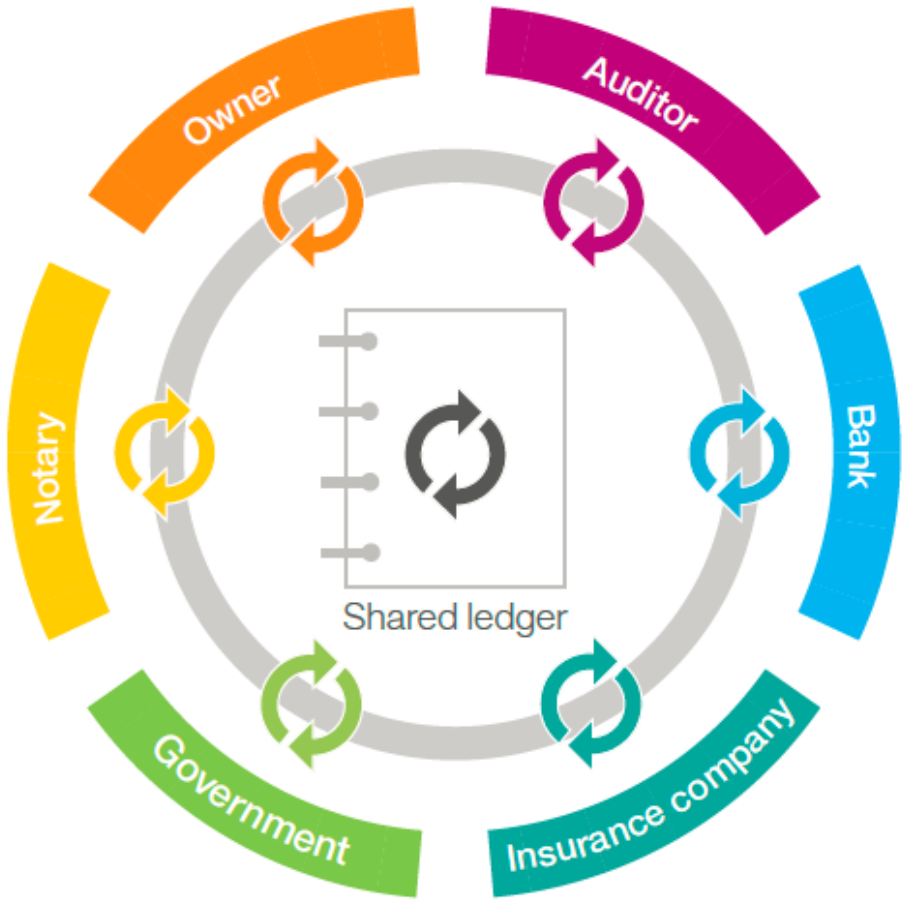
Disruptions Coming Our Way

ValuePickr Goa Summit 2017

The world of business is changing… Technology is now not an enabler, but resides at the core of an enterprise … sometimes it is the enterprise

I will talk about some businesses which are currently operational. So, this is REAL. Not science fiction.

So, what are the disruptive technologies?

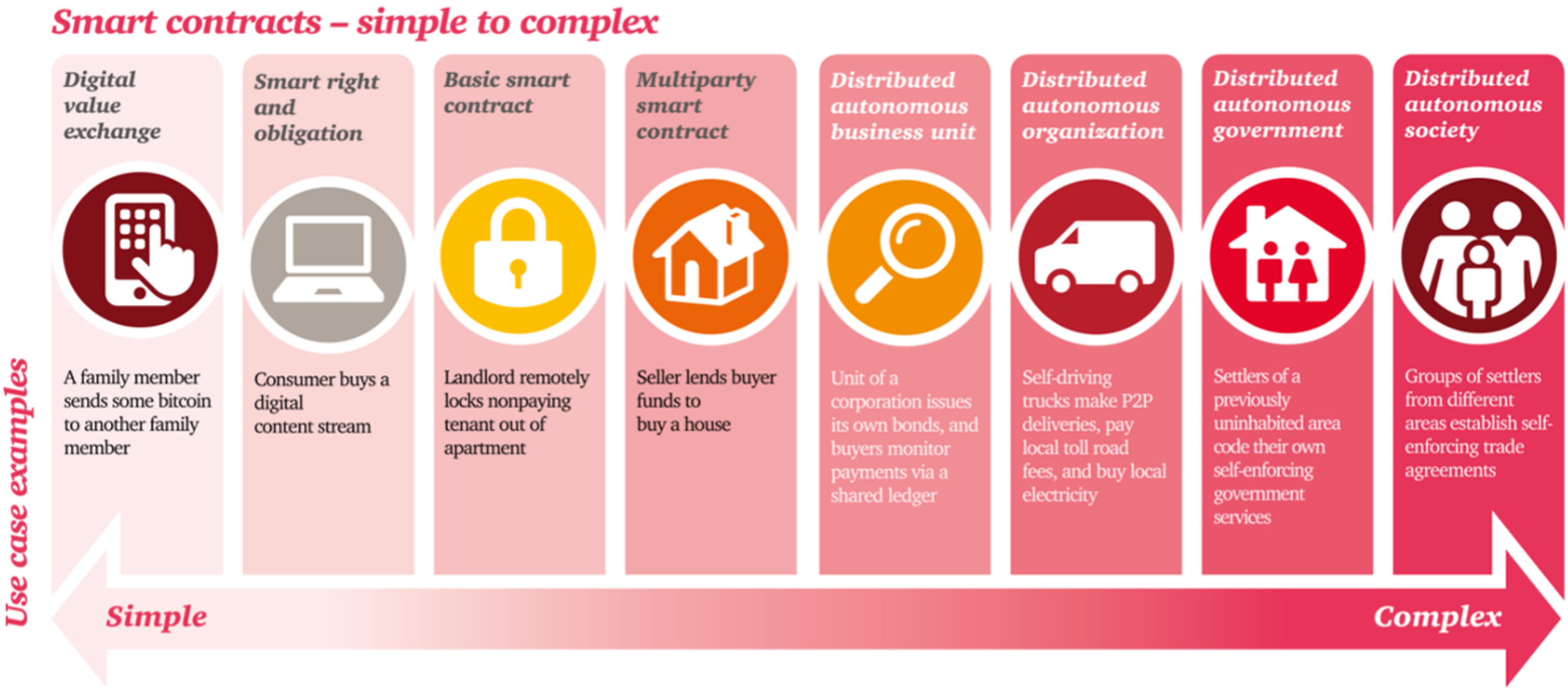


Blockchain is a secure, unchangeable, shared ledger or data store

Today, transactions are recorded in multiple ledgers. Each one captures at best a moment in time and reflects the information held by a single party: Bank X purchased or sold a mortgage, for example. They don't record what happens next, what came before, or the role of others – partners, suppliers, consumers – in the transaction. Moreover, they're prone to human error and vulnerable to tampering.

By contrast, distributed ledgers can be shared and updated in near real-time across a group of participants. Every transaction becomes part of the permanent record and can be scrutinized by those that have permission – and relevant information can be shared with others based on their roles and access privileges.

Smart contracts not only define the rules and penalties around an agreement in the same way that a traditional contract does, but also automatically enforce those obligations.

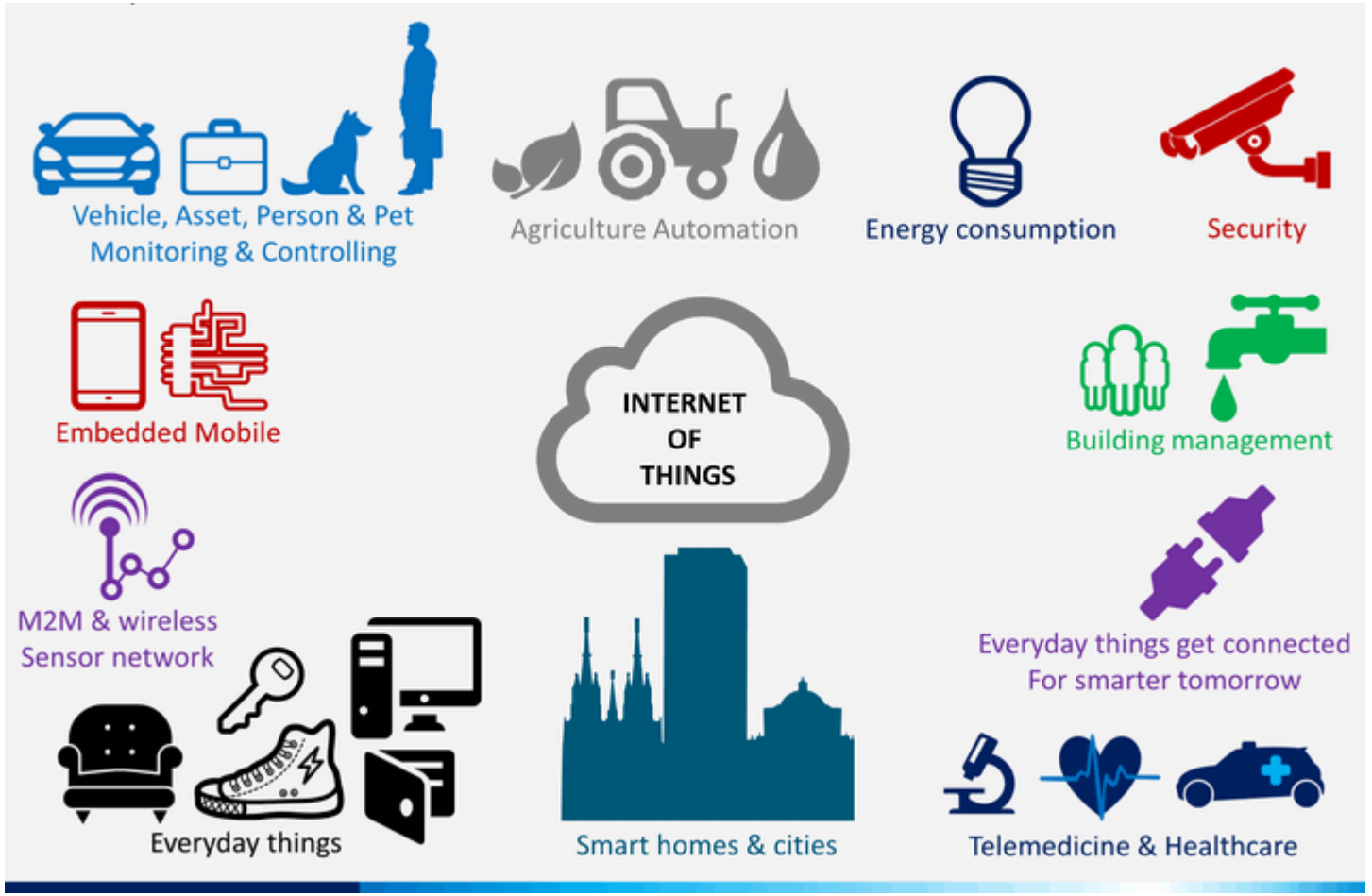


Ref: http://www.slaw.ca/2016/09/19/smart-contracts/

Internet of Things make everyday objects “smart”

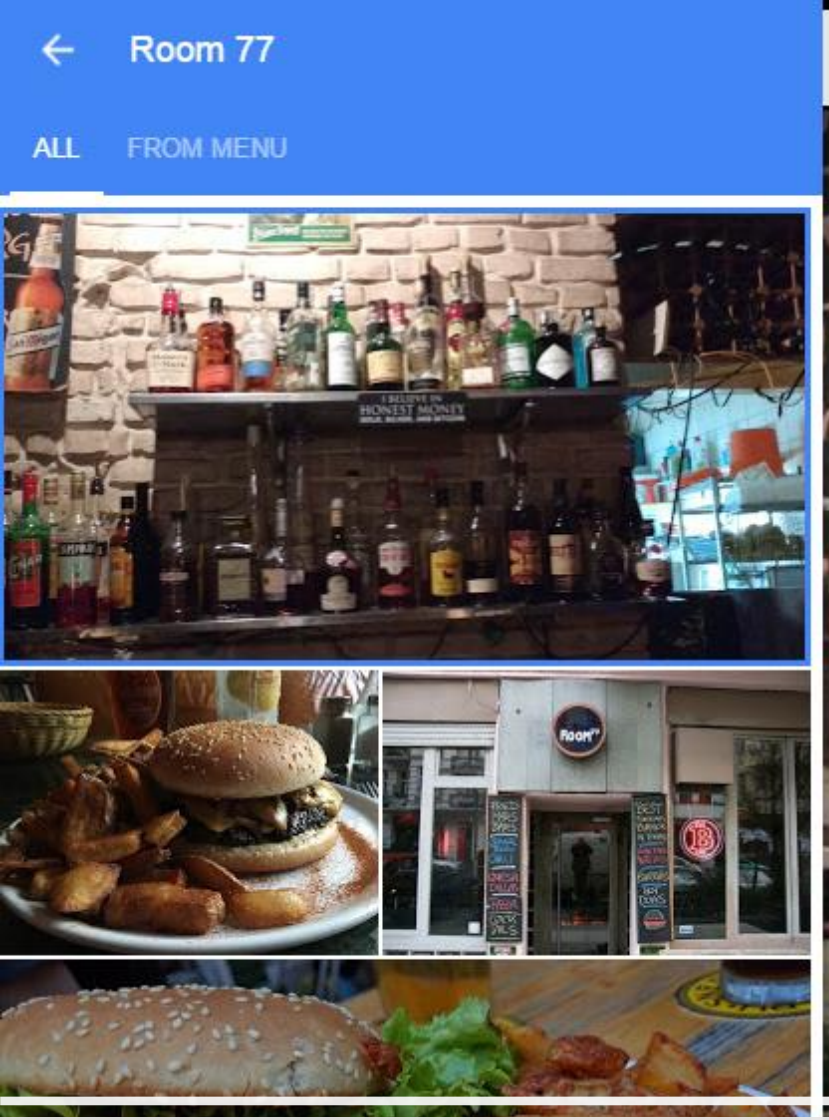
The Internet of Things is made up of devices – from simple sensors to smartphones and wearables – connected together.

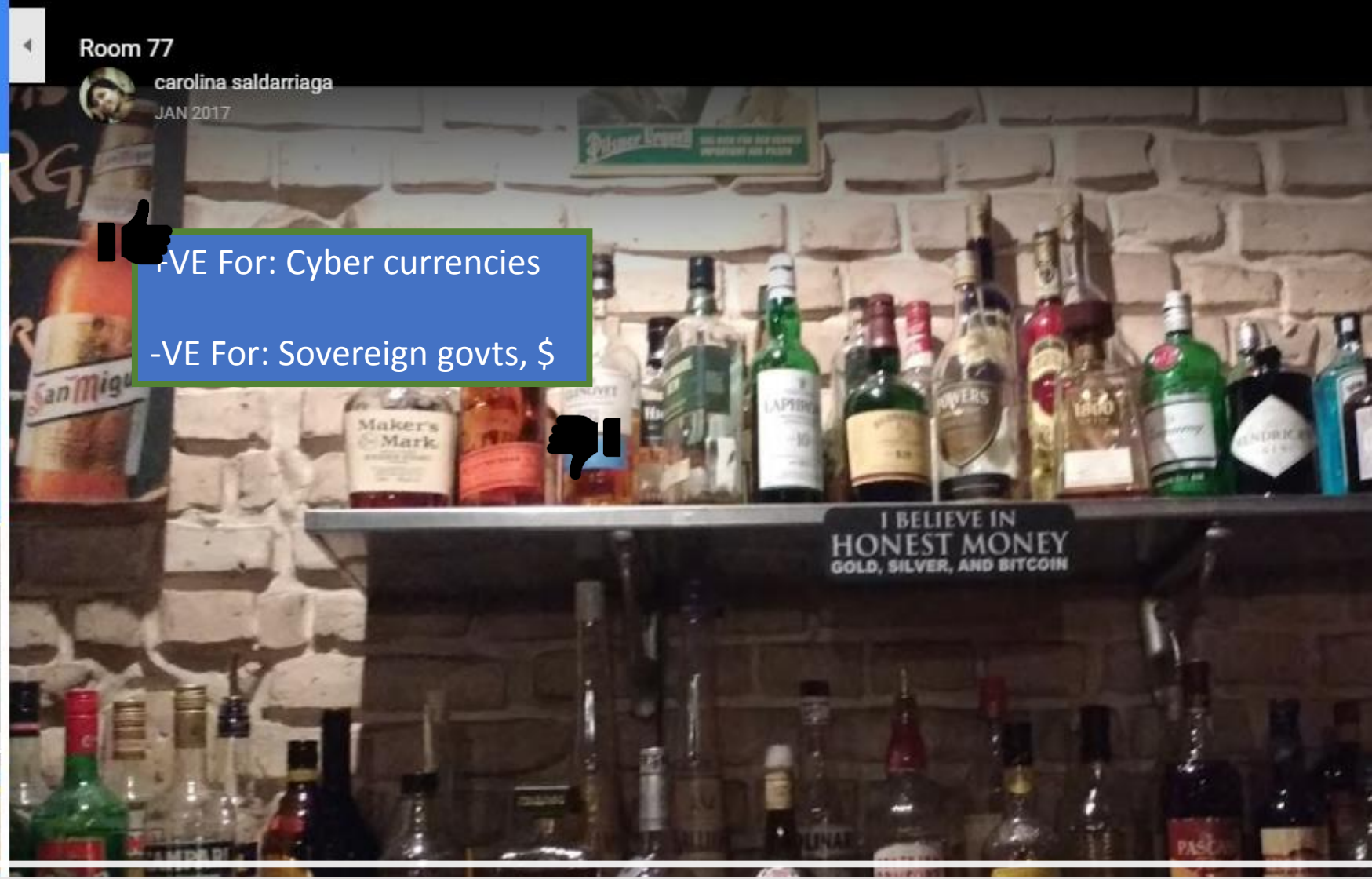
By combining these connected devices with automated systems, it is possible to gather information, analyse it and create an action to help with a particular task, or learn from a process.



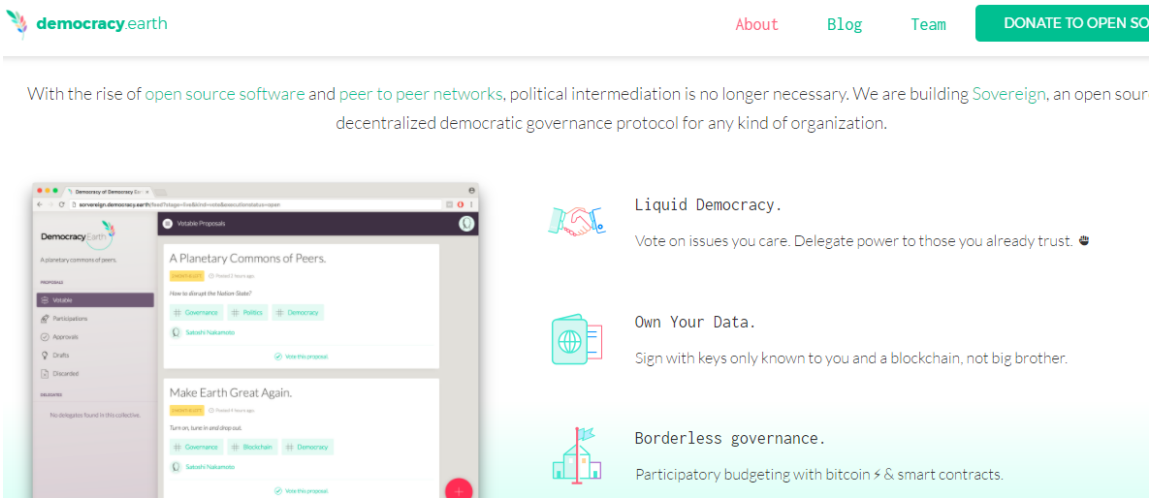
http://www.supinfo.com/articles/single/4235-internet-of-things

How are businesses changing?





Room77 in Berlin… A place where the digital and the analog world met for a beer!



NASDAQ'S BLOCKCHAIN TECHNOLOGY TO TRANSFORM THE REPUBLIC OF ESTONIA'S E-RESIDENCY SHAREHOLDER PARTICIPATION

TALLINN, Estonia and NEW YORK, Feb. 12, 2016 (GLOBE NEWSWIRE) -- Nasdaq (Nasdaq:NDAQ) and the Republic of Estonia have announced that Estonia's e-Residency platform will be facilitating a blockchain-based e-voting service to allow shareholders of companies listed on Nasdaq's Tallinn Stock Exchange, Estonia's only regulated securities market, to vote in shareholder meetings. The country's e-Residency platform is an electronic identity system used by both Estonian residents and those with business interests in the country to access government services through e-Residency digital authentication. The program marks the second official blockchain project Nasdaq is executing on after successfully delivering the first private securities issuance between an investor and company via Nasdaq Linq, its blockchain-enabled platform.

+VE For: Shareholders, Citizens

-VE For: DP (NSDL, CDSL)

Online voting – unlikely that countries will adopt, but definite possibility for corporate decision making and resolutions

OVERSTOCK BEGINS TRADING ITS SHARES VIA THE BITCOIN BLOCKCHAIN

Online retailer Overstock.com has become the first publicly traded company to issue stock over the internet, distributing more than 126,000 company shares via technology based on the bitcoin blockchain.

Through a subsidiary called tØ, the Salt Lake City-based Overstock has spent the past two years building the technology that facilitates

NASDAQ LINQ ENABLES FIRST-EVER PRIVATE SECURITIES ISSUANCE DOCUMENTED WITH BLOCKCHAIN TECHNOLOGY

Transaction by Chain.com Marks Significant 'Proof of Concept' and Major Step Forward in Use of Blockchain

Blockchain Holds Potential for 99% Reduced Settlement Time and Risk Exposure in Capital Markets

NEW YORK, Dec. 30, 2015 (GLOBE NEWSWIRE) -- Nasdaq (Nasdaq:NDAQ) today announced that an issuer was able to use its Nasdaq Linq blockchain ledger technology to successfully complete and record a private securities transaction - the first of its kind using blockchain technology. Chain.com, an inaugural Nasdaq Linq client and blockchain developer, documented its issuance of shares to a private investor using Nasdaq's blockchain-enabled technology. This transaction represents a major advance in the application of blockchain technology for private companies.

+VE For: Shareholders, Citizens

-VE For: DP (NSDL, CDSL)

Blockchains are beginning to be used for settlement in stock exchanges.

Ranging from metered wifi access, sports equipment, tool libraries, or renting rooms, offices or vehicles. Smart lockers extend the possibility to rent or share just about any object.

+VE For: AirBnB, Uber / Ola

-VE For: Hotels, Commercial Auto / 2 wheelers

The Universal Sharing Network: Rent, sell or share anythi

Download Press Kit

With Slock.it, Airbnb apartments become fully automated, smart objects can be rented on demand and unused vehicles get a new lease on life. We're developing the future infrastructure of the Sharing Economy. Learn more

A combination of blockchain & IoT as implemented by slock.it has the potential to tremendously increase the use of any resource with many potential downstream ramifications.

Autonomous Objects

Connecting all things, the Universal Sharing Network will form a financial Internet where machines can not only sell and rent themselves, but also pay for each other services. For example, an office door can open itself when paid, while a fridge could order its own repairs.

Peer-to-Peer Energy Transaction & Distributed Energy Resource Control

TransActive Grid is an energy market enabled by blockchain technology.

How does Piclo® work?

Smart meters record how much energy is put onto and taken off the grid

Our Piclo® peer-to-peer technology uses this data to match customers with the local generation sources in an optimal and fair way

Our utility company partners provide top-up energy, manage billing and underwrite contracts

Intro

Piclo® is a new kind of marketp
to transact peer-
providing transparency,

+VE For:

- Solar panel
- Coolers, ACs, Household devices

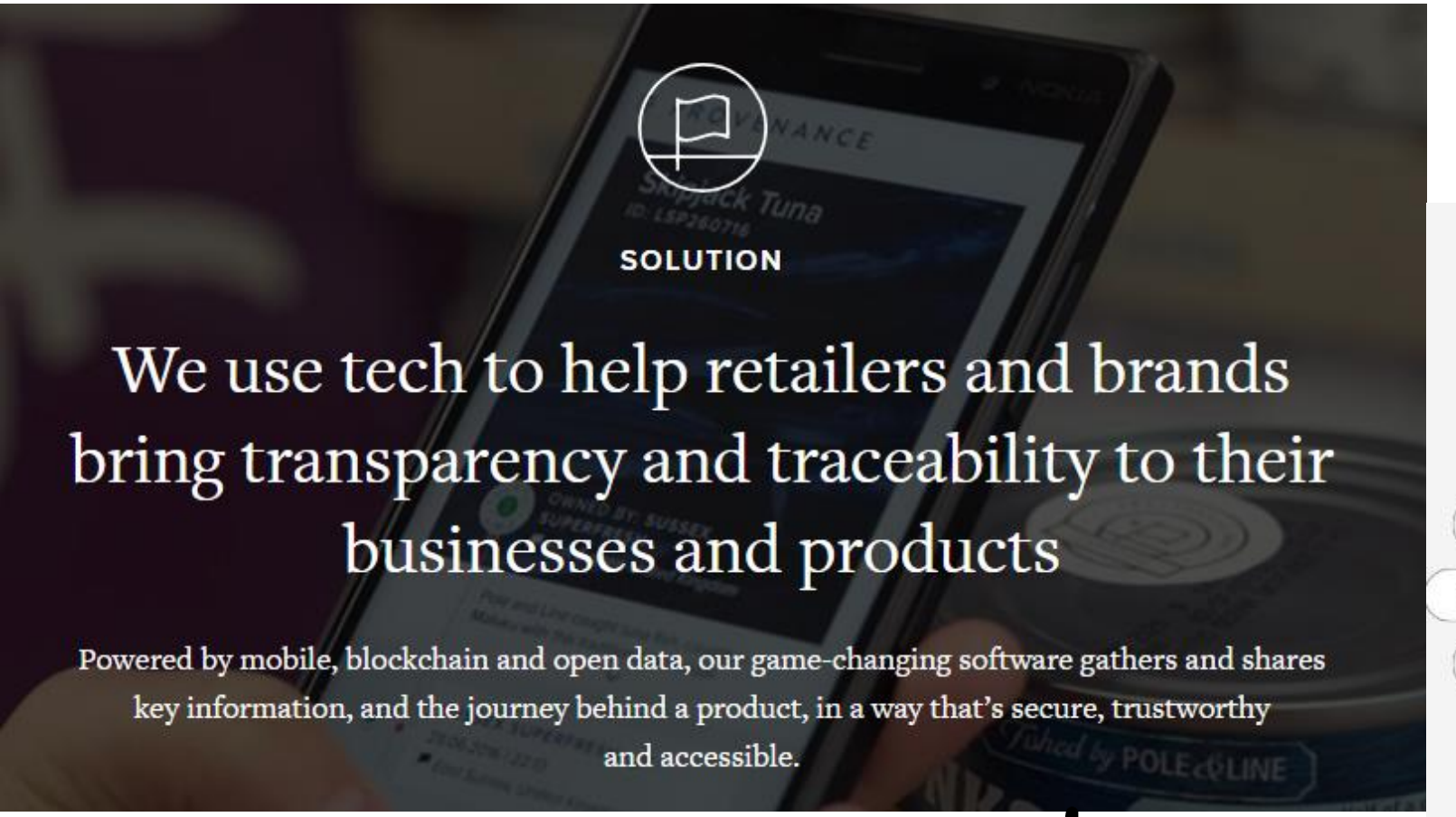
-VE For:

- Power distribution companies (Tata Power, CESC, Rel Power)

TRANSACTIVEGRID

Peer-to-peer energy can reduce the dependence on utility companies

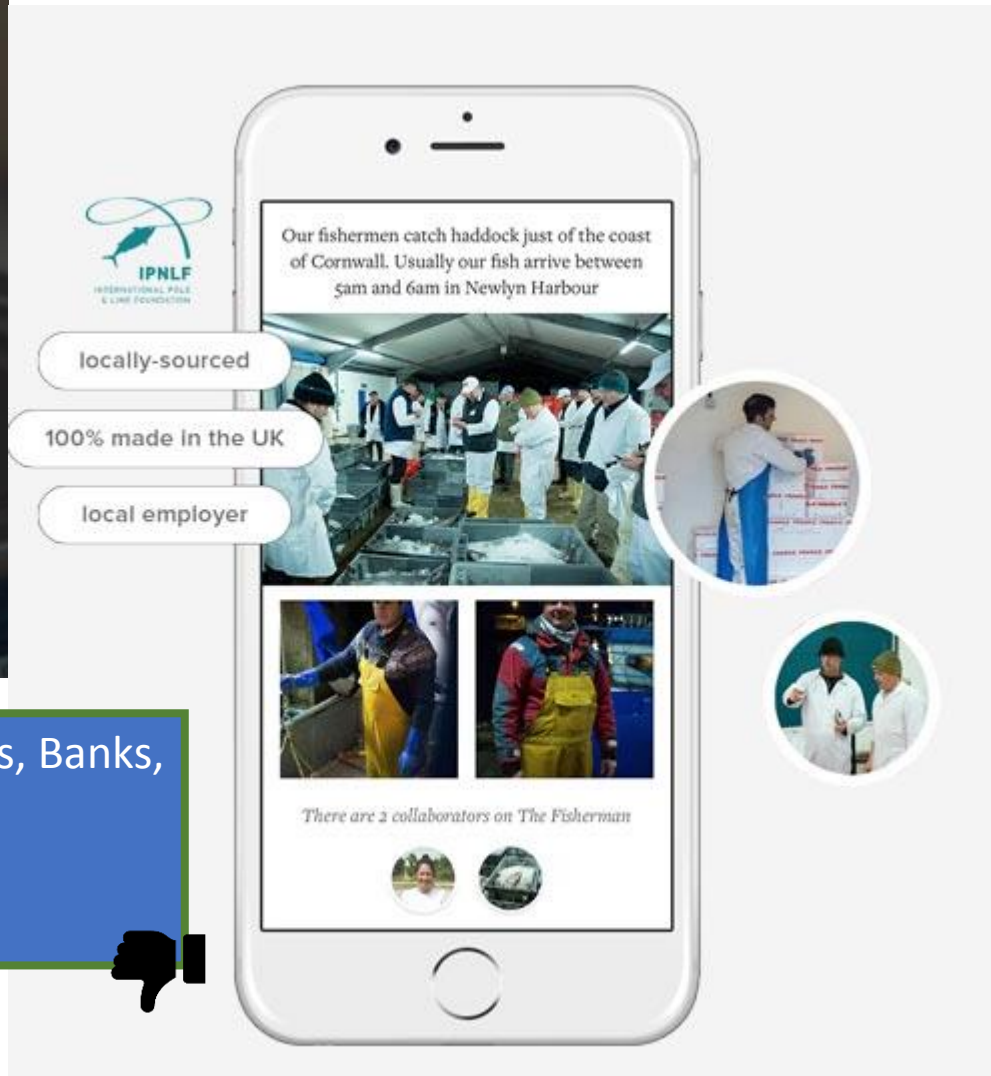
Transparent and Optimized supply chain



https://www.provenance.org/
https://skuchain.com
https://hijro.com/

+VE For: Consumers, Banks, Manufacturers

-VE For: Unclear



Provide pricing decisions to the participants instead of centralizing it and allows for community ownership of autonomous vehicles

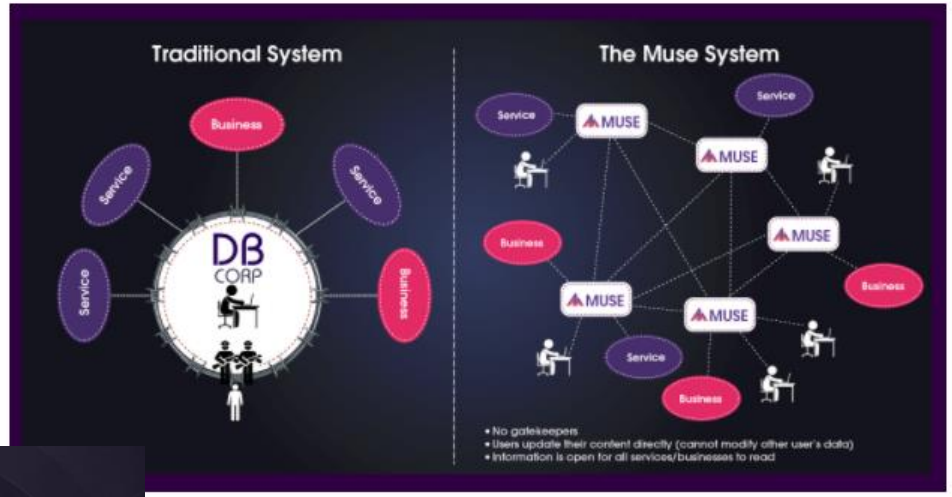
The Achilles' heel of Uber and Lyft is their centralized management of pricing. By decentralizing that decision to the level of the driver and rider, Arcade City frees the driver to be an entrepreneur and empowers the rider with control over their entire experience.

+VE For: payment banks

-VE For: Auto manufacturers, Fuel marketing companies

> *In such a blockchain cooperative most people do not own cars but rather share vehicles in a commons. All revenue, except for the overhead would go to its members, who would also control the platform and make decisions. The communication is done peer to peer on the network via cryptographically signed messages. In the case of Uber, the drivers' initial entry and registration would contain criminal records, record of previous driving, vehicle ownership, safety inspections and insurance, etc. Smart contracts would continuously watch for timely re-inspection/insurance and permit renewals. The drivers have thus created a blockchain cooperative and they receive all the wealth they create.*

In the case of autonomous vehicles, blockchain provides a platform in which residents at a particular neighborhood could invest in an autonomous car, and be rewarded by discounted rides for a specified time period. "The car owns itself — or, more precisely, the operating computer program owns it. This program would pay the car's running costs and take in its own revenue on blockchain," the paper suggests.



Owned by musicians

Unlike other attempts at creating a database that keeps track of worldwide copyrights, the Muse Blockchain is not proprietary. It is an automated, globally distributed Peer-to-Peer network that isn't under the control of any single individual person, corporation or government. Considered ownerless, Muse "belongs" to all its members (mostly musicians!) and is open for all to join.

- http://peertracks.com/
- https://ujomusic.com/
- http://myceliaformusic.org/

+VE For: creative artists, media houses, content owners & producers. E.g. Balaji

-VE For: Content distributors. E.g. Saregama

Tiny Human

To demonstrate the power of blockchain technology, we worked with singer-songwriter Imogen Heap to release her song Tiny Human on the Ethereum blockchain. Debuting in October 2015, the prototype allowed users to purchase licenses to download, stream, remix, and sync the song. Each payment was automatically split on the blockchain and sent directly to Imogen and each of her collaborators.

The demo explored how music on the blockchain could look and illuminated the importance of four central topics:

- How a decentralized platform can give artists greater ownership over their creations
- How greater transparency can promote and incentivize efficient systems
- How direct licensing on the blockchain can improve collaboration
- How digital currency can be used to enable instant payments among fans, artists, and service providers

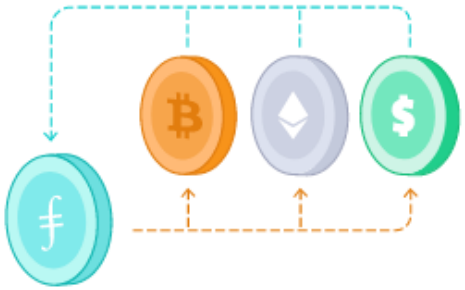
Disintermediation and monetization of music and other creative arts

Blockchain cloud storage solutions allow storage to be decentralized, and therefore less prone to cyber attacks that can cause systemic damage and widespread data loss.

https://sia.tech
http://filecoin.io
http://storj.io

A MASSIVE AMOUNT OF STORAGE SITS UNUSED IN DATA CENTERS AND HARD DRIVES AROUND THE WORLD.

EARN FILECOIN FOR HOSTING FILES



EXCHANGE FILECOIN FOR USD, BTC, ETH AND MORE

RELIABLY STORE FILES AT HYPERCOMPETITIVE PRICES

+VE For: Users

-VE For: Storage providers, Seagate, Transcend, Sony, Amazon, Dropbox

There is much more tech disruption happening in the world besides blockchain

“Google for Jobs” can take major market away from LinkedIn, Naukri etc

TECH | TECHNOLOGY

Microsoft Closes Acquisition of LinkedIn

Deal, valued at roughly $26 billion, is biggest in tech company's history

Info Edge (India) Ltd

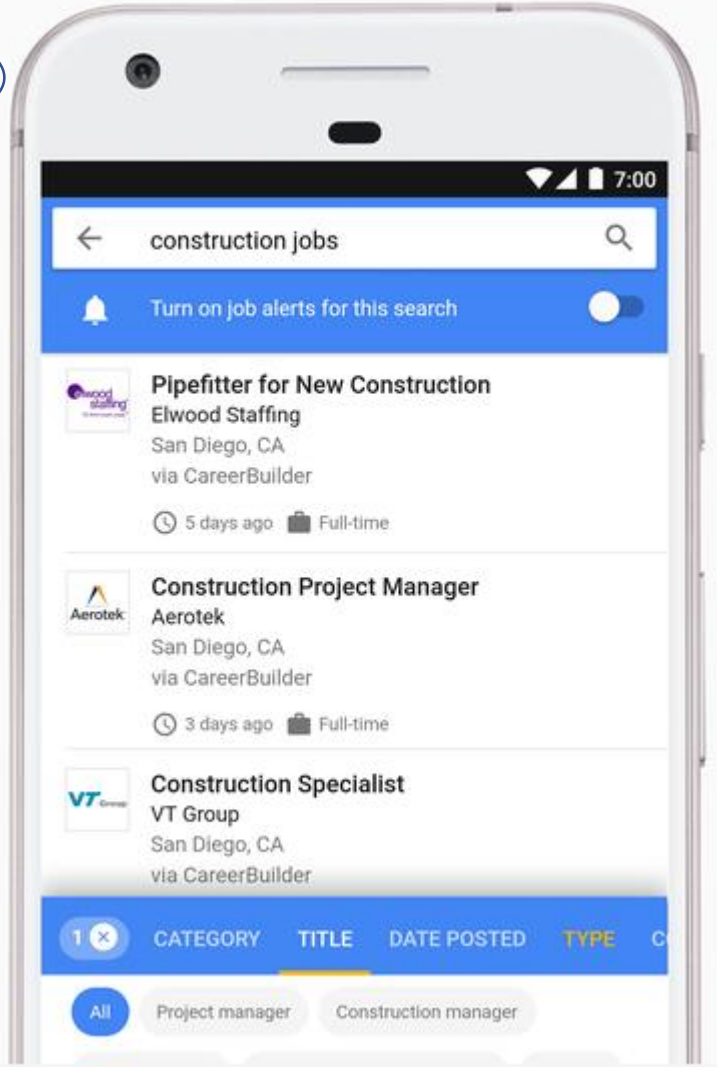
Info Edg.(India) | Charts | Analysis | Peers

Market Cap.: ₹ 11,823.42 Cr.

Stock P/E: 57.28

+VE For: Google (Facebook?)

-VE For: Microsoft, Info Edge



https://blog.google/topics/machine-learning/making-ai-work-for-everyone/

How it Works

Despite widespread use in other industries, automation has made little progress in clothing manufacturing due to the difficulties robots face when trying to manipulate limp, flexible fabrics.

Sewbo avoids these hurdles by temporarily stiffening fabrics, allowing off-the-shelf industrial robots to easily build garments from rigid cloth, just as if they were working with sheet metal. The fabric panels can be easily molded and welded before being permanently sewn together.

The water-soluble stiffener is removed at the end of the manufacturing process with a simple rinse in hot water, leaving a soft, fully assembled piece of clothing. The stiffener can then be recovered for reuse.

Sewbo's technology will allow manufacturers to create higher-quality clothing at lower costs. It will shorten supply chains and lessen the long lead times that hamper the fashion and apparel industries, helping to reduce the complexity of today's intricate global supply network.

Sewbo, Inc. is pleased to announce that it has used an industrial robot to sew together a T-shirt, achieving the long-sought goal of automation for garment production.

Fully automated garr manufacturing will completely change supply chains

+VE For: Sewbo++

-VE For: Traditional Finished Garment Makers

Organ Transplant using 3D Bioprinting & Stem Cells can completely disrupt the traditional pharma industry

'Bioprinting' - the use of specialist 3D printers to construct cellular scaffolds on which further cells can be grown - is being used to produce hearts, livers, kidneys and other types of human tissue in laboratories. Traditional 3D-printing is being used to create prototypes of everything from wheelchairs to exoskeletons.

Mar 27, 2017	3D-printed Partial Liver Transplants Targeted for 2020
Jan 28, 2017	The Economist: How to Build Organs from Scratch
Dec 13, 2016	First Preclinical Data on Human Liver "Patch"
Dec 1, 2016	The Scien… Tissue Selec…
Oct 5, 2016	Advancing T…
Sep 14, 2016	3D Bioprinting Pioneer Creates a Market
Sep 9, 2016	3D Bioprinted Human Kidney Tissue for Toxicity Testing
Jul 1, 2016	3D Cellular Models

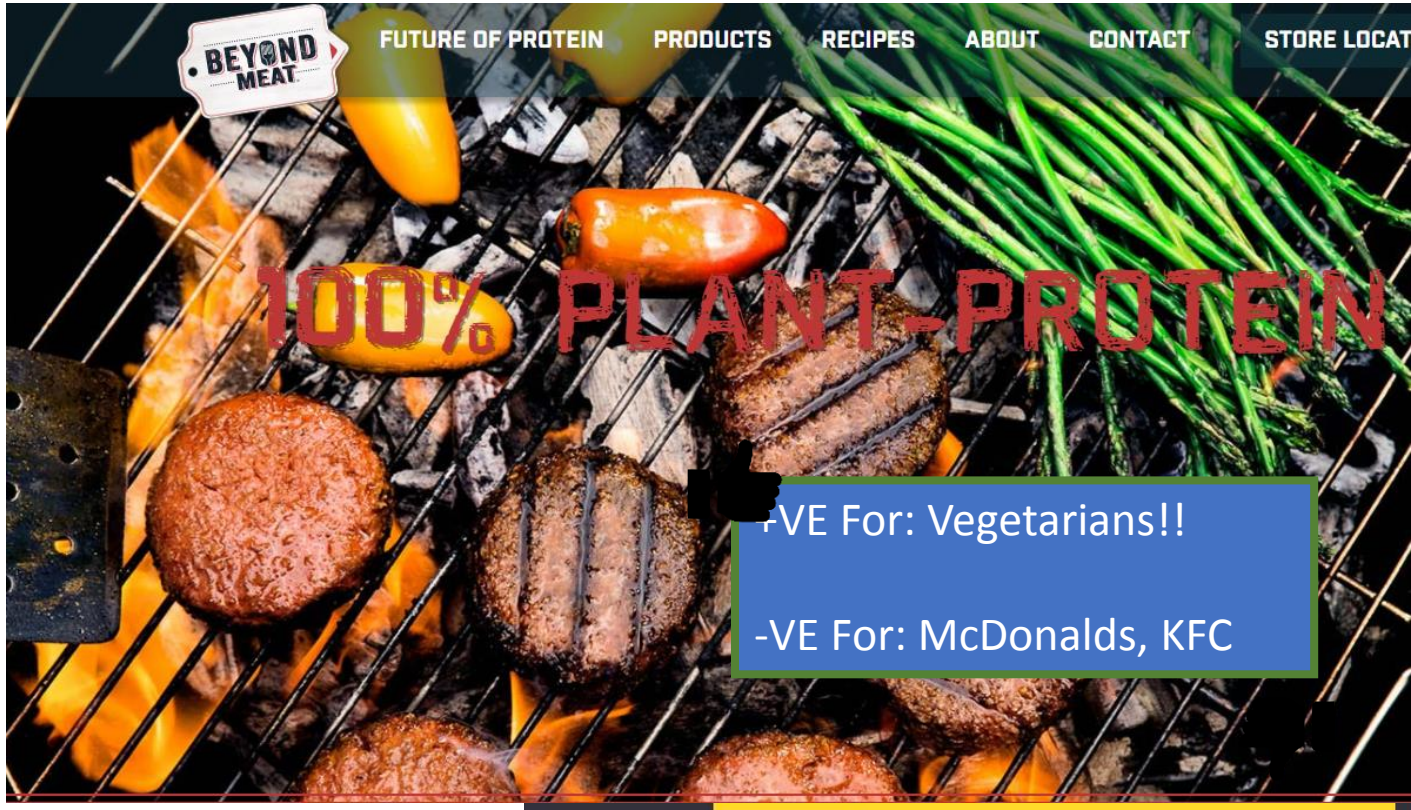
+VE For: Organova ++, Surgeons

-VE For: Traditional Pharma

Veggie meat!!! – A completely new paradigm in food

REINVENTING THE BURGER FROM THE GROUND UP

We spent the past five years researching what makes meat unique: the sizzle, the smell, the juicy first bite. Then we set out to find precisely the right ingredients from the plant kingdom to recreate the experience meat lovers crave. You've never tasted plants like this.



+VE For: Vegetarians!!

-VE For: McDonalds, KFC

www.beyondmeat.com
www.impossiblefoods.com

Disruption is a process, not an event. There are always winners and losers.

Be aware of it. Profit from it.