TECHSPACE

DIVE THROUGH TECHNOLOGY WITH US

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CRYPTO

Cryptocurrencies are digital currencies that work the same as physical currencies, except they are digital. Transactions in cryptocurrencies are done through smart contracts via Blockchain. Smart contracts are like the contracts we physically make and blockchains are like banks that transact and maintain the ledger of those transactions. Blockchains are decentralized. It means that transactions and ledger maintenance is not done by a single person.

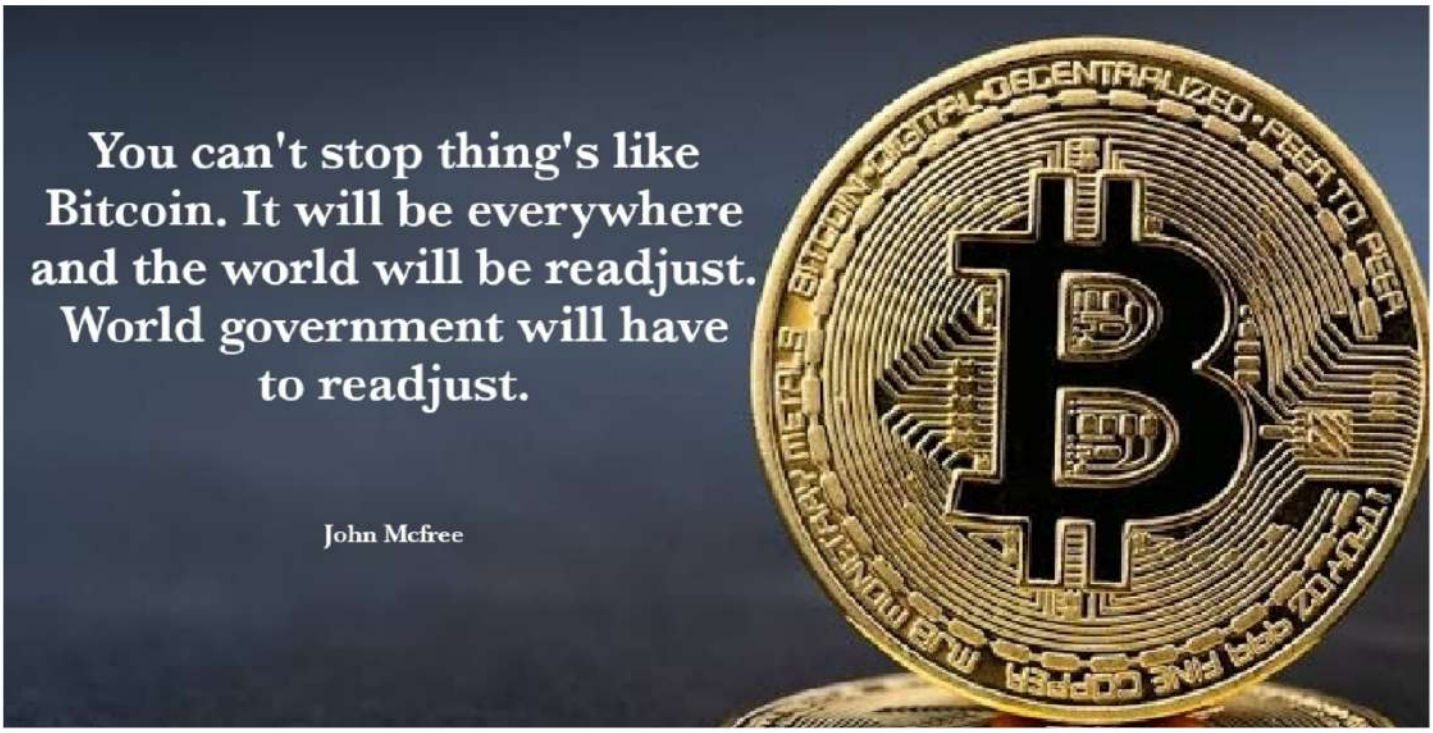
What is CRYPTO?

A cryptocurrency is a type of digital or virtual currency that uses encryption to protect it against counterfeiting or duplicate spending. Blockchain technology, a distributed ledger enforced by a dispersed network of computers, is the foundation of many cryptocurrency decentralized networks. The fact that cryptocurrencies are often not issued by any central authority makes them potentially impervious to intervention from or manipulation by governments.

BITCOIN

Bitcoin is the oldest one still in existence after being unveiled in a whitepaper in 2008.

Although there were cryptocurrencies before Bitcoin, they weren't widely known until after its launch in 2009. The company DigiCash created eCash, the first cryptocurrency, in 1990. David Chaum, a cryptographer, developed the idea and founded the business. He released a paper titled "Blind Signatures for Untraceable Payments" in 1983.



What is a Blockchain?

A blockchain is a distributed database or ledger that is shared among the nodes of a computer network. As a database, a blockchain stores information electronically in digital format. Blockchains are best known for their crucial role in cryptocurrency systems, such as Bitcoin, for maintaining a secure and decentralized record of transactions. The innovation with a blockchain is that it guarantees the fidelity and security of a record of data and generates trust without the need for a trusted third party

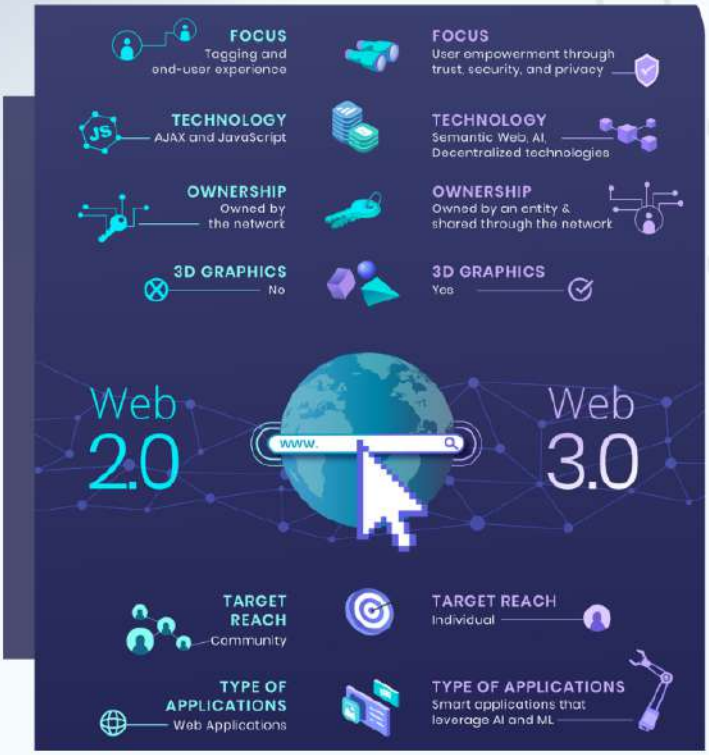
The first decentralized blockchain was conceptualized by a person (or group of people) known as Satoshi Nakamoto in 2008. By timestamping blocks without requiring them to be signed by a third party, Nakamoto significantly enhanced the architecture. He also added a difficulty parameter to control the rate at which blocks are added to the chain.The idea was put into practice the following year by Nakamoto as a crucial part of the cryptocurrency bitcoin, where it functions as the network's central public record for all transactions.

Decentralization?

In blockchain, decentralization refers to the transfer of control and decision-making from a centralized entity (individual, organization, or group thereof) to a distributed network. Decentralized networks strive to reduce the level of trust that participants must place in one another, and deter their ability to exert authority or control over one another in ways that degrade the functionality of the network.

Many consider Bitcoin to be the most decentralized cryptocurrency. According to "bitnodes.io", the Bitcoin network has 15,092 active nodes. This is higher than the current number of nodes on the second-largest blockchain network, Ethereum, which stands at 5,873, according to "ethernodes.org".

WEB 3.0: A NEW ERA OF INTERNET TECHNOLOGY



What is Web 3.0 ?

The third stage of web technology development is known as Web 3.0 (Web3).

There isn't a single, accepted definition of Web 3.0 because it is continually changing and being defined. However, it is clear that Web 3.0 will heavily highlight **decentralized applications** and exercise **blockchain-based technology**.

Artificial intelligence (AI) and machine learning will both be used in Web 3.0 to enable smarter, more adaptive applications.

The Differences Between Web 3.0 and Web 2.0

Web 3.0 is different from Web 2.0 in that it is more focused on using technologies like machine learning and AI to supply each user with appropriate material rather than just stuff that other end users have provided.

Users can essentially contribute to and occasionally participate on site content using Web 2.0, but these tasks will likely be handled by semantic web and AI technology in Web 3.0.

Web 3.0 applications

NFT : Nonfungible Tokens (NFTs) are tokens that have a unique cryptographic hash and are kept in a blockchain.

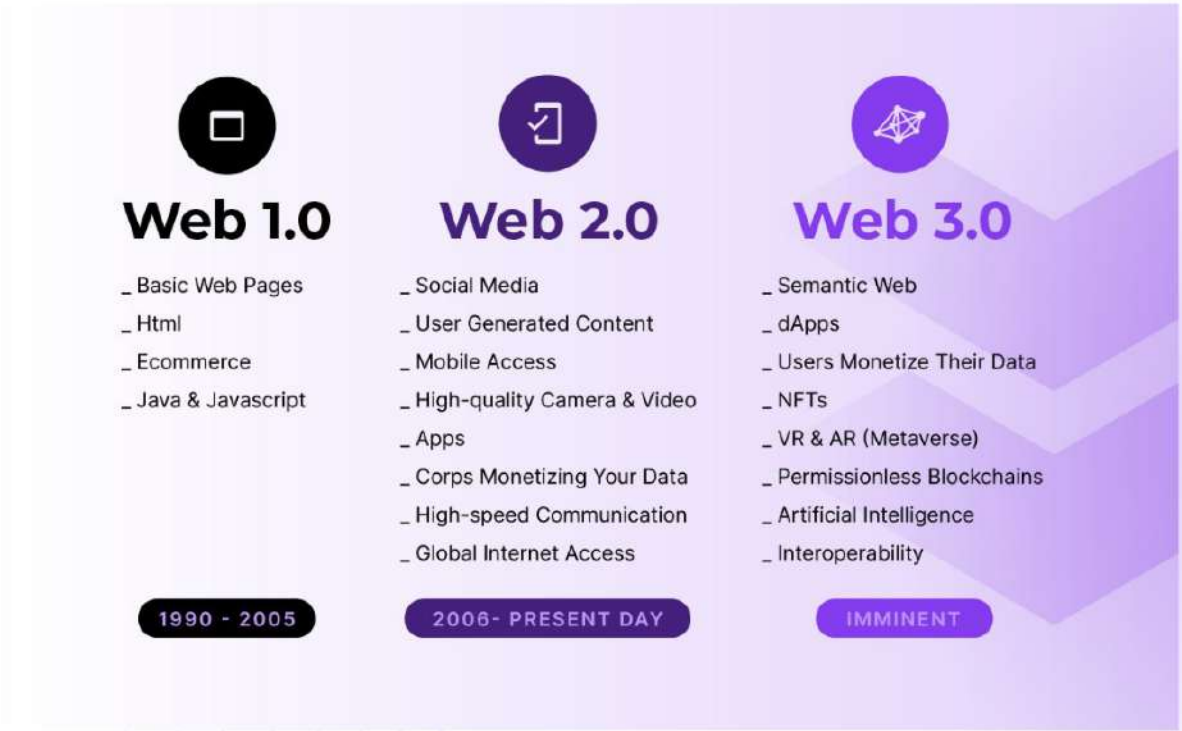
DeFi : Decentralized blockchain technology is being utilized as the foundation for decentralized finance (DeFi), a new use case for Web 3.0 that allows for the provision of financial services beyond the constraints of a conventional centralized banking infrastructure.

Cryptocurrency : Cryptocurrencies like Bitcoin are Web 3.0 applications that establish a new financial system that strives to be distinct from the traditional fiat financial system.

Cross-chain bridges : In the Web 3.0 environment, there exist various blockchains, and cross-chain bridges are responsible for facilitating some level of interoperability between them.

dApp : Decentralized applications (dApps) are programs that run programmatically and are logged in an immutable ledger. They are built on top of the blockchain and use smart contracts to facilitate service delivery.

DAOs : The organizational bodies for Web 3.0 services may end up being DAOs, which will offer some structure and governance in a decentralized manner.



TESLA MODEL S: THE PINNACLE OF ELECTRIC CARS

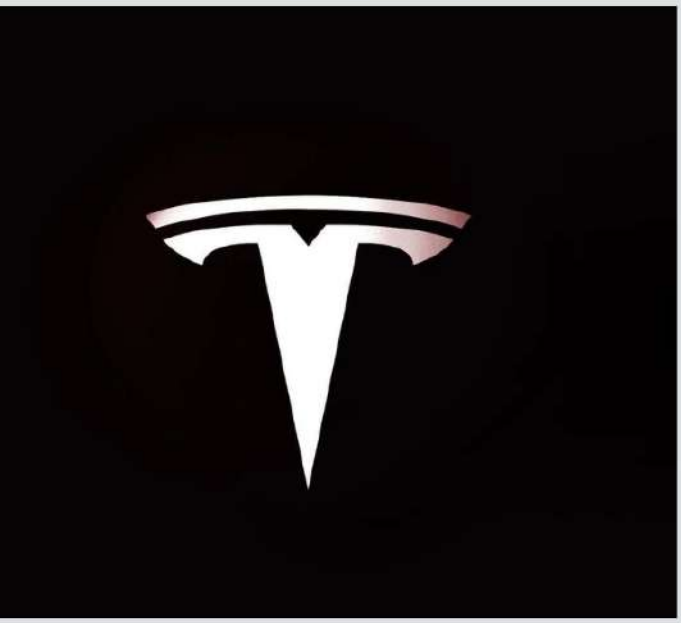
the Future Is Sustainable
- Tesla Motors

With fossil fuels becoming scarce, the world has started to look for alternative methods to use for transportation, and electrification is the most popular method among them. While electric cars are popular throughout the world, they aren't as mainstream as conventional gasoline powered cars. But there's one car company that breaks this hypothesis, and that's Tesla.

Tesla, Inc., or Tesla Motors as it was first known was founded by Martin Eberhard and Marc Tarpenning in July 2003. With a $6.5 million investment, Elon Musk became the largest shareholder of Tesla in 2004, and became the CEO of the company in 2008. Tesla then produced their first car, the Tesla Roadster in 2009. While the Roadster wasn't initially a success, for Tesla it was successful because it achieved its main objectives.

The Roadster changed people's perception of what electric cars can be, and it helped launch or accelerate several more electric vehicle programs. But what grounds Tesla's name in the automotive world as the leader in electric car is the Tesla Model S.

The 2012 Tesla Model S: How this innovative car first looked



THE 2022 TESLA MODEL S PLAID: THE LATEST AND THE GREATEST

MODEL S

First debuting on June 22, 2012, the Tesla Model S is the Flagship model in Tesla's range of cars, and it's the most technologically advance model they offer. The Plaid trim level of the Tesla Model S can do 0 to 100kmph in under 2 seconds, and it has a top speed of 347kmph, making it the fastest sedan and the fastest accelerating car in the world.

The Model S has a range of 650km, which makes it an electric car with one of the longest ranges available in the market. While the Model S is impressive compared to other electric cars, what makes it truly special is its technological features.

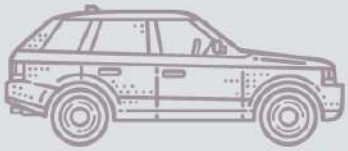
The most noteworthy feature the Model S offers is the Tesla Autopilot. Self-Driving technology is at the forefront of innovation in the field of transportation, and Tesla is the company that successfully brought that technology to the masses.

Tesla's Self-Driving technology, or "Autopilot" as it's known more commonly, is the most accurate and successful Self-Driving tech integrated into a production car. Tesla's Autopilot is able to guild itself from on-ramps to off-ramps, automatically change lanes and even Auto Park itself.

The Autopilot feature also lets the owner of the car to summon the car to the place he/her is in. The owner can summon the car to his/hers place through their Mobile device. When summoned, the car will automatically turn on and drive to the place where the owner is.

And the features of the Model S don't end there. To keep the futuristic theme of the Model S, Tesla has opted for a minimalistic design in the interior. That means there are no buttons or air vents to be seen on the interior of the car. But then how do you control the A/C and such without buttons? Well, Tesla has brought all of those controls such as A/C, Mirror adjustment etc. into the center screen of the car.

Even after 10 years, the Tesla Model S has not dropped its status of being at the top of all electric cars, and it will do so for a long time to come, as time evolves, so does the Tesla Model S. The Tesla Model S truly is the pinnacle of electric cars.



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Alexa is always listening to your conversations.
Alexa stores all of your dialogue history in the cloud to improve the Alexa experience.

Surgeons that grew up playing video games more than three hours per week make 37% fewer errors.

And have a 42% faster completion rate when performing laparoscopic surgery and suturing.

"I'm the creeper, catch me if you can!"

In 1971, the first ever computer virus was developed. Named Creeper, it was made as an experiment just to see how it spread between computers.

The virus simply displayed the message above

Until 2010, carrier pigeons were faster than the internet.

The name for "robot" has dark origins.

If you look into the etymology of "robot," it comes from the Czech word "robota" which translates to forced labor or work.

iTunes has unusual Terms & Conditions. When agree to the Terms & Conditions for iTunes, you are agreeing to not use it to make nuclear weapons.

"Android" is gender-specific. The word "Android" literally means a human with a male robot appearance.

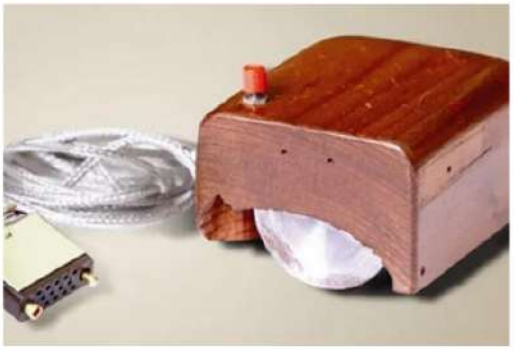
The female equivalent of this word is a "Gynoid."

The first computer mouse wasn't made from plastic.

Back then, it was made out of wood.
It was rectangular and featured a little button on the top right.

Mark Zuckerberg is color blind.

The founder of Facebook purposely chose a blue color scheme because he has red-green color blindness!
To him, blue is the richest and most prominent color that he can see.



FactoSpace

Google rents out goats. You read that right, instead of mowing their lawn, Google rents goats to eat the grass at their Mountain View headquarters.

A herder will bring 200 goats which are herded by a border collie named Jen

The Firefox logo isn't a fox. There is a common misbelief that because the browser is named Firefox, the logo must be a fox.

Surprisingly, the cute furry creature in the logo is actually a red panda!

Everyone uses Google as a spellchecker.

Most everyone, anyway! 97% of people type in words to Google just to see if they spelled it right.

ICT SOCIETY

Adobe PHOTOSHOP

Bit of Adobe

Officially known as Adobe Systems, the company is known for its multimedia and creativity software products.

Headquartered in San Jose, California, the company was founded in 1982 by John Warnock and Charles Geschke. The name Adobe comes from Adobe Creek in California, which ran behind the houses of the company's founders.

One of Adobe's first products was digital fonts, with the company entering the consumer software market in the 1980s. Adobe Illustrator was the company's first consumer product, which was a vector-based drawing program for Mac.

Released in 1990, every new update offers mind-blowing new features and improvements which help it cater to the creative industry's rapidly changing needs.

From the creation of simple designs to complex photo montages, Photoshop boasts a toolbox so vast not even Photoshop experts know all the features it offers!

According to Adobe's facts page, over 90% of all creative individuals around the globe make use of their products.

Adobe's popularity has brought in over 22,000 employees, spread across their headquarters in San Jose, California, and across the world.

So there you have it, Adobe is a giant worldwide business with great products, thousands of employees, billions in revenue...

Other Adobe Products

1. Adobe Acrobat Pro
2. Adobe Illustrator
3. Adobe InDesign
4. Adobe Premiere Pro
5. Adobe Lightroom
6. Adobe After Effects

NEW TRENDS IN ICT

TRENDS

New trends arise within this industry every year, and it becomes important for professionals to be familiar with these different trends and all that they entail.

No matter what profession one is working in, being familiar with these can improve your professional standing and help you understand the potential upgrades for the industry you are already working in.

By keeping up with trends, you'll constantly be learning; new tools, new events to participate in, new ways to be efficient.

> Follow the trendlines, Not the headlines
> - William J. Clinton

TOP NEW TECHNOLOGY TRENDS IN 2023

1. Computing Power
2. Smarter Devices
3. Quantum Computing
4. Datafication
5. Artificial Intelligence and Machine Learning
6. Extended Reality
7. Digital Trust
8. 3D Printing
9. Genomics
10. New Energy Solutions
11. Robotic Process Automation (RPA)

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A PROJECT BY THE

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The ICT Society endeavors to provide a platform for students interested in information technology to showcase their skills and gain knowledge about this vast field. The ICT Society plays a major role in bringing college to the forefront by the use of latest technologies in school activities.

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