

Cryptocurrency: Fairy Tale or Future?

As crypto hype winds down, what can we learn? BY LIAM KAVANAGH AND SHAYNE KAVANAGH

he late 2022 FTX scandal seems like a plausible end to the era of blockchain mania, so 2023 is a good time to look back and ask ourselves, "What can we learn from crypto thus far?" After all, local governments will face increasing pressure to adopt new technologies, not just blockchain/cryptocurrency. Artificial intelligence and augmented reality/metaverse are two examples, and there are many others. Perhaps some will be useful or even revolutionary, but others may fall flat. The ups and downs of crypto/blockchain can provide guidance on how to navigate the stories (or hype) around these new technologies that promise great things for the public but also risk wasting considerable tax money if they don't work.

Six months ago, blockchain buzz had many asking whether something as life-changing as the World Wide Web was upon us. Some local governments were issuing cryptocurrencies, and speculation about governments going on the blockchain was bending our sense of reality. Now the story is "the cryptospeculative bubble has crashed," even though, as of this writing, prices were hovering near their peak in 2017—the first time crypto prices became an international news item. Predicting the future is tempting, but doing so ignores the lessons of crypto. In this article, we will examine some of the lessons from the crypto craze, which can be applied to navigating hype cycles generally and technology hype cycles in particular.

Economics is more about narrative than we would like to think

The prices of things have always been based on stories of value, but they can increasingly become decoupled from direct experiences of usefulness. There is rising "face plausibility" of stories heralding technological revolution, fear of missing out (FOMO) on being an "early adopter," and the growing difficulty of understanding the complex underlying technologies that are behind the hype. Because tech stories have such potential to take on a life of their own, betting on stories rather than value is tempting. These factors help explain why Robert Schiller—the esteemed economist who gave us the phrase "irrational exuberance"—has recently changed his focus to "narrative economics," advising economists to take stories seriously despite their "soft" and "subjective" feel.

RETHINKING REVENUE RETHINKING REVENUE AND CRYPTOCURRENCY

GFOA's Rethinking Revenue initiative (gfoa.org/rethinking-revenue) began an investigation into the potential of blockchain technologies in Summer 2022. We began with healthy skepticism, given that most new technologies do not live up to the initial expectations quickly, if ever. In addition, earlier that year, GFOA released an advisory cautioning governments to abstain from cryptocurrency. The late 2022/ early 2023 crypto crash seems to have borne out this skepticism. However, to the extent interest and excitement around the sector persists and technologies can recover their footing as better use cases are found, GFOA will continue to monitor the development of blockchain and cryptocurrencies and their implications for government finance.

However valuable or irrelevant Web3 (the collective term for crypto/ blockchain and related technologies) turns out to be, the appeal of blockchain stories until now has not been based on direct experience of using blockchain tech. Imagination and the amount of collective chatter or "buzz" play the stronger role. Buzz around Web3 rises and falls with the price of cryptocurrency—the main demonstration of blockchain technology's potential. In turn, cryptocurrencies' value rises and falls with the believability of the story that they can compete with and even replace money as we know it. It seemed like a crazy story at first, but as science fiction writer Arthur C. Clarke famously told us, "Sufficiently advanced technology is indistinguishable from magic." The limits of magic are impossible to see for those who are not wizards, which is why continuing technological advances will enable the narrative economy.

Technologists are not "the experts" on the system

Popular imagination often miscasts the information technology industry in the role of wizards who can tell us whether a new kind of "magic" can live up to rumors. Therefore, the early buzz that built around Bitcoin in Silicon Valley mattered more than the skepticism of the caretakers of traditional currency, such as former Federal Chairman Ben Bernanke. This is a mistake because Bitcoin had to outperform traditional money to become the future's money. The Federal Reserve and U.S. Treasury Department manage the money supply and interest rates with a complex staff of thousands, keeping the value of money stable. Fewer people truly understand this system than can explain a blockchain, which is comparatively simple. This dynamic of false simplicity replayed the 90s dot-com bubble, wherein technologists' opinions on the value of e-commerce were taken more seriously than experts in commerce of the traditional (i.e., boring) kind. Back then, ideas that brick-and-mortar grocery stores would be extinct by 2005 were taken seriously. Technologists

best understand the inner workings of technology but not whether potential users will find a high-tech solution preferable—or even workable.

Years ago, governments were hearing a lot of buzz among technologists about the potential of online analytical processing (OLAP) databases to become the silver bullet technology to automate the government budgeting process. Indeed, OLAP has impressive capabilities to view financial data from different perspectives; but as the experienced budget officer knows, there is more that goes into the complete system of budgeting than just data and the ability to view and manipulate it in various ways.

The hazards of magicians

The problem with magic is that it is not transparent. The more "magical" a technology appears, the harder it is for observers to judge what it can't do. Thus, qualified "magicians" can make extravagant claims about the power of their spells. In the case of Web3, the sometimes-gigantic financial windfalls associated with a few Web3 applications (cryptocurrencies, NFTs) contribute to the credibility of Web3 technologies in a more general sense. Hence, the technological claims of Web3 advocates are backed by stories of these windfalls. This kind of credibility, though, does not speak to the actual capability of the technologies to solve real-life problems. Thus, it is an untransparent source of credibility.

Using things is different from understanding things
When we use things easily, they feel simple and familiar. Money and grocery stores are both examples. We are conscious of the complicated circuits

inside a cell phone, but money works because of an array of institutions that are outside of us, largely invisible, but with intricate workings. A grocery store visit is a well-designed, stimulating experience, but because it is so predictable and familiar, we can easily assume that it is simple. We often say that we can tell a dependable service is good when we don't think about it or notice it (that is, it is predictable). If we don't think about products, we can easily miss their complexity.

In this way, stories of new technologies can compete against simplistic stories about old, dependable technology. In the case of "old money," the story is that the government "just prints money" and we exchange it, and grocery stores are just a place where people go to feed themselves. It is easy to imagine that replacing these things would be simple, given these simple stories. The lesson is that our stories about how the things we use in everyday work are often not reality, and so our efforts to replace them have surprising results.

Everything has an ideology Big social trends always have some underlying ideology, and Web3 is no exception. The ideology of Silicon Valley favors utopian ideas, particularly those that have a libertarian bent and are centered on information technology. These narratives about the future played an outsized role in creating an initial buzz around blockchain. The wider public was not fully aware of the reasons for this buzz, believing it represented an industry consensus around the technical capabilities of cryptocurrency. Rather, what it may have reflected was a story about what cryptocurrency was competing

In March 2022, GFOA approved an advisory that advises governments to abstain from accepting cryptocurrency for receivables, using cryptocurrency for payables, and investing in these products. More information is available at gfoa.org/materials/cryptocurrency-advisory.

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against—the flimsiness and arbitrary nature of fiat money "with no real backing." Fiat means "decree," but the government decrees are backed by state power—the ability to pass laws that are enforced by police, such as obligations to pay taxes in dollars. The lesson is to learn to speak about the ideology behind a story's appeal diplomatically and respectfully rather than avoiding ideology. GFOA's Perspectives Program (gfoa.org/perspectives) is one proven way to build this skill.

Some stories can endure longer than others

The continued believability of the Web3 story depends on whether the facts match the predictions it makes. The willingness of many to trade old money for the new money is, after all, an important metric of the blockchain story's believability. Rising cryptocurrency prices gave the appearance that blockchain was creating a new money, which, in turn, made stories about the transformative potential of blockchain technology across various domains plausible. The recent loss in the buzz around blockchain applications that have nothing to do with currency shows the role that high cryptocurrency prices played in Web3 narratives' credibility. A good example is NFTs (non-fungible tokens), which involved digital works of art that sold for thousands of dollars but now can only be sold for a fraction of their former price.

But we must pay attention to all predictions that a story makes to judge it. The most important metric for new currencies is whether people want to buy things with them. Blockchain applications for government applications have their own metrics. In these regards, the crypto story has failed to live up to the predictions it makes.

Another thing that crypto taught us about stories is that unclear stories have an unclear shelf life. Cryptocurrency's narrative might regain credibility and drive Web3 interest again because it offers no clear timeline for its adoption. Though only a few vendors have ever accepted it, crypto's story has only claimed that widespread acceptance will occur at an unspecified future tipping point, when it has been around long enough and worked out enough bugs to be trusted. This unclarity is what allowed it to survive one massive crash. The lesson is that we must look at the predictions that a story makes to know when the story might collapse. Unclear stories have an unclear shelf life.

There are no perfect analogies for new tech

As the Web3 buzz declines, it is tempting to conclude that analogies to the dotcom bubble were "the right story," but each technological story is unique. The dot-com analogy leads many to expect that blockchains will have a lengthy period of transition to significant but sensible uses. It is just as plausible that blockchain will have little use besides illegal/under-the-table transactions-or that after some adjustments, it will experience a revival. Cryptocurrencies could rise in price a third time, and then the story might take hold that crypto is here to stay. Blockchain shows us the difficulty of nailing down "the right narrative." Learning to interpret economic narratives and to sense how new developments may interact with them is an economic art that we will all continue to practice.

The takeaways for local government leaders

There are recurring questions that should be asked about new tech stories before taking heavy risks to be an early adopter.

- Are we depending completely (or almost completely) on technologists for information on how their technology works? More importantly, are we depending on technologists to tell us how their technology will interact with or outperform the old system (people, process, and/or technology) their technology is supposed to supplant? It is unlikely that technologists are experts in the old system.
- Do we understand the system that we're thinking about replacing, or are we just familiar with it? If we do not truly understand it, then we should talk to somebody who understands it. Just allowing yourself to be impressed by what you don't know may help you make a better decision.
- Are we trying to understand new technology through a simple analogy to something we do understand? If so, we are probably overconfident in our understanding.
- What claims does the story around new technology make? Are these claims stated in such a way that we will, at some point, be able to evaluate if they are true? If so, at what point do we expect to see evidence of these claims?
- What is making us take this new story seriously now? To what extent are "fashionable" ideas or ideologies pushing the technology forward? 🖪

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¹ Lori Perri, "What's new in digital government from the 2022 Gartner Hype Cycle, Gartner, November 17, 2022.