Emerging Trends- Industry Service providers, block-chain, trade system

The 3rd IPPC Global Symposium on ePhyto
"ePhyto and Trade Facilitation"

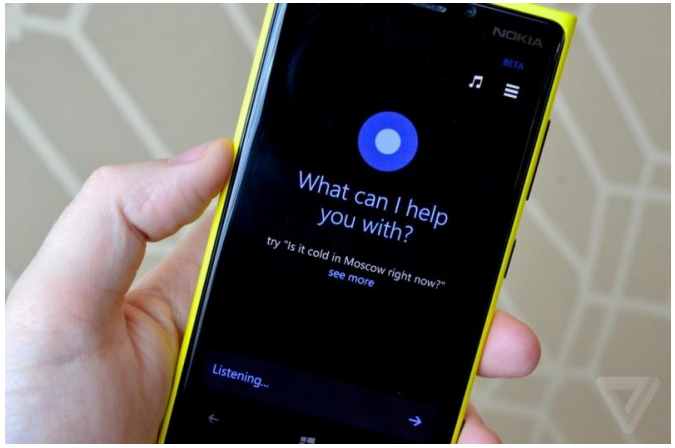
22-26 January 2018

ICC international computing centre

IT SOLUTIONS FOR THE UN FAMILY

Example 1

Example 2

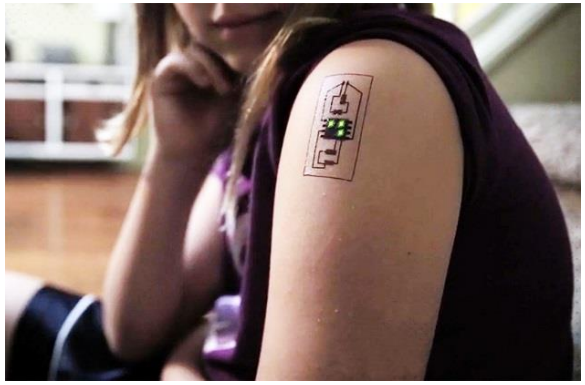

NOKIA
BETA
What can I help you with?
try "Is it cold in Moscow right now?"
see more
Listening...


Google Home
google.com/home


amazon

More ….

- Garmin, Polar, Fitbit, Apple Watch and many more … Insurance companies are using this collect health data and also give customer health rewards.
- Chaotic Moon is developing a tattoo that will keep tabs on everything from medical conditions to financial information.
- Smart brush – tracking dental habits.



- Netflix disrupted the overall video/game rental industry first by providing unlimited DVDs by mail and then by offering video streaming.
- Uber – a global taxi technology company. It develops, markets and operates car transportation mobile apps.
- Amazon, a digital company, disrupted the retail market, resulting in the closing of many electronics store chains and malls while increasing its customers' loyalty. By leveraging its cost effective and time-sensitive supply chain and fulfillment capabilities.

Digital disruption

- Digital disruption is becoming an essential part of the normal business cycle. To survive and thrive in this era, businesses need to fully grasp the leading new technologies; the shifting business, operational, and IT paradigms;
- Without proper planning for these disruptions, there is a high risk of becoming irrelevant in a short period, as businesses may not be able to compete successfully in dynamic markets.
- In today's fast-moving environment, strategic, practical, and innovative partnerships between business and technology executives play a critical role in helping businesses respond to these forces of change.

Gartner calls the entwining of people, devices, content and services the intelligent digital mesh. It's enabled by digital models, business platforms and a rich, intelligent set of services to support digital business.

- **Intelligent:** How AI is seeping into virtually every technology and with a defined, well-scoped focus can allow more dynamic, flexible and potentially autonomous systems.
- **Digital:** Blending the virtual and real worlds to create an immersive digitally enhanced and connected environment.
- **Mesh:** The connections between an expanding set of people, business, devices, content and services to deliver digital outcomes.

Blockchain

- Blockchain or the distributed ledger technology, is a public electronic ledger that can openly shared among users. It creates an unchangeable record of transactions and each transaction is linked to the previous one. It can only be updated by consensus between the participants in the system.
- It is not a new technology, it is a combination of proven technologies applied in a new way.
  (Cyrptography, P2P network & blockchain protocol)
- With blockchain, we can imagine a world in which contracts are embedded in digital code and stored in transparent, shared databases, where they are protected from deletion, tampering, and revision.

Blockchain

- The Bitcoin is a simple real-world application and implementation of the blockchain technology.
- The open-source cryptocurrency protocol was published in 2009 by Satoshi Nakamoto, an anonymous developer (or group of bitcoin developers) hiding behind this alias.
- Usually described as a “cryptocurrency,” “digital currency,” or “virtual currency”.
- Some of the other currencies are Ether (Ethereum), Litecoin, Monero, Ripple, Dogecoin, Dash, MaidsSafeCoin, Lisk…..

Blockchain

- Banking
- Financial markets
- Healthcare
- Insurance
- Supply chain
- Government

- Not limited to handling currencies.
- Being used to develop transactional business applications to achieve transparency, efficiency and accountability into the process.

- Assets ranging from equipment, warranties, and artwork to healthcare records and shipping data can now be shared, exchanged, or transferred via a blockchain network more efficiently, and with greater collaboration and less risk to stakeholders, than is customary using traditional practices.

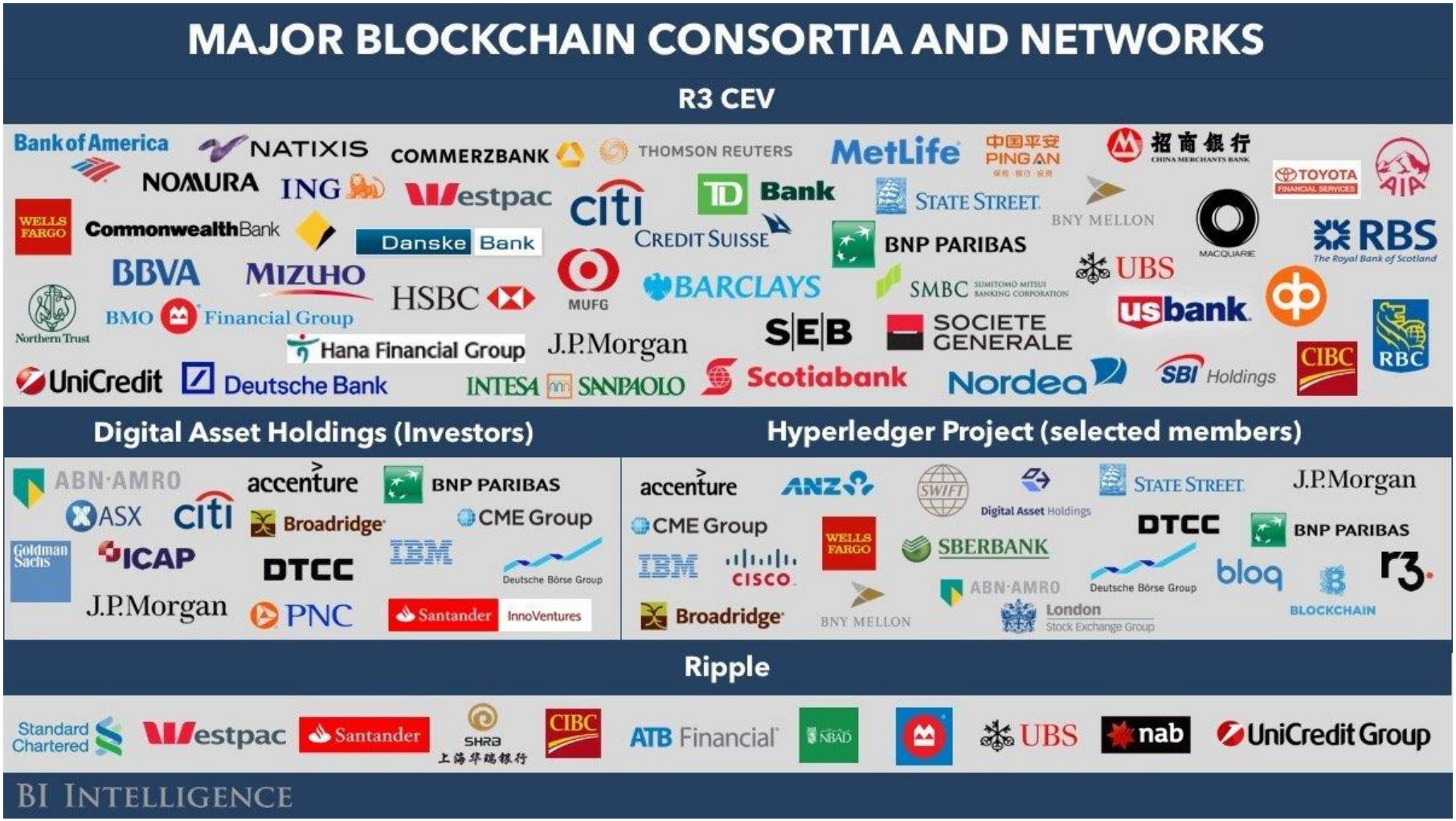
Blockchain

- The current market for available blockchain solutions is limited. That said, commercial blockchain developments are proceeding rapidly.
- Industry-specific blockchain solutions are becoming available — and not just for financial transaction and cryptocurrency trading applications, but for others uses like supply-chain, CRM, shipping and logistics, and the Internet of Things (IoT).

Blockchain providers

Company Logo	Company Name	Company Description
	BitSE	Promotes digital assets development and implementation on blockchain technology through its VeChain application
	Blocko	Blocko provides Blockchain services to various industries
	Blockstream	Blockstream was founded to develop new ways to accelerate innovation in crypto currencies
	Bloq	Bloq delivers an enterprise grade blockchain experience based on the core values of open source
	PayStand	Creating a smart billing and payment network for businesses by using blockchain and SaaS technologies
	Peer Ledger	Provider of blockchain-based solutions for identity management and supply chain in the precious metals industry
	R3	R3 is a financial technology company that brings blockchain inspired technology to the financial markets
	Skuchain	Skuchain is a blockchain platform that provides transparency, security and efficiency to the supply chain
	Symbiont	Symbiont is the market-leading smart contracts platform for institutional applications of distributed ledger technology
	t0 (tzero)	Provider of blockchain-based solutions for banks, exchanges, and other financial institutions

Blockchain - Networks



http://uk.businessinsider.com/blockchain-technology-banking-finance-2017-9/?IR=T

Blockchain

IBM and Danish transport and logistics company Maersk recently announced that they are teaming up to create an as-yet-unnamed Blockchain-based shipping and supply chain company. The goal of the venture is to commercialize Blockchain for all aspects of the global supply chain system, from shipping to ports, and banks to customs offices.The joint venture is hoping to start offering their software solutions by Q3 2018.

15

UN entities carrying out Blockchain initiatives.

UN Development Program

Proof of concept:

Blockchain technology for alternate financing.

See the Alternative Finance Lab in Istanbul.

Img: UN Photo/JC McIlwaine

Looking into Blockchain technology as means to manage UN car fleets.

Blockchain – Some Challenges

- An emerging technology
- Identifying Use Cases
- Expertise
- Standards - Some industry groups are working towards standardization while atleast 200+ startups are developing on their own versions of distributed ledger technology.
- Regulatory constraints
- Market is limited
- Costs and Investment - development and implementation costs at this stage are likely to be quite substantial

Blockchain – Conclusion

- In the long run blockchain technologies have the ability to enable cost savings, greater efficiency, more rapid transaction clearing, and greater cybersecurity.

- Blockchain technology will inevitably move quickly in many sectors specially in finance and trade so companies large and small need to be prepared for what is coming.

Website: http://www.unicc.org