

19 November 2024

Discussion paper

**Legislative Council Subcommittee on Issues Relating to the
Development of Web3 and Virtual Assets**

**Cyberport's initiatives to promote the development of the
third generation Internet ecosystem**

PURPOSE

This paper briefs Members on the progress of Cyberport's work in promoting the adoption of blockchain technology and the development of the third generation Internet ("Web3.0") related ecosystem.

BACKGROUND

2. As Hong Kong's flagship in information and communications technology ("ICT") sector, Cyberport has been implementing public mission programmes over the years and nurturing start-ups through the provision of financial and professional support, with a particular focus on three information technology ("IT") application clusters, namely smart living, digital entertainment and financial technology ("FinTech"). Cyberport has also been actively promoting the technology advancement and application of artificial intelligence ("AI") and big data, blockchain technology, as well as cybersecurity, with a view to laying the foundation for future technological development.

3. In recent years, applications of blockchain technology have undergone rapid advancement. With its characteristics of disintermediation, security, transparency and low cost, blockchain technology can solve a lot of challenges and pain points in finance, trading, business operations and even day-to-day life, so as to drive the development and innovation of related fields and applications in daily life and commercial activities.

4. To embrace the trend of blockchain technology-related development, the Government announced in the 2023-24 Budget an allocation of \$50 million to support Cyberport in expediting the development of the related ecosystem, including attracting enterprises, nurturing talents, promoting industry development, as well as organising related educational and promotional activities.

CYBERPORT COMMUNITY

5. At present, the Cyberport houses more than 270 blockchain technology-related enterprises, including three unicorns¹, of which about 15% are from the Mainland and overseas. The founders of these over 270 enterprises originate from over 20 countries and regions, including Japan, Korea, the United States (“US”), Canada, Germany, the United Kingdom and India, in addition to Hong Kong and the Mainland. The enterprises can be broadly categorised as follows –

Category	Number of enterprises (approximate)
Applications and content (e.g. non-fungible tokens, games, decentralised finance, etc.)	200
System tools and data analytics (e.g. data analytics, security and audit, etc.)	40
Infrastructure (e.g. blockchain node infrastructure, etc.)	20
Others (e.g. venture capital funds, professional services, etc.)	10
Total	270

6. The Cyberport community has been actively applying blockchain-related technologies in various areas, some examples of which are set out in the **Annex**, including the following application scenarios –

¹ One of them is a licensed virtual asset trading platform.

- (a) **Smart Living:** an enterprise has leveraged blockchain and Internet of Things (IoT) technologies to assist farmers in real-time monitoring of the location, health conditions, and growth of their livestock, and to convert them into reliable and immutable data. The credibility of the data provides financial institutions with reliable means of assessing and monitoring collaterals, thereby resolving the pain point of the farm industry's limited access to financing;
- (b) **Digital Entertainment:** blockchain combined with electronic games can provide players with a brand-new experience. Blockchain technology enables the issuance and trading of virtual assets in electronic games, bringing new possibilities for in-game economic models and inter-player social interactions. For example, a company launched in 2023 the world's first interactive fitness adventure app with an "immersive" experience where users can exercise and work out together with their favourite comic characters;
- (c) **FinTech:** a start-up streamlines construction companies' access to working capital by providing contemporary financial solutions to the traditional supply chain through the use of blockchain digital platform to connect with the main contractor's system and assessing risks based on actual performance data; and
- (d) **Cyber and Data Security:** a start-up launched an innovative anti-fraud solution, such as browser extensions and wallet-embedded applications, designed to protect users from fraud in crypto transactions and other Web3.0 activities.

7. Meanwhile, Cyberport has been actively recruiting large-scale enterprises at home and abroad, including blockchain security enterprises from the Mainland, and asset custodian and wallet technology providers from overseas. The presence of these enterprises in Cyberport enables business co-operation and opportunities for Cyberport community members and related start-ups, thereby facilitating the development of a vibrant ecosystem.

DRIVING INDUSTRY DEVELOPMENT

8. Cyberport actively supports start-ups, fosters the application of blockchain-related technology solutions in traditional industries and facilitates investment and financing, in order to stimulate further growth of these start-ups. Details are as follows.

Supporting start-ups

9. Through various incubation, accelerator and support programmes, Cyberport provides start-ups, including blockchain start-ups, with various financial and professional support, etc., to provide comprehensive support for their development needs at different stages.

10. Taking the “Cyberport Incubation Programme for Smart Living Start-ups” and “Cyberport Incubation Programme” as examples, incubatees are provided with comprehensive entrepreneurial support, including financial assistance of up to \$500,000, technical support and business consultancy services, etc., to assist them in transforming their innovative ideas into substantive businesses or products. Since 2023, Cyberport has admitted over 230 enterprises under the two programmes, of which about 110 are involved in blockchain-related technology applications and/or solutions.

11. In addition, the “Cyberport Creative Micro Fund” provides seed money of \$100,000 to each selected project to help participants develop their innovative ideas into prototypes. Since 2023, about 190 projects have been approved, of which more than 30 involve blockchain-related technology applications and/or solutions.

12. The “Overseas/Mainland Market Development Support Scheme” also provides financial assistance of up to \$200,000 to enterprises for conducting sales and marketing activities, market research and promotion etc. outside Hong Kong. Cyberport has approved over 30 applications from blockchain-related enterprises under the scheme.

Encouraging Proof-of-Concept testing

13. Cyberport launched the “Web3 Proof-of-Concept Scheme” in late 2023 with the aim of facilitating the development of the Web3.0 industry and the application of related blockchain technologies in various areas. The scheme provides development-stage funding support for innovative technology projects to encourage relevant technology enterprises to collaborate with mature industries to co-develop high-value and innovative solutions. The maximum amount of funding support is \$150,000 per project.

14. A total of 45 projects have been approved under the scheme, covering areas such as real estate and construction, carbon credits certification, as well as arts and culture, etc. For example, an enterprise uses digital tools for decentralised identity to improve cross-border recruitment and ensure verification of candidates’ personal information and credentials. Another enterprise develops decentralised applications for governments and financial institutions to provide decentralised identity and rights management, lending services and payment functions to ensure transparent and timely financial management, which significantly reduces the time and effort required for application and signing of contracts.

Expanding partner networks

15. Cyberport is actively expanding its partner network both at home and abroad. In May 2024, Cyberport signed a Memorandum of Understanding with Hangzhou Shangcheng District to encourage relevant enterprises of the two cities to engage in business development, project matching and business landing, so as to promote the collaborative development of the Hangzhou-Hong Kong blockchain technology industry chain. Cyberport also announced in October 2024 the signing of a Memorandum of Understanding with Draper Dragon from the US, under which the two parties will jointly establish the “Cyberport x Draper Dragon Web3.0 Accelerator Programme” to leverage on Draper Dragon’s Silicon Valley incubation experience to inject new momentum into Cyberport's relevant enterprises.

16. In addition, Cyberport launched the “Cyberport Blockchain Support Portal” in October this year, which aims to assist blockchain projects² from different regions to build up their networks in Hong Kong, and to facilitate the development of the blockchain ecosystem in Hong Kong through use-case experience sharing, support for business expansion and education, etc. Two well-known overseas blockchain projects have joined the platform as its first batch of partners, which will bring more co-operation opportunities to Hong Kong’s start-ups through business co-operation and innovation funds respectively.

Promoting investment

17. The “Cyberport Investor Network” (“CIN”), established in 2017, has already gathered more than 200 investment entities, including venture capital, accelerator or angel funds, family offices, venture arm of corporates and banks, private equity funds, etc. from Hong Kong, the Mainland, Southeast Asia, the Asia-Pacific region, the Americas and Europe, etc. Cyberport has further established the “Web3.0 Investors Circle” (“W3IC”) under the CIN in May 2024 with the aim of establishing a dedicated investor network for the sector. W3IC brought together investors interested in investing in the relevant technologies in order to attract more capital for the related industries, facilitating the matching of investors with suitable high-quality enterprises or projects. It also establishes a reliable financing channel for the relevant start-ups, thereby driving the development of the ecosystem.

18. Cyberport estimates that its Web3.0 related community enterprises have successfully raised over \$500 million since 2023. Among them, an enterprise focusing on payment finance and physical assets has raised about \$300 million from investors, while an enterprise focusing on metaverse development has raised over \$100 million.

² Also known as ‘blockchain protocol’, i.e. a platform that defines the basic rules and protocols of the blockchain, these rules/protocols can cover transaction verification, consensus mechanisms, network security, etc.

NUTURING TALENTS

19. Talent is an important resource for driving innovation and technology development. Cyberport is committed to identifying local talents in blockchain technology to inspire young people to join the industry.

“Cyberport Web3.0 Internship Programme 2024”

20. Cyberport launched the “Cyberport Web3.0 Internship Programme 2024”, which successfully matched 12 companies with 30 university students, including six from Stanford University and Zhejiang University, and 24 students from local universities. The companies offering internships under the programme cover areas such as AI, biomedicine, FinTech and blockchain applications, etc. During the internship period, Cyberport organised a wide range of exchange activities for the interns, including entrepreneurship training and exchanges with industry leaders to enrich their internship experience.

“Cyberport University Partnership Programme 2024”

21. For the “Cyberport University Partnership Programme” this year, Cyberport has for the first time incorporated Web3.0 element and collaborated with a number of public and industry organisations, including the Hong Kong Monetary Authority, Securities and Futures Commission (SFC), Hong Kong FinTech Association, Hong Kong Digital Asset Society, as well as other Web3.0 enterprises to nurture more innovative talents. A total of 20 teams comprising over 40 students from 11 local universities were selected to present their innovative proposals to the Cyberport judging panel after attending the Web3.0 entrepreneurship boot camp at Draper University in Silicon Valley, US. The 10 winning teams were each awarded \$100,000 in seed money from the Cyberport Creative Micro Fund to realise their entrepreneurial dreams.

Other nurturing programmes

22. Cyberport has also set up the Web3 Academy in June last year, which has organised a number of online and offline blockchain-related training and seminars in collaboration with university institutions, related industry associations and industry leaders, reaching out to over 4 500 participants. Cyberport actively collaborates with public organisations/institutions, including co-organising training activities with the Investor and Financial Education Council of the SFC and the Hong Kong University of Science and Technology, inviting industry experts to share relevant knowledge with students.

23. In terms of collaboration with the industry, Cyberport co-organised a developer training programme with “Polkadot Blockchain Academy” in January this year, which successfully attracted over 120 local, Mainland and overseas entrepreneurs and developers to Cyberport for a one-month training programme. The programme not only nurtured local developers, but also encouraged and facilitated projects from the Mainland and overseas to set up in Hong Kong.

ENHANCING PUBLIC AWARENESS AND FACILITATING INDUSTRY EXCHANGE

24. To enhance public awareness of blockchain technology applications and facilitate industry exchanges, Cyberport has been actively organising relevant educational and publicity campaigns to foster the development of the industry.

Web3 Living Lab

25. Cyberport set up the Lab last year. The Lab showcases how local enterprises apply blockchain and other related technologies to different aspects of daily life and business to enhance efficiency and enable the creation of new economic value from innovative ideas. As of September this year, more than 16 000 people have visited the “Web3 Living Lab”. The solutions showcased include:

- (a) an enterprise assisted the China Post in issuing digital stamps on the public chain, enabling stamp enthusiasts to collect stamps more conveniently. The digital stamps can also record the address of the original issue through the blockchain to ensure their authenticity;
- (b) an enterprise provides a convenient and decentralised social platform. Users can connect with others and post updates, as well as participate in discussions and activities in various fields, creating a more open and interactive online social experience; and
- (c) an enterprise has created a new immersive viewing experience by integrating art and technology to showcase fascinating digital artworks to visitors.

Organising Mega Events

26. Cyberport organised the “Web3 Innovators Season” with a series of events from October to November 2023, partnering with venture capital firms and technology companies to organise keynote speeches, proposal competitions, academic forums, industry sharing sessions and hackathons, etc. Cyberport launched the “Web3Verse” series of themed events from April to May 2024 which included technology summits, academic forums, e-sports tournaments, game expos, etc., covering a wide range of topics such as cybersecurity, regulatory regime, non-fungible tokens, decentralised physical infrastructure network, etc. The series of events attracted more than 50 000 participants, enabling the industry and enterprises to better grasp frontier development and promote cross-sectoral business collaborations and exchanges.

27. Apart from the thematic events, Cyberport also facilitates exchanges among the related industries and showcase the latest blockchain applications to the public and the industry through its mega events. Taking Cyberport's flagship event, the “Digital Entertainment Leadership Forum”, as an example, both its 2023 and 2024 editions have adopted Web3.0 as one of the themes, with an application experience zone and a carnival to promote the benefits brought about by the use of blockchain technology to the public.

28. Cyberport has also incorporated related topics, highlights and demonstrations into its “Cyberport Venture Capital Forum” (“CVCF”). In the CVCF held in October this year, through the “Web3.0 Innovation Expo”, Cyberport has brought together over 20 experts and industry practitioners to showcase real-life use cases from local, Southeast Asia, Europe, the US and Africa, covering asset tokenisation, culture, product traceability, digital identity, etc., so as to enable the industry to explore more opportunities in the application of related technologies.

ADVICE SOUGHT

29. Members are invited to note the respective work progress of Cyberport.

**Innovation, Technology and Industry Bureau
Digital Policy Office
Hong Kong Cyberport Management Company Limited
November 2024**

Examples of Cyberport Companies

Company Name	Major Solution/ Service	Achievements/ Application Solution Outcomes
Smart Living		
Certizen	Builds blockchain-based identity authentication and verification service solutions using government-issued e-certificates and international corporate identities.	Certizen is the second accredited certification body of the Global Legal Entity Identifier Foundation in the Mainland, promoting international cross-border digital identity.
Regtitude	Its trade finance and green finance platform uses blockchain and advanced Web3.0 technology to streamline the financing process. It aims to serve exporters, importers, financial institutions, the environmental, social and governance communities and regulators by seamlessly integrating with the smart port electronic system and financial institutions to enhance operational efficiency and facilitate data exchange.	Regtitude has won a number of FinTech-related awards, such as “Infrastructure Technology–Blockchain” and “Regulatory Technology–Regulatory Reporting” at the Hong Kong FinTech Development Awards 2023 organised by ETNet. In addition, the enterprise has also collaborated with various listed companies to explore online green finance solutions for decentralised physical infrastructure networks.

Company Name	Major Solution/ Service	Achievements/ Application Solution Outcomes
DeBox	Provides a convenient and decentralised social platform. Users can connect with others and post updates. Users are required to hold specific credentials to be granted access to specific groups.	The platform has more than 8.3 million users in more than 100 countries and regions, and has established more than 270 000 communities.
Digital Entertainment		
Animoca Brands	Through its subsidiaries such as The Sandbox, Animoca Brands develops and publishes a diverse range of products and content across gaming, education, entertainment.	The enterprise announced its unicorn status in 2021 and has been recognised by the Financial Times as one of the 2023 High Growth Company in the Asia-Pacific region. The Group is also an active supporter of Web3.0 companies, with a portfolio of over 450 related projects.
Artifact Labs	An innovative technology company incubated by South China Morning Post. Its proprietary platform, ARTEVAULT, provides a secure and efficient solution for museums, galleries, artists and intellectual property (“IP”) owners for digital assets and cultural IP in the age of artificial intelligence.	The company has partnered with a number of cultural organisations and institutions, including the National Gallery of Singapore, the Hong Kong Philharmonic Orchestra and the South China Morning Post. It also recently launched a proof-of-concept project with the Swiss National Museum.

Company Name	Major Solution/ Service	Achievements/ Application Solution Outcomes
TraditioNow	The platform provided by the enterprise promotes the sustainable development of the creators' economy, facilitates real-world transactions of IP rights and promotes local economic development. More than 10 IP rights-based assets have been issued, and it has worked with more than 30 domestic and international brands to increase the efficiency of monetising IP rights.	The partner network includes 61 top museums, hundreds of intangible cultural heritage experts and more than 150 globally renowned commercial brands such as P&G, Samsung, Tencent, Jingdong and Starbucks, etc. The platform has a user base of over 1 million.
Cybersecurity		
Slowmist	Offers a wide range of security services, as well as products such as anti-money laundering, vulnerability monitoring, and smart contract firewalls.	In the third quarter of 2024 alone, it assisted 16 victims in freezing approximately \$34 million across multiple platforms. The company's tracking expertise has been cited in a report by the United Nations Security Council.
CertiK	The company provides mainly Web3.0-related security services, including pre-launch audits, post-launch monitoring, and emergency response following security incidents.	Announced its acquisition of unicorn status in 2022. It is reportedly serving more than 4 700 enterprise customers, has uncovered nearly 70 000 code vulnerabilities, and has protected more than \$360 billion in digital assets from loss.

Company Name	Major Solution/ Service	Achievements/ Application Solution Outcomes
FinTech		
RD Technologies	The RD Wallet of RD Technologies, has obtained a Stored Value Payment Instrument licence from the Hong Kong Monetary Authority to enable businesses, including companies incorporated outside Hong Kong, to open accounts remotely using mobile applications.	Its subsidiary RD InnoTech Limited has been admitted to the Hong Kong Monetary Authority’s “Sandbox” of stable currency issuers. As one of the first entities to join the Sandbox, RD InnoTech Limited will test its Hong Kong Dollar stablecoin issuance in various application scenarios such as digital asset trading and cross-border trade payments.
Hashkey	HashKey is an end-to-end digital asset financial services group in Asia, with businesses covering digital assets and blockchain ecosystems, providing innovative investment opportunities and technology solutions to large corporate organisations, family offices, funds, professional and qualified investors. It has operations in Hong Kong, Singapore, Japan and Bermuda and other regions.	Licensed by SFC as a virtual asset trading platform in 2022 and successfully completed nearly US\$100 million Series A funding in 2024, acquiring unicorn status.
