as a whole. It was first introduced to address the following:

- No reliance on trust
- Digital signatures
- Peer-to-peer network
- Proof-of-work
- Public history of transactions
- Honest, independent nodes control majority of CPU computing power
- Nodes vote with CPU computing power
- Rules and incentives enforced through consensus mechanism

Insight into Cryptocurrency

Circulated Cryptocurrency Examples: Bitcoin, Ethereum, Litecoin

Bitcoin for instance

- A maximum of 21 million Bitcoins can be generated
- Just as with real world mining, energy must be invested to solve complex mathematical problems by which systems earn Bitcoins
- Technology Behind Bitcoin
    - Bitcoin as an electronic asset (as well as a digital currency)
    - A network of computers keeps track of Bitcoin payments, and adds them to an ever-growing list of all the Bitcoin payments that have been made, called "The Bitcoin BLOCKCHAIN"
    - The file that contains data about all the Bitcoin transactions is often called a "ledger"
    - Bitcoin value is created through transaction processing, referred to as "mining," which is performed by distributed processors called "nodes" of the peer-to-peer network

Three "Levels" of BLOCKCHAIN

- Storage for Digital Records
- Exchanging Digital Assets (called tokens)
- Executing Smart Contracts
    - Ground rules: Terms & Conditions recorded in code
    - Distributed network executes contract & monitors Compliance
    - Outcomes are automatically validated without third party

Hyperledger

- Hyperledger is an open source collaborative effort created to advance cross-industry BLOCKCHAIN technologies.

    - It is a global collaboration, hosted by The Linux Foundation, including leaders in finance, banking, IoT, supply chain, manufacturing, and technology.
- Business BLOCKCHAIN Frameworks are hosted with Hyperledger.
- Hyperledger addresses important features for a cross-industry open standard for distributed ledgers.

Hyperledger Projects

Hyperledger Burrow

- Permissible Smart Contract machine with a modular BLOCKCHAIN client, built in part to the specification of the Ethereum Virtual Machine (EVM)

Hyperledger Fabric

- Foundation for developing plug-n-play solutions within a modular architecture

Hyperledger Iroha

- Simple and easy BLOCKCHAIN framework designed to be incorporated into infrastructure projects requiring distributed ledger technology

Hyperledger Sawtooth

- A modular platform for building, deploying, and running distributed ledgers

Insight into Ethereum

Ethereum is a decentralized platform that runs smart contracts: applications that run exactly as programmed without any possibility of downtime, censorship, fraud, or third party interference.

The Ethereum Wallet

It's a gateway to decentralized applications on the Ethereum BLOCKCHAIN, allowing users to hold and secure ether and other crypto-assets built on Ethereum, as well as write, deploy and use Smart Contracts

What is Ether?

Ether is the crypto-fuel for the Ethereum network.
Ether is a necessary element, a fuel, for operating the distributed application platform Ethereum.

- It is a form of payment made by the clients of the platform to the machines executing the requested operations, functioning as the incentive that ensures that developers will write quality applications, and that the network remains healthy.

VALOORES Risk & Compliance

Reasons behind embracing BLOCKCHAIN in the Financial Services Industry

VALOORES believes that Trust and Efficiency are the main value drivers in the finance world.

- Tracking Risk and monitoring Compliance with laws and regulations within an increasingly complex cybersecurity environment requires considerable time and resources.
- The Financial Services Industry sees opportunities in BLOCKCHAIN and has been heavily investing in its usage, primarily as a part of private implementations.

Distributed Access Management

- Creating an identity on BLOCKCHAIN can give individuals greater control over who has their personal information and how they access it
- Areas impacted include passports, e-residency, birth certificates, wedding certificates, IDs, online account logins, etc

- Digital ID's can provide digital watermarks that can be assigned to every online transaction of any asset

Protecting Private Keys

- Within the BLOCKCHAIN, trust relies on the safekeeping of private keys, in support of a truly distributed identity management
- Ultimately, that safekeeping resides with the actions taken by individuals to secure their private key

Distributed Databases / Storage

- Distributed database technology allows for permanent storage of an agreement. Files are split into pieces, each piece outside of the control of any one company.
- This means faster, quicker, more secure sharing of databases of information that persists even if the company closes.
- Distributed databases cannot be hacked, as the files are disassembled in many pieces.
    - Instead of storing one encrypted document in one safe, it's like encrypting a document, tearing it into pieces, and storing in multiple safes.

VALOORES - Future Outlook

VALOORES is proud of the VBS success achieved till now; a myriad of solutions implemented in multiple lines of business so far. VALOORES is determined to innovate and solve Governance, Risk, Compliance, Profitability Problems and emerging challenges downstream.

VALOORES continues to partner with Regulators (Central Banks, Financial Information Units…) and Industry Catalysts (Thomson Reuters, Financial Integrity Network…) around the globe, and on board more Compliance and Financial Crime Experts, professionals, engineers, business analysts, and data scientists, to push the boundaries of Compliance, through **FinTech**, **RegTech**, & **GovTech**.

The Global Outlook has considerations for Governments and Financial Institutions on their journey toward a 21st century Governance Risk and Compliance framework

Here comes VALOORES Added Values, to Walk with you, and stay this minute in advance of the Governance, Risk, & Compliance Headwinds…

VALOORES

Over 30 years of successful deliveries **déjà!**

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