

Topic 1: Election Data Analysis

General Description of the idea or application?

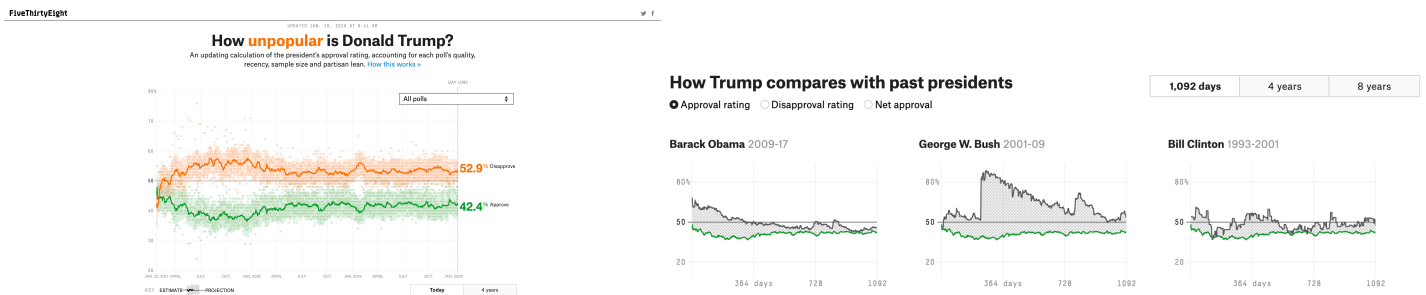
Internet-based information technology can play a decisive role in political competition. People put their information online, let various websites record their personal and property information, and publicly express their opinions on social networks. This public information can be used to depict the face of specific users.

By analyzing people's information, Politicians can adjust their strategies to win the election.

Why is this a 2018+ (or 2020/2019) hottest/coolest technology that you and I should be talking about?

2020 US election is approaching.

By analyzing popular trends, people can learn from the data who is more in line with the national standards. However, the use of big data statistics and judgment in social media has caused certain deviation in the judgment direction of the public, led the direction of the public opinion, and even changed the original intention of many people. The scale in the heart has unconsciously deviated.



2020 People Polls from Nate Silver's website fivethirtyeight.

What is its usage, applications and functions?

Accurate fundraising email screening, real-time analysis of the election situation, accurate positioning of the voter population.

Analyze the age structure of the electorate, segment and score them by age group, and then use that information to optimize their media spending.

Make the whole presidential election become a typical data-driven business decision-making process

Who will benefit from this technology/concept/application?

This will absolutely benefit politicians, but it can also benefit government because government can use such method to see how the people think about the new policy

Topic 2: Blockchain

General Description of the idea or application?

A blockchain, originally block chain, is a growing list of records, called blocks, that are linked using cryptography.

Why is this a 2018+ (or 2020/2019) hottest/coolest technology that you and I should be talking about?

The technology behind bitcoin came into people's vision. Blockchain among the most searched terms in Google during 2018. And the technology is very applicable in cryptocurrencies, smart contracts, financial services, supply chain, and video games.

What is its usage, applications and functions?

Cryptocurrencies :

Most cryptocurrencies use blockchain technology to record transactions. For example, the bitcoin network and Ethereum network are both based on blockchain.

Smart contracts :

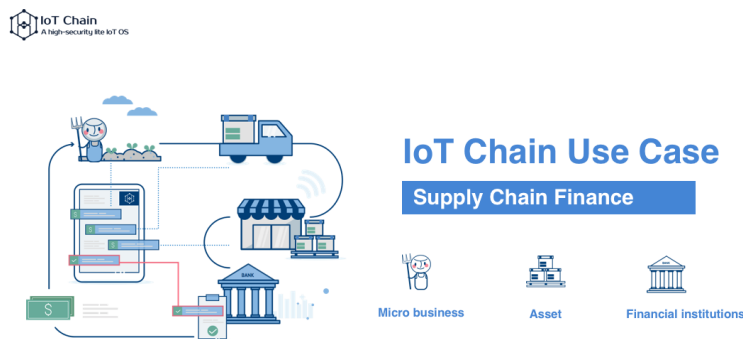
Blockchain-based smart contracts are proposed contracts that can be partially or fully executed or enforced without human interaction.

Financial Services :

Major portions of the financial industry are implementing distributed ledgers for use in banking

Supply chain :

There are a number of efforts and industry organizations working to employ blockchains in supply chain logistics and supply chain management.



Who will benefit from this technology/concept/application?

People, government, bank, Intellectual property, supply chain industry will benefit from it.

Existing solutions and what you believe (your propose improvement) that can be done to make it better

For supply chain industry. There are some implement base on public blockchain and it can make sure that the reliability and unchangeable of the upload data. But it cannot prove the data itself is reliable. So, my improvement is that such system can develop with multiply certification. That is mean make blockchain play as a tool in the whole supply chain system. By making data reliable and storage it in blockchain, which will make the data also unchangeable.

Topic 3: Internet of Things

General Description of the idea or application?

The Internet of Things (IoT) is a system of interrelated computing devices, mechanical and digital machines, objects, animals or people that are provided with unique identifiers (UIDs) and the ability to transfer data over a network without requiring human-to-human or human-to-computer interaction.

Why is this a 2018+ (or 2020/2019) hottest/coolest technology that you and I should be talking about?

IOT is not only limited to smart homes, it also can be applied in Smart Cities, Smart Homes, Health Care, Smart Industries. There's a new level of sophistication coming to the way people approach the analytical end of the IoT phenomenon. And businesses store roughly half of the data they capture and analyze about half of what's stored. And this will give people a better view of data to display more potential patterns.

What is its usage, applications and functions?

Smart home:

IoT can be used in smart home, which is a part of the larger concept of home automation. Long-term benefits could include energy savings, privacy protection.

Elder care:

One key application of a smart home is to provide assistance for those with disabilities and elderly individuals. These home systems use assistive technology to accommodate an owner's specific disabilities.

Smart Industries:

The IoT can realize the seamless integration of various manufacturing devices equipped with sensing, identification, processing, communication, actuation, and networking capabilities. Based on such a highly integrated smart cyber-physical space, it opens the door to create whole new business and market opportunities for manufacturing.

Who will benefit from this technology/concept/application?

Manufacturing industries, medical care, energy saving industries, government.

Existing solutions and what you believe (your propose improvement) that can be done to make it better

The Google Nest is a very typical implement of IoT. And for now, the nest system in home heavily rely on Internet connection. And it will cause some financial like switch to 'saving model' commend doesn't transport to the devices correctly.

So my improvement is to in-build connection model that the devices can connect base on local area network.

Topic 4: Cloud Computing

General Description of the idea or application?

Cloud computing is the on-demand availability of computer system resources, especially data storage and computing power, without direct active management by the user. The term is generally used to describe data centers available to many users over the Internet. Large clouds, predominant today, often have functions distributed over multiple locations from central servers. If the connection to the user is relatively close, it may be designated an edge server.

Why is this a 2018+ (or 2020/2019) hottest/coolest technology that you and I should be talking about?

Cloud computing are a segment of the application software sector and they stand to have an increasingly important impact on people's lives. They will also be one of the main beneficiaries of emerging technologies like Autonomous Vehicles (both cars and drones), Augmented Reality/Virtual Reality (AR/VR), Artificial Intelligence (AI), 5G Networks, the internet of Things (IoT), Blockchain Security, and Robotics. That's why investors looking to build long-term wealth should consider cloud computing stocks.

What is its usage, applications and functions?

Infrastructure-as-a-Service (IaaS) :

Fundamental building blocks of computing that can be rented.

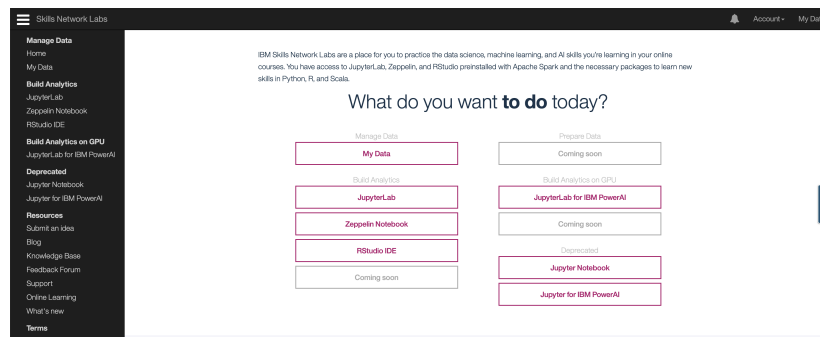
Platform-as-a-Service (PaaS):

The tools and software that developers need to build applications on top of can be serviced.

Software-as-a-Service (SaaS):

The delivery of applications will become services base on the fundamental of IaaS and PaaS.

And online development environment is kind of application of SaaS



Who will benefit from this technology/concept/application?

Middle and small company will take advantages from it and build their business in a very fast speed.

For large company, they can make maximum use of their fundamental hardware equipment.

For AR/VR, AI or some computing concentrated industry, they will have better resource to build their work.

Existing solutions and what you believe (your propose improvement) that can be done to make it better

Security has indeed been a primary, and valid, concern from the start of cloud computing technology: you are unable to see the exact location where your data is stored or being processed. So what I'm think about is that the storage technology can combine with blockchain to enhance the security.

Topic 5: 5G

General Description of the idea or application?

5G is the fifth generation wireless technology for digital cellular networks that began wide deployment in 2019

Why is this a 2018+ (or 2020/2019) hottest/coolest technology that you and I should be talking about?

This is because whoever develops 5G first, and to be more realistical, the various components of technology may have their intellectual property rights (IPR) rooted in 3GPP and ITU international standards. And there will be more economic benefit and information security for a country.

What is its usage, applications and functions?

Support IoT network and smart devices:

As IoT network devices becoming more and more, higher speed of network can provide higher data analysis.

Provide higher speed for media supplier.

The customers mainly want the higher quality steam media. So it can support suppliers to meet this requirements.

Support the cloud game industry.

Game always need low delay. 4G latency is about 20ms to 70ms. And 5G has a latency lower than 1ms. And higher speed provide higher quality picture of game.

Who will benefit from this technology/concept/application?

The country who create the perfect 5G. The customers, media supplier can also benefit from this technology

Existing solutions and what you believe (your propose improvement) that can be done to make it better

5G has a critical problem is that it is very energy consuming

In the 4G era, base station energy costs (electricity charges) are not a small amount, accounting for about 16% of the operator's network operation and maintenance costs. And in 5G era, the base station number will rise two time compare to 4G.

So my propose improvement is that we can break this problem through software. As for a 1 Mb data transform, it has no different in time consuming for human between 4G and 5G. So I think there can be a algorithm to choose which generation wireless technology is good for current customer. So there can be less 5G base stations to be built.