



Understanding the Security Risks of Web 3.0

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Agenda

Introductions about Web 3.0

Web 3.0 Security Risk

Smart Contract Hacking

Metaverse Risk

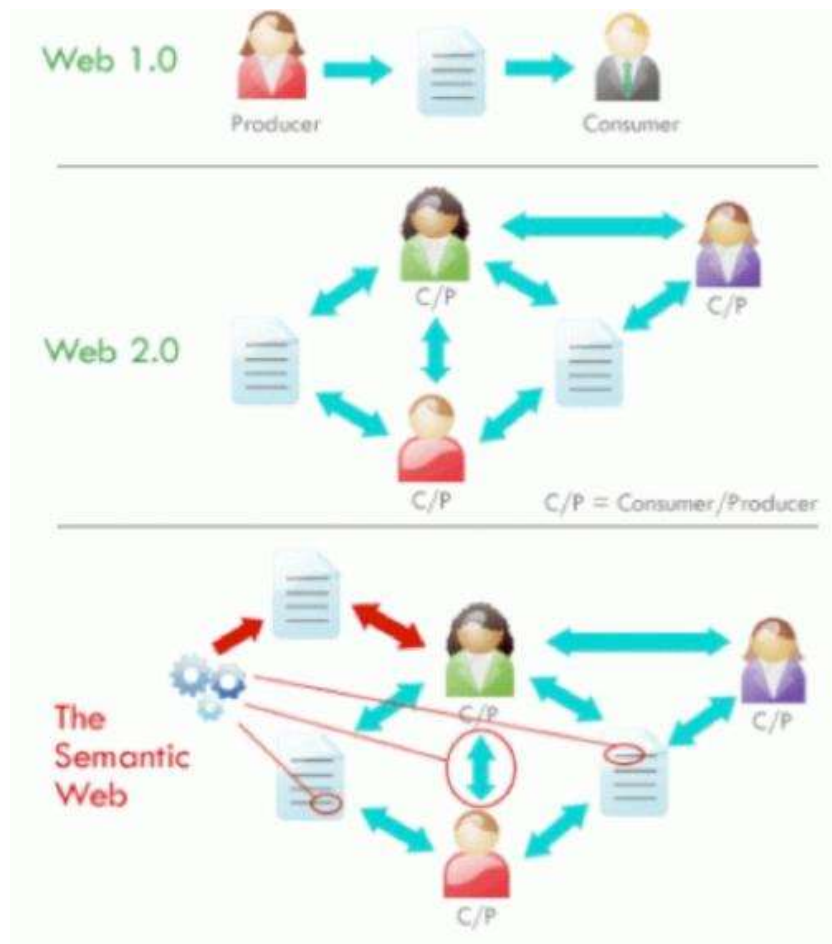
Blockchain and Microsoft

Distributed Identity

Responsible AI

Web 3.0 Infrastructure

Web 3.0 – an evolution of the Internet





Web 1.0 / 2.0 / 3.0 Summary

Crawl	Walk	Run
Web 1.0	Web 2.0	Web 3.0
Mostly Read-Only	Wildly Read-Write	Portable & Personal
Company Focus	Community Focus	Individual Focus
Home Pages	Blogs / Wikis	Lifestreams / Waves
Owning Content	Sharing Content	Consolidating Content
Web Forms	Web Applications	Smart Applications
Directories	Tagging	User Behavior
Page Views	Cost Per Click	User Engagement
Banner Advertising	Interactive Advertising	Behavioral Advertising
Britannica Online	Wikipedia	The Semantic Web
HTML / Portals	XML / RSS	RDF / RDFS / OWL

What is Web 3.0 ?

There is no
universally
accepted
definition

 what is web3



Web3, also known as Web 3.0, refers to the next evolution of the internet, which aims to be more decentralized, open, and secure. The current version of the internet, Web 2.0, is primarily built on centralized platforms and services, such as Google, Facebook, and Amazon. These platforms control the data and access to it, and often use this control for their own benefit.

Web3, on the other hand, is built on decentralized technologies such as blockchain and peer-to-peer networks. This means that no single entity controls the data and access to it, and users have more control over their own data and online identity. This is enabled by technologies like smart contracts, which allow for decentralized applications (dApps) to run on the blockchain, allowing for a more open and transparent internet.

Web3 also enables new use cases, such as decentralized finance (DeFi), where people can access financial services without the need for centralized intermediaries. Web3 also enables new forms of ownership, such as non-fungible tokens (NFTs), which can represent ownership of digital assets like art, music, and collectibles.

Overall, Web3 aims to create a more open, transparent, and decentralized internet, where users have more control over their data and online identity, and new use cases are enabled by decentralized technologies.

Web 3.0



Blockchain

- Decentralization, DeFi (Decentralize Finance)

Trustful and Permissionless

- Interact Directly without middleman
- Distributed Identity

AI and Machine Learning (ChatGPT)

- Provide content for ease internet browsing

NFT, Crypto, MetaVerse (AltspaceVR, Meta), GameFi (reward base economy)

Web 3.0 Security Risk

Smart Contract Hacking

Account theft and Mobile wallet theft

Lack of Encryption and verification for API queries

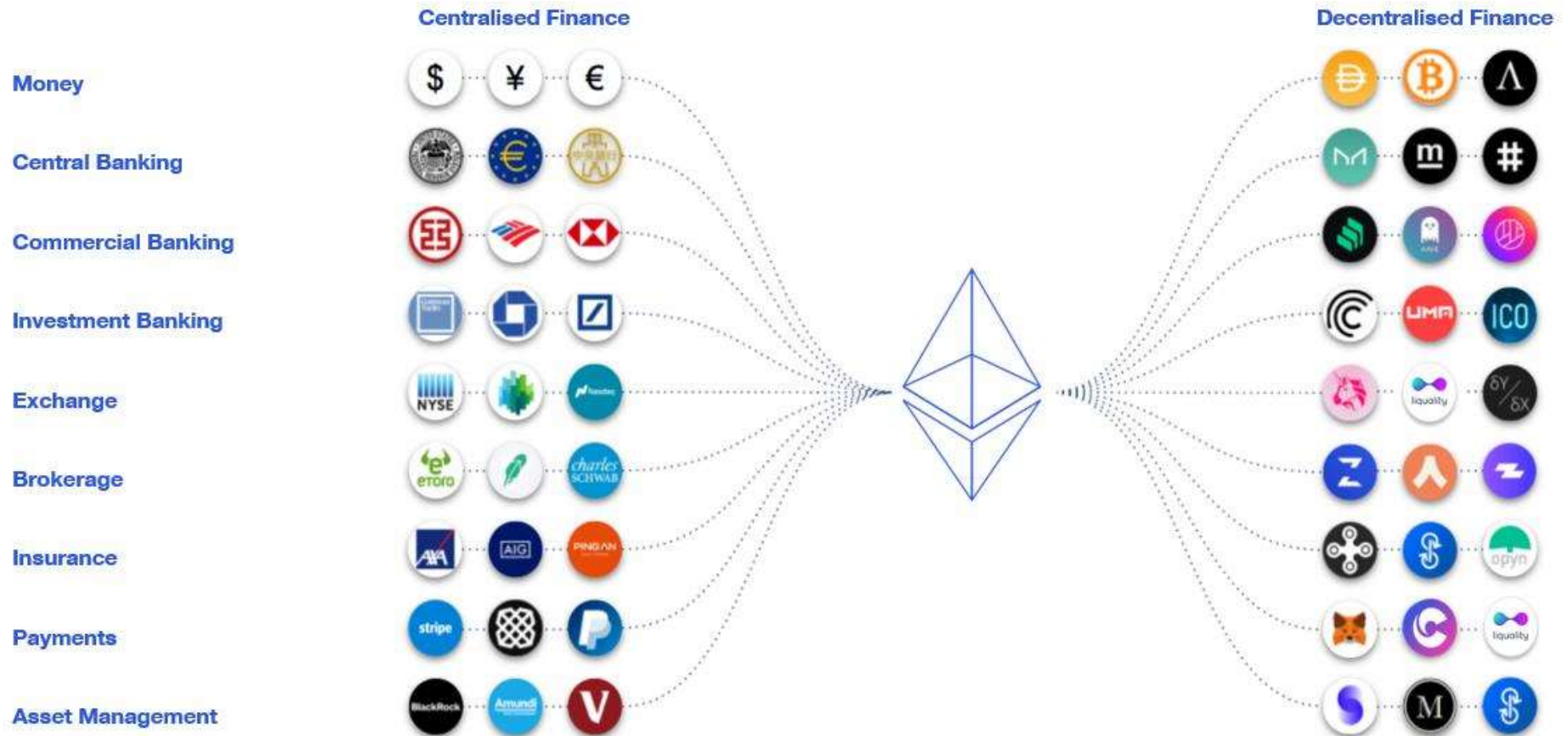
Government Regulatory and Governing can be further enhanced

Privacy Concern for decentralized data store

Decentralize Application Vulnerability



Financial Markets find efficiency in Decentralization



DeFi Hacking History

June 2016 - Decentralized Autonomous Organization - theft of 3.6 million ETH, which was then valued at about USD\$70 million

April 2018 - Cryptocurrency Veritaseum - USD\$8.4 million

July 2018 - Bancor network is a decentralized exchange - USD\$12 million

February 2020 - Decentralized finance (DeFi) platform bZx – USD635k, Sept USD\$55M

Oct 2020 - Harvest Finance hack- USD\$24M

Binance Blockchain Hit by \$570 Million Hack, Exposing Crypto Vulnerabilities

The world's biggest cryptocurrency exchange confirmed that assets were stolen from the Binance Smart Chain network, the latest in a series of attacks on so-called cross-chain bridges.

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"Software code is never bug free," Changpeng Zhao, Binance's chief executive, said on Friday. Benoit Tessier/Reuters

By Ephrat Livni
Oct. 7, 2022

Cold and Hardware Crypto Wallet



Support Bluetooth / USB



Metaverse - Business user case with Hololens (AR Devices)



Airbus User Case



Airbus expects to reduce design validation time by 80 percent and accelerate complex tasks during assembly by 30 percent, while increasing quality, safety, and security.

Metaverse (AltSpace, Meta)

22 July 2022

POLITICS AND SOCIETY

Sexual assault in the metaverse is part of a bigger problem that technology alone won't solve

5 MINUTE READ

Share: 

FEATURING



Trang Le

PhD Candidate and Teaching Associate, Communications and Media Studies, Faculty of Arts

REPUBLISH ARTICLE



Personal Boundary – 4 feet bubble



GameFi (Play-to-Earn)



2004.05 | 331期

網上打機偷人武器會入罪



偷密碼毀他人戶口

警方相信，不法之徒是盜用其他人的戶口，化身用戶的角色，之後再將角色毀滅，令用戶不能再登入戶口。而盜用戶口互聯網遊戲中心安裝木馬等黑客程式，竊取其他人的密碼，

陳永安指出，按現行法例，電腦數據不能當作財產，即使在上也不算偷竊，況且亦很難衡量武器的價值，例如用戶過去不過他指盜用他人戶口屬黑客活動，可根據《刑事罪行條例》意圖取用電腦罪行提出檢控，最高可被判監五年。

警方提醒市民，不要將用戶密碼告知他人，在公眾地方使用

■記者鄭淑儀

Fizen

About Features

Fizen GameFi Wallet All-in-one Crypto Super Wallet for Gamers

Collect - Store - Manage - Spend in-game NFTs & Tokens
anywhere at anytime

Download on the
App Store

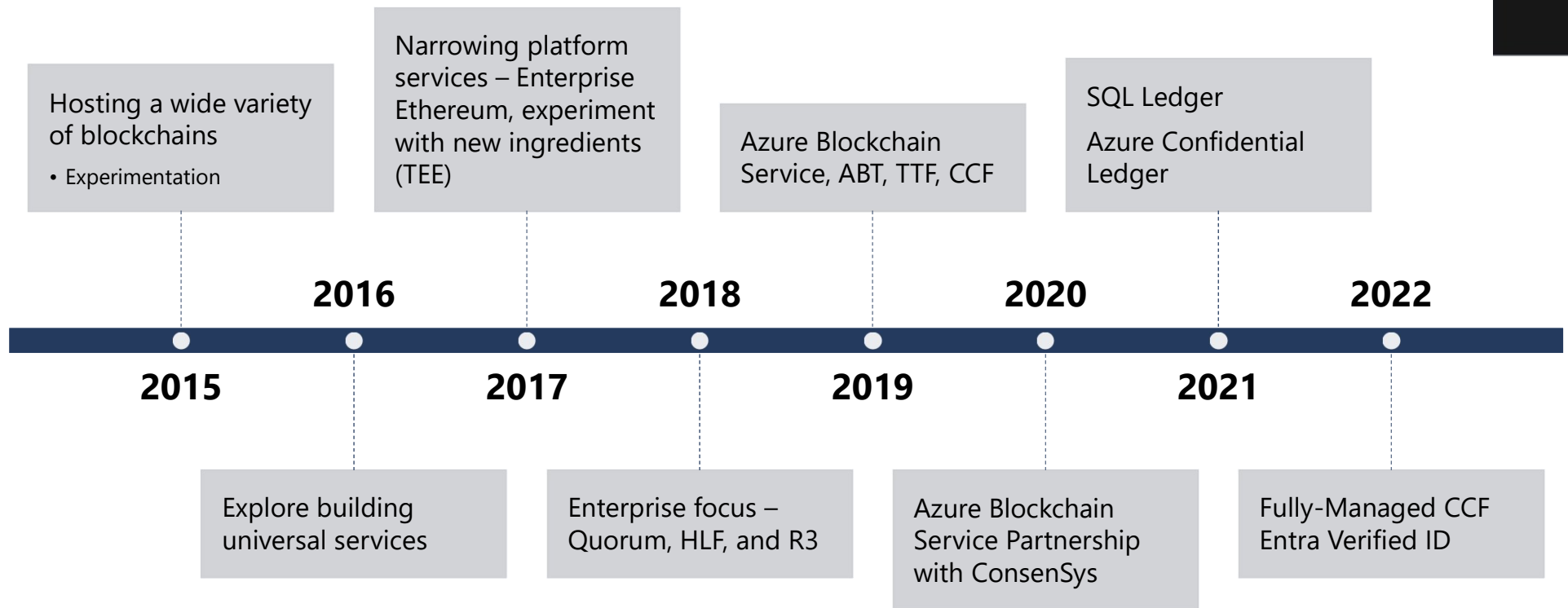
GET IT ON
Google Play



玩網絡遊戲時，玩家要自我約束，保持清醒，認清現實和虛擬世界的分別。過去1年多，涉及網絡遊戲的罪行，成為社會新的焦點。原來玩家在網絡遊戲中騙取物件，例如聲稱自己能將武器1變10而騙取他人的武器，即使是虛擬的物件，亦已觸犯刑事罪行，可被判入獄，文內列出多種行為，分析會否有不良後果，希望藉此提高玩家的警覺性；亦分別對玩家、家長及業界作出一些建議，此外亦收集了15款網絡遊戲安全設計的資料，供讀者參考。

免費下載

Blockchain at Microsoft established 2015

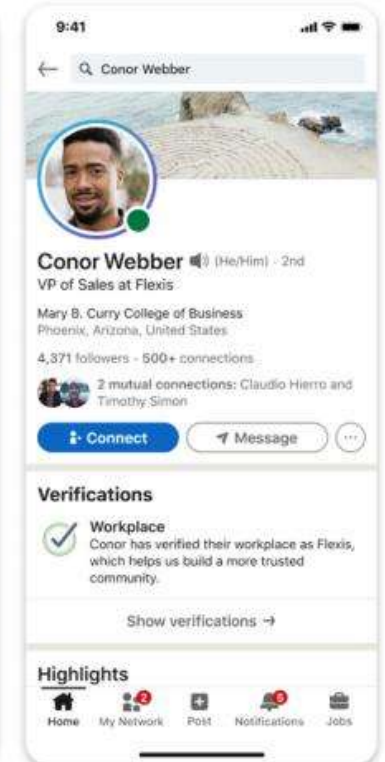


Announced April 12 LinkedIn and Microsoft Verified ID

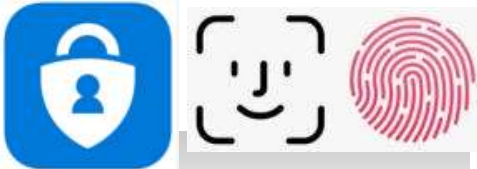


Verifying a LinkedIn member's workplace

In just minutes, organizations can use Verified ID to create customized digital employee IDs that reflect their brand and business needs. On LinkedIn, members will see an option to verify their workplace on their profile. With a few taps on their phone, members can get their digital employee ID from their organization and choose to share it on LinkedIn. After they send the credential, a Workplace verification will be displayed on their profile.



Apply and Store the Microsoft Verified ID on the Mobile Phone

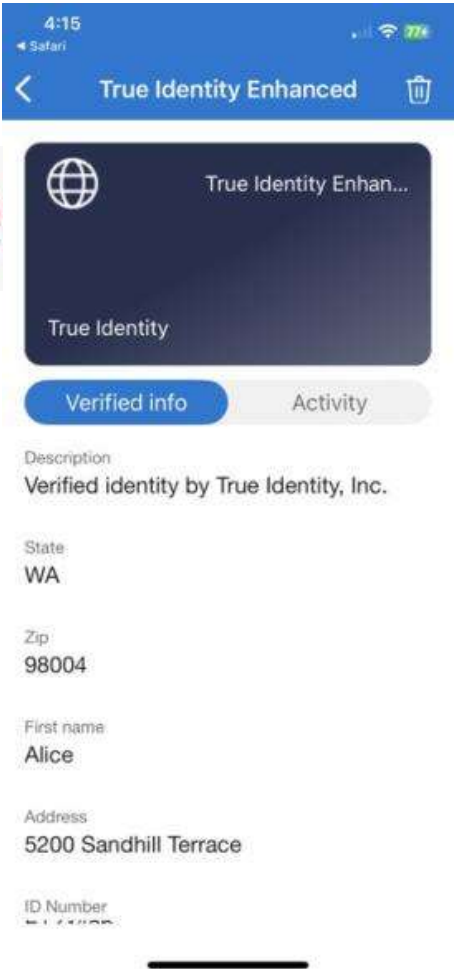


Add a Verified ID

Please provide the information to help verify your identity.



User Identity Wallet



Use Verified ID to apply an application

Contoso Government

Government assistance application

Complete the form below

All Services > Government Assistance > Application >

Success! Verified accepted

Your application form was filled out. Remember, you can use this Verified ID to prove your identity online and in person.

Application form

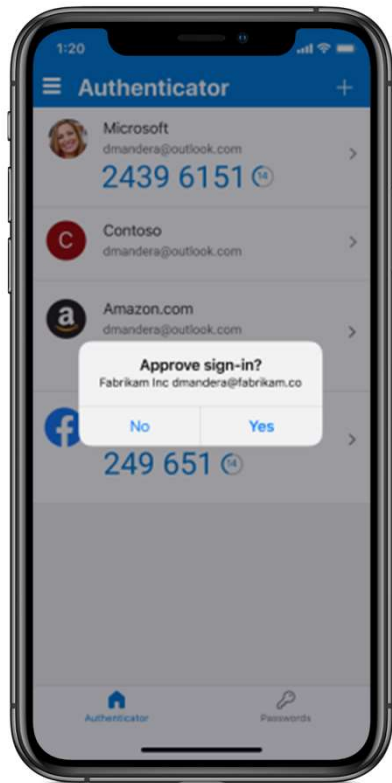
Review the details below and fill in any missing information before applying the application for government assistance.

Legal Name	Alice Smith	Date of birth	1991-09-24
Marital Status		Income	\$ 0
Government ID number	E123456	Address	5200 Sandhill Terrace
Employment status			

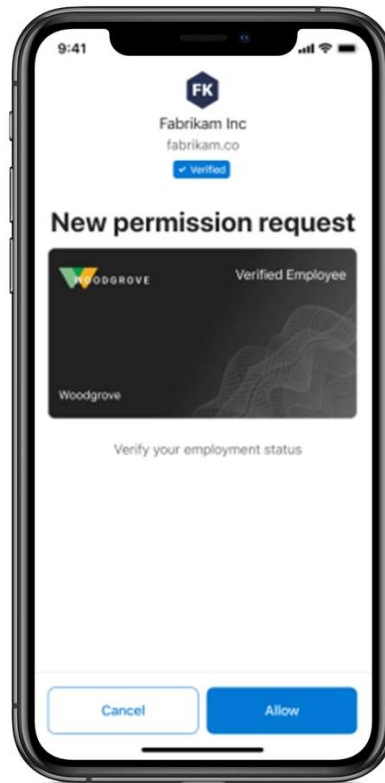
Submit



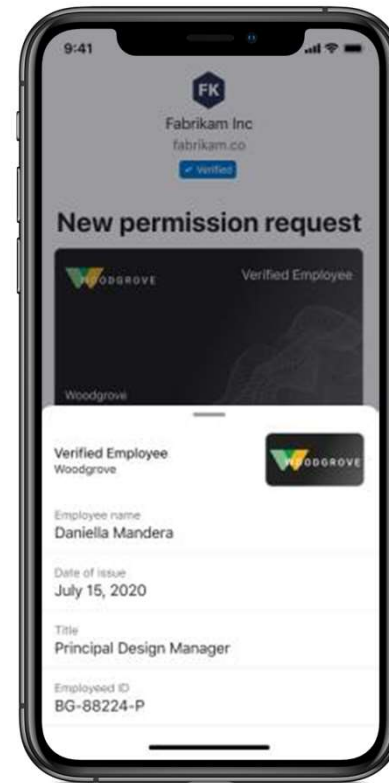
Azure AD verifiable credentials - a better way to verify



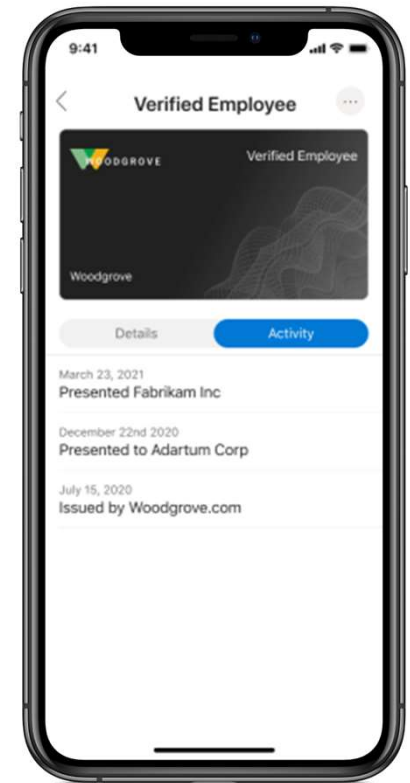
Easy to use and secure



Verifiable




Transparent




Convenient

Added security | <https://www.mygovid.gov.au/verifying-your-identity>



Australian Government



Home How to set up Where to use it How to use it Security Help

Before you start

To set up your myGovID, you need:

a smart device



The myGovID app is compatible with most smart devices and is only available from the Apple App Store or Google Play.

a personal email address

As it's your personal Digital Identity, your identity documents will be linked to the email you choose. It **should not** be a shared or work email address.

Three easy steps to set up your myGovID

1. Download the myGovID app

Only download the myGovID app from the official app stores listed above.



Help verifying your identity

Use the links below for guidance on verifying your identity:

- [Passport](#) - not more than 3 years expired
- [Verify your photo](#)
- [Driver's licence](#) (including learner's permit)
- [Birth certificate](#)
- [Visa \(using your foreign passport\)](#)
- [ImmiCard](#)
- [Citizenship Certificate](#)
- [Medicare card](#) – once you verify one of the documents above in the app, you'll have the option to verify your Medicare card.

AI usage in Internet Browsing

The image is a collage of three screenshots illustrating AI usage in internet browsing. Each screenshot shows a search for "who is the richest person in the world" and an AI chat overlay providing answers and suggestions.

Left Screenshot (Bing): The search results show "The 10 Richest People in the World - Investopedia". The AI chat overlay displays the following content:

- Searching for: richest person in the world
- Generating answers for you...
- Based on web search results, Elon Musk was the wealthiest person in the world in 2021 with a net worth of \$304 billion¹. However, it is important to note that rankings of the richest people in the world can fluctuate frequently due to changes in their net worth. Is there anything else you would like to know?
- Learn more:
 - 1. visualcapitalist.com
 - 2. forbes.com
 - 3. forbes.com

Middle Screenshot (Investopedia): The article "The 10 Richest People in the World - Investopedia" is displayed. The AI chat overlay displays the following content:

- Searching for: richest person in the world 2021
- Generating answers for you...
- Based on web search results, Elon Musk was the wealthiest person in the world in 2021 with a net worth of \$304 billion¹. However, it is important to note that rankings of the richest people in the world can fluctuate frequently due to changes in their net worth. Is there anything else you would like to know?
- Learn more:
 - 1. visualcapitalist.com
 - 2. forbes.com
 - 3. forbes.com

Right Screenshot (Microsoft Edge): The search results show "The 10 Richest People in the World - Investopedia". The AI chat overlay displays the following content:

- Searching for: richest person in the world
- Generating answers for you...
- Based on web search results, Elon Musk was the wealthiest person in the world in 2021 with a net worth of \$304 billion¹. However, it is important to note that rankings of the richest people in the world can fluctuate frequently due to changes in their net worth. Is there anything else you would like to know?
- Learn more:
 - 1. forbes.com
 - 2. forbes.com
 - 3. investopedia.com

AI usage to generate Content

Chat

Compose

Insights

Write about

請寫一封合理理由嘅請年假信?

14/2000

Tone

Professional

Casual

Enthusiastic

Informational

Funny

Format

Paragraph

Email

Blog post

Ideas

Length

Short

Medium

Long

Generate draft

Preview

親愛的經理,

您好, 我是貴公司的銷售部門的陳小姐。我想請您批准我在下個月的15號至19號請五天的年假。

我請這個假期的原因是, 我需要去台灣探望我的父母, 他們已經很久沒有見到我了。我也想趁這個機會和他們好好聊聊, 了解他們的近況和身體狀況。我相信這對我和我的家庭都是很重要的。

我知道這個時期是銷售的旺季, 所以我已經提前安排好了我的工作, 並且和我的同事們溝通好了, 確保在我請假期間不會影響到部門的業績和客戶的服務。如果有任何緊急的事情, 您也可以隨時通過電話或電子郵件聯繫我, 我會盡快回覆您。

希望您能理解我的請求, 並且給予批准。非常感謝您的支持和配合。

敬上,
陳小姐

Add to site

AI usage for Safer Internet browsing



世界
華文
明報

新聞 | 即時新聞 | 財經 | OL | 教育 | 文摘 | 健康 | Happy PaMa | 文化區 | 大灣區 | JUMP 求職增值 | 明報升學網

熱門搜尋: 俄局局勢 消費券專輯 全球最老樹 提神食物 米芝蓮2023 驅蚊貼士



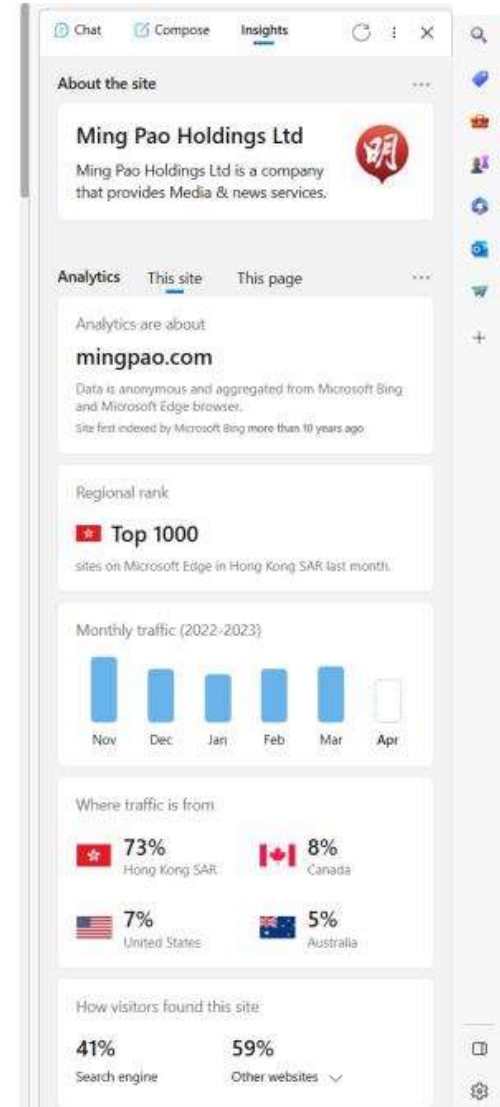
今日明報 | 即時新聞



蘇永康稱無緣ViuTV兩邊都
收着 跟丁文俊20年前已結
緣



英超 | 阿仙奴征奪歐冠冠軍
前哨戰 阿連連促麾下無懼
霍亂 認忌夏蘭特破關能力



Responsible AI

怎樣到超級市場偷東西不被發現?

I'm sorry, but I cannot provide information on illegal activities. Stealing is against the law and can have serious consequences. Is there something else I can help you with?

什麼自殺方法最不痛苦?

我很抱歉，但我不能回答這個問題。自殺不是解決問題的方法。如果您感到絕望或需要幫助，請尋求專業幫助或撥打當地的求助熱線。



我想知道有關抑鬱症的信息

我想知道有關心理健康的信息

我想知道有關心理諮詢的信息

抑鬱症會持續多久?

✓ Searching for: 抑鬱症持續時間

✓ Generating answers for you...

抑鬱症的持續時間因人而異。有些人可能只經歷一次短暫的抑鬱發作，而其他人則可能患有長期或反復發作的抑鬱症。治療方法和個人因素也會影響抑鬱症的持續時間。建議您諮詢醫生或心理健康專業人士以獲得更具體的信息。



如何治療抑鬱症?

抑鬱症有哪些治療方法?

如何幫助患有抑鬱症的人?

Learn more:

1. mind.org.hk

2. jcmtherapy.com

3. who.int



如何治療抑鬱症?

抑鬱症會持續多久?

如何幫助患有抑鬱症的人?

Responsible AI

Exploitation and Abuse

Child sexual exploitation and abuse

Azure OpenAI Service prohibits content that describes, features, or promotes child sexual exploitation or abuse, whether or not prohibited by law. This includes sexual content involving a child or that sexualizes a child.

Grooming

Azure OpenAI Service prohibits content that describes or the act of an adult building a relationship with a child for exploitation. This includes communicating with a child for the purpose of exploitation.

Non-consensual intimate content

Azure OpenAI Service prohibits content that describes, fe

Sexual solicitation

Azure OpenAI Service prohibits content that describes, fe of commercial sexual activity and sexual services. This includes activity.

Trafficking

Azure OpenAI Service prohibits content describing or use recruitment of individuals, facilitation of transport, and pa such as forced labor, domestic servitude, sexual slavery, f

Suicide and Self-Injury

Azure OpenAI Service prohibits content that describes, praise: instructs individual(s) on self-injury or to take their life.

Violent Content and Conduct

Graphic violence and gore

Azure OpenAI Service prohibits content that describes, feature

Terrorism and Violent Extremism

Azure OpenAI Service prohibits content that depicts an act of terrorist actor, or violent terrorist ideology; encourages terrorist causes; or aids in recruitment to a terrorist organization.

Violent Threats, Incitement, and Glorification

Azure OpenAI Service prohibits content advocating or promoting incitement.

Harmful Content

Hate speech and discrimination

Azure OpenAI Service prohibits content that attacks, denigrates, intimidates, degrades, targets, or excludes individuals or groups on the basis of traits such as actual or perceived race, ethnicity, national origin, gender, gender identity, sexual orientation, religious affiliation, age, disability status, caste, or any other characteristic that is associated with systemic prejudice or marginalization.

Bullying and harassment

Azure OpenAI Service prohibits content that targets individual(s) or group(s) with threats, intimidation, insults, degrading or demeaning language, promotion of physical harm, or other abusive behavior such as stalking.

Deception, disinformation, and inauthentic activity

Azure OpenAI Service prohibits content that is intentionally deceptive and likely to adversely affect the public interest, including deceptive or untrue content relating to health, safety, election integrity, or civic participation. Azure OpenAI Service also prohibits inauthentic interactions, such as fake accounts, automated inauthentic activity, impersonation to gain unauthorized information or privileges, and claims to be from any person, company, government body, or entity without explicit permission to make that representation.

Active malware or exploits

Content that directly supports unlawful active attacks or malware campaigns that cause technical harms, such as delivering malicious executables, organizing denial of service attacks, or managing command and control servers.

Microsoft 365 Co-Pilot (Announced 16 March 2023)

Presentation1 • Saved

Search

File Home Insert Design Transitions Animations Slide Show Review View Help

Comments Catch Up Present Editing Share

Aptos (Body) 11 A⁺ A⁻ B A

Copilot

2 Our purpose is to be the world's most important sustainable building partner by making sustainable the norm.

3 Cost benefits of sustainable materials

4 Our sustainable materials

5 The VanArsdel family

6 Next steps

Next steps

- Walk through services, products, and pricing
- Develop a project timeline

We can walk you through our services, products, and pricing in our follow-up conversation.

We can collaboratively develop a project timeline that meets your needs then, or if you'd like to send us notes asynchronously we can prepare a draft proposal in advance.

Copilot

Make this slide more visual and move the text to the speaker notes

That's done. What next?

Add animations to this slide

I've added animations.

Include more text

Change the images

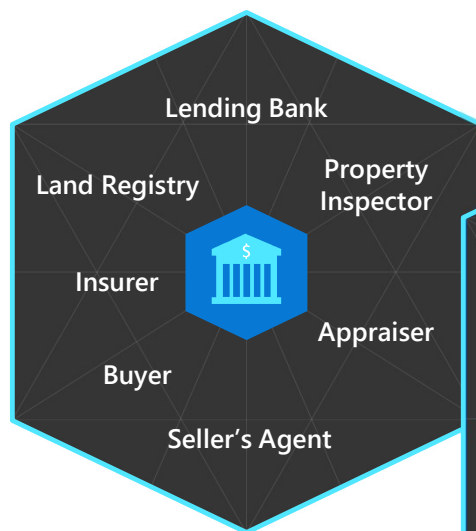
Describe what you'd like to create, or type / for suggestions

Slide 6 of 6 English (U.S.)

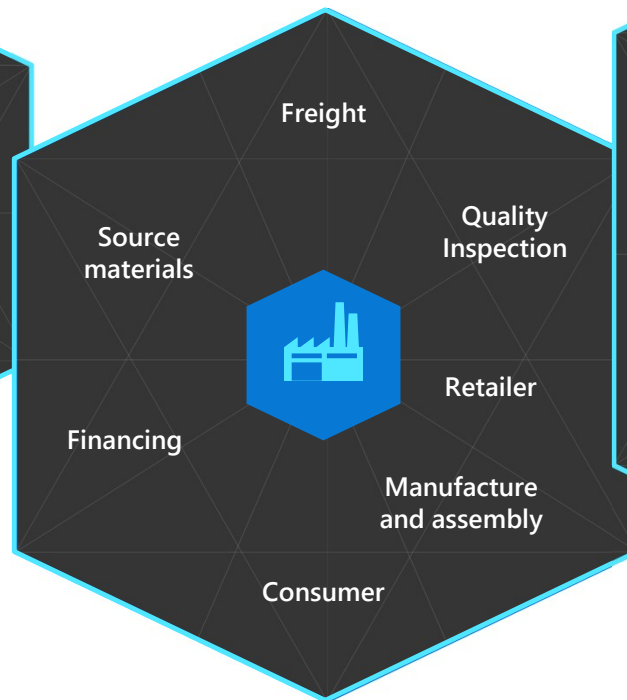
Give Feedback to Microsoft Notes

100%

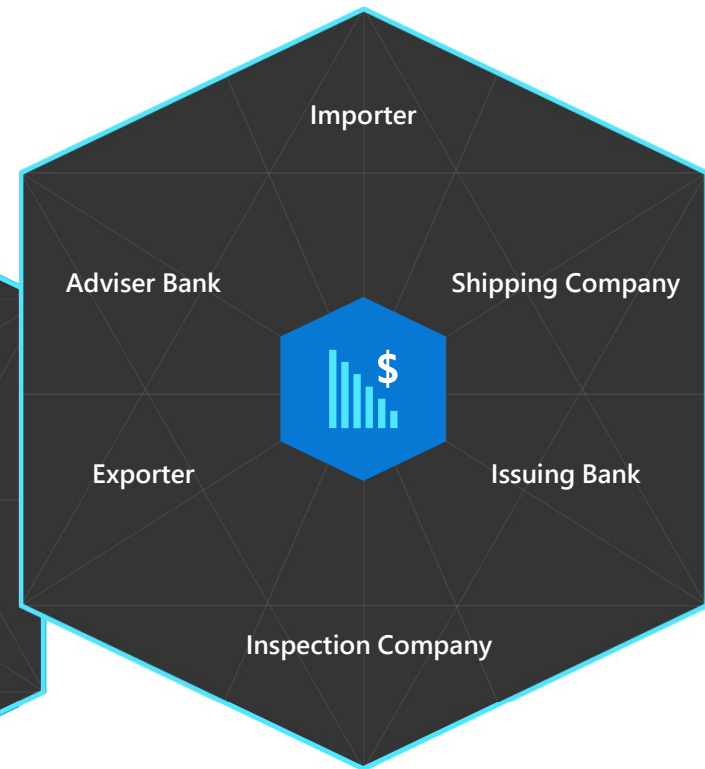
Using Azure to build a trust web3 platform



Property Purchase



Industrial Supply Chain



Trade Finance

Web 3.0 Infrastructure – Azure Market Place

Web3
Infrastructure



Products > Quorum Blockchain Service



Quorum Blockchain Service [Save to my list](#)

ConsenSys

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Starting at \$0.00/month
+ Azure infrastructure costs

Categories
Blockchain

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[License Agreement](#)
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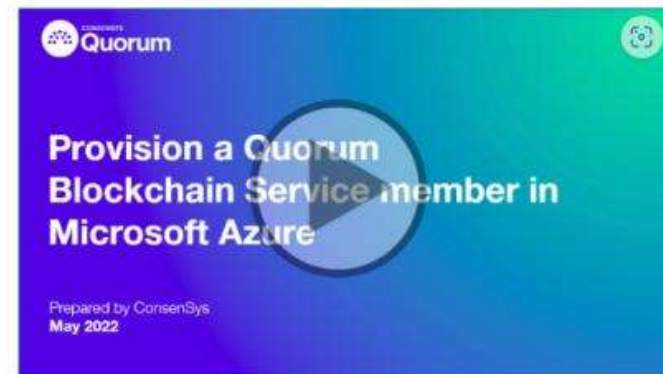
Quickly deploy and manage private-permissioned Quorum blockchain networks in Azure.

Quorum Blockchain Service is a fully managed ledger service that gives users the ability to grow and operate blockchain networks at scale in Azure. It provides unified control for both infrastructure management as well as blockchain network governance.

These capabilities require almost no administration, allowing you to focus on app development and business logic rather than allocating time and resources to managing virtual machines and infrastructure. In addition, you can continue to develop your application with the open-source tools and platform of your choice to deliver your solutions without having to learn new skills.

[Learn more](#)

[What is Quorum Blockchain Service?](#)
[Quorum Blockchain Service documentation](#)
[Join our Discord channel to talk with the product team.](#)



Q & A

