Some questions about the Web3.0 story DM Chiu, 15/6/2023

If you live in Hong Kong, you cannot help but repeatedly hear about the Web3.0 story. Basically, Web3.0 is a term coined to represent the next generation of Internet and World Wide Web (WWW) which is referred to as Web2.0. But the major new applications supported by Web3.0 we keep hearing about are crypto currency, NFT, Metaverse, and any application Blockchain will bring about. Since Blockchain is not managed by one or few central authorities who may have conflict of interest with users, all the undesirable exploitation will disappear in Web3.0. At the risk of appearing short-sighted, I would like to question some of the claims of this narrative.

If we look at what so-called Web2.0 brought us, they helped enhance all kinds of *mainstream* activities we engage in: communicating with others, searching for and getting information whether textual or visual, consumer activities such as shopping, getting different kinds of services, digitizing all kind of services such as using digital currency, getting authenticated digitally, and so forth. Now let us consider some of the Web3.0 applications, are they as mainstream? Although I don't invest in any crypto currency, am not interested in any NFT, or indulge myself in various virtual worlds and games, I am not arguing these are things some people may be interested in. After all, besides working and consuming, we may all find something more virtual help bring happiness to our lives. But are these things mainstream? If not, why do you claim that is the next generation?

I have spent some time to learn about Blockchain a few years ago. It is indeed quite an ingenious technology, designed to support Bitcoin, a new kind of currency with finite quantities, and without central authority control. The gist is it tries to keep record of a history of events/transactions by a collection of workers unrelated to these records, hence guaranteeing no conflict of interest. These workers all perform some feat to prove themselves and gain the trust. Together, they also make the records kept reliably, since many copies are automatically maintained by them. Because of this elaborate mechanism, Blockchain is notoriously inefficient and wasteful of energy and money. But for Bitcoin, it can be argued that it is all justified, since else Bitcoin would lose its credibility and value. But how many other applications truly require such guarantees that Bitcoin does, to justify the costs? If not many, then how do you justify that Blockchain, or the decentralized nature of the mechanism (which incurs the costs), is at the core of the next generation?

Some idealists may argue that some kind of cryptocurrency (with disintermediation) can completely replace mainstream currencies today, thus all the complains about the way governments are controlling currencies today will go away. But a cryptocurrency replaced world will serious disrupt all kinds of regular government functions, such as taxation, regulating banks and markets, monitoring and making some control on the economy. Unless there is an alternative system that replaces all these functions we all depend on, I will never see this scenario happen. On the other hand, if Web3.0 is just about doing more Fintech, such as digitizing existing currencies and automating various transactions more, then it is already happening

today with Web2.0 technologies.

Finally, I observe that this Web3.0 story is hyped by mainly two forces: (1) the people in cryptocurrency or related industries, (2) the Hong Kong government. For the industrial people, cryptocurrencies and NFTs are their business and livelihood, so they naturally hope the Web3.0 story will help grow that kind of business in Hong Kong. For the government, the main goal is strengthening Hong Kong's position as a financial center, by allowing more variety of financial vehicles. I doubt anyone believes cryptocurrency trading and investment will be the mainstream. But if this is the case, why make all the hype about Web3.0? Why not call things as they are?