

UBIX

GLOBAL TRENDS

2030

UBIX Futuristic
Research

December 2023

Contents:

1. Introduction	2
1.1. Global Trends	3
1.2. Web3 Technologies	6
1.3. Looking Ahead: UBIX Network	8
2. Income and Savings	10
2.1. Rise of the "Precariat" Class	11
2.2. Digital Nomads	11
2.3. Growth in the Share of Crypto in Savings	12
2.4. Unconditional Basic Income (UBI)	13
3. Expenses and Payments	14
3.1. Ecosystems	15
3.2. Embedded Finance	16
3.3. Decrease in Cash	17
3.4. Cryptocurrencies	18
4. Human Privacy	20
4.1. Digital Identity	23
4.2. Personal Data Security	24
5. Public Policy	25
5.1. Grow of Social Inequality	26
5.2. Social Credit System	26
5.3. CBDC	27
6. Financial Services	29
7. Conclusion	34
References	37

1. Introduction

As we enter the new decade, it is crucial to acknowledge the rapid pace of change and innovation that awaits us in the transformative landscape of 2030. The world as we know it is undergoing a significant transformation as a result of technological advancements, shifting societal values, and the pressing need to address issues like inequality and climate change on a global scale. In this era of unprecedented disruption, it is essential for individuals, organizations, and governments to not only adapt but also embrace the opportunities that lie ahead.

The year 2030 marks the beginning of a new age where revolutionary technological advancements and shifting social and economic paradigms will transform our daily lives. Visions of a future where blockchain, decentralized finance (DeFi), robotics, and artificial intelligence (AI) reshape not just the nature of work and income distribution but also our relationship with and understanding of money. In this future, traditional banking systems and currencies may become obsolete. **UBIX Network** could be explored further as one of the ecosystems that enables this transformation.

Let's dive into specific global facets that will be impacted by this technological revolution.

1.1 Global Trends

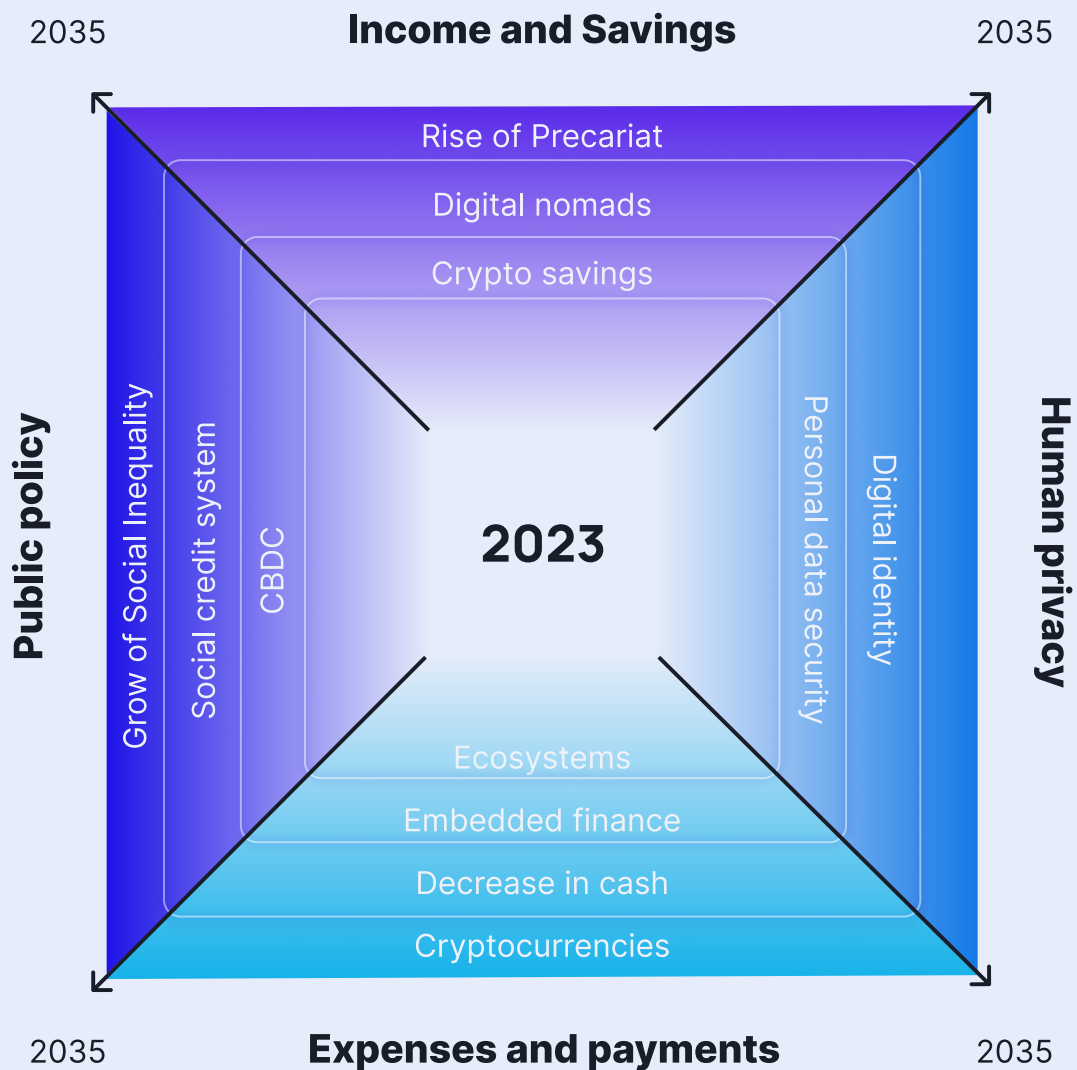


Figure 1.1. Global Trends Map. Source: "Financial Services 2030" by Frank RG

The world is changing quickly, so knowing what the trends for the next ten years are will be crucial if you don't want to be left behind.

A basic tenet of futurology is that humans tend to overestimate the rate of change while underestimating its overall scope.

In this figure, we have outlined the key trends that, in our opinion, will have a significant impact on individuals in the next 10 years:

- **Human privacy** is becoming an increasingly important topic as technology advances and personal data becomes more easily accessible. Users could explore how this issue will continue to evolve over the next decade and its implications for individuals.

- **Public policy** is another key trend that will greatly impact individuals in the coming years. Users could delve into how government regulations and policies regarding various aspects such as technology, healthcare, and social issues will shape our lives in the future.
- **Income and savings** are also a significant trend that individuals need to pay attention to. With the rise of automation and artificial intelligence, there is a growing concern about job displacement and the impact it will have on people's financial stability. Exploring strategies for adapting to these changes and ensuring long-term financial security could be a valuable topic to delve into.
- Automating **expenses and payments** will require new skills and financial management tactics. Additionally, the growing wealth gap and economic inequality will continue to shape our lives. Individuals and society should prioritize addressing these inequities and promoting fair access to resources and opportunities. Individuals must also understand the risks and benefits of digital currencies and online transactions.

The development of payment and financial services will be influenced by this comprehensive system of global trends and technologies by 2030.

Income and Savings

The imminent integration of robotics and AI is poised to instigate profound shifts in the labor market and income distribution. Sectors reliant on routine processes may witness a surge in unemployment as automation takes center stage. However, this digital disruption is not a tale of complete displacement; instead, it paints a picture of collaboration. A symbiotic dance between human creativity and the precision of AI is likely to unfold, prompting a rapid retraining of individuals for roles that demand uniquely human qualities.

In response to the increase in unemployment among unskilled workers, governments are contemplating the implementation of unconditional basic income. Blockchain technology facilitates this shift, with crypto assets anticipated to play a substantial role in people's savings.

Expenses and Payments

The rise of blockchain technology and the growing acceptance of cryptocurrencies fuel a metamorphosis in the financial sector concurrent with these labour market dynamics. Cryptographic tokens, including the novel concept of non-fungible tokens (NFTs), are poised to occupy a significant share of personal savings by 2030. As the populace embraces a more conscientious approach to savings facilitated by robotic assistants, blockchain technology becomes a linchpin, offering efficient, secure, and automated transactions.

As we delve into the future of financial transactions, UBIX Network emerges as a pivotal player, offering a suite of built-in services designed to enhance user experiences. The rise of ecosystems and hyper personalization becomes dominant trends, shaping financial offerings and making financial services an invisible yet integral part of people's lives.

Human Privacy

The increasing use of biometrics for both identification and payment purposes is the main topic. There is an intensive effort to address the rising need for safe and user-controlled digital identities. In line with the course of digital progress, ideas like Self-Sovereign Identity (SSI) provide consumers with agency over their own data.

For example, imagine a world where individuals no longer need to carry multiple identification cards or remember dozens of passwords. With the integration of biometrics into everyday devices such as smartphones and laptops, people can simply use their unique fingerprints or facial recognition to securely access their digital identities. This not only streamlines the authentication process but also empowers individuals to have control over their personal information, ensuring a higher level of privacy in an increasingly interconnected world.

Public Privacy

The goal is to build a sustainable ecosystem where production, smart infrastructure, and the internet come together. Society will evolve in response to social dynamics and the increasing responsibilities of younger generations. Central Bank Digital Currencies (CBDCs), social credit systems, and socioeconomic inequality all play important roles.

These factors necessitate the need for public privacy measures that protect individuals' personal data and information. While CBDCs offer convenience and financial inclusion, they must be designed with stringent privacy protocols to prevent potential abuses and surveillance. Combating socioeconomic inequality also requires a comprehensive approach, ensuring that data-driven policies and initiatives do not knowingly exacerbate disparities or compromise individuals' privacy rights.

1.2. Web3 Technologies

By 2030, there will be a transition to the internet of the Web 3.0 type. In addition to providing access to the global network, it will unify ecosystems, metaverses, and online platforms into a unified digital space built on blockchain, semantic networks, and machine learning. Web 3.0 will ensure seamlessness in processes and control over personal data for individuals.

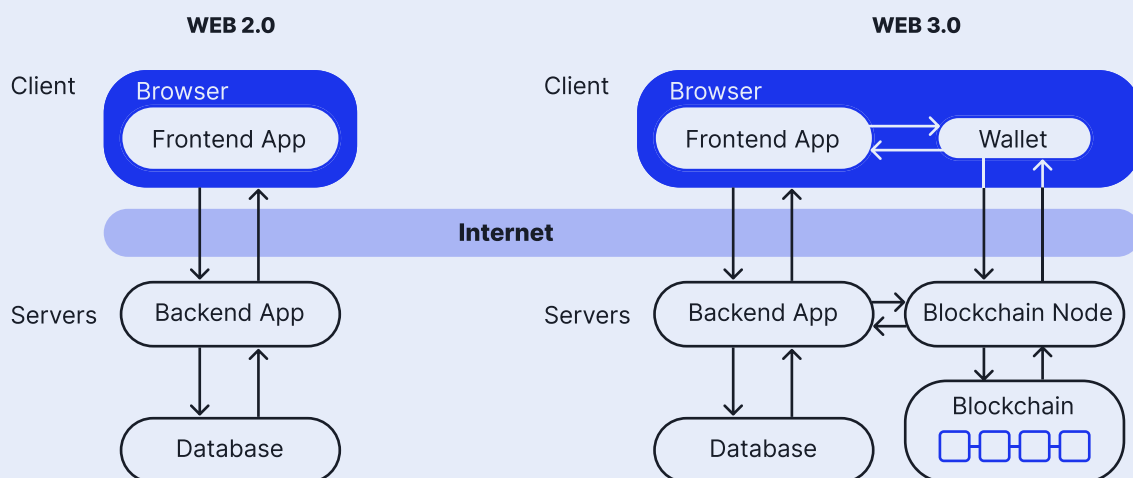


Figure 1.2. Comparison of a simple architecture of Web2 and Web3

Smart contracts

Smart contracts are simply programs stored on a blockchain that run when predetermined conditions are met. They can also be used to automate and enforce agreements between parties without the need for intermediaries, reducing costs and increasing efficiency. Additionally, they can enable the creation of decentralized applications (DApps) that provide various services, such as decentralized exchanges (DEX), prediction markets, and decentralized governance systems. These innovations have the potential to revolutionize industries and empower individuals by removing centralized control and increasing transparency in economic transactions.

Tokenization

Tokenization of everything will play a crucial role in this new era, allowing for the creation and exchange of digital assets that represent real-world value. This will revolutionize not only the financial industry but also various sectors such as art, gaming, and real estate, unlocking new opportunities for innovation and economic growth. This will enable individuals to have ownership and control over their financial assets, revolutionizing the way we interact with money and investments.

DeFi

Decentralized Finance (DeFi) includes financial instruments created on the blockchain. DeFi services offer alternatives to traditional banking services, such as peer-to-peer lending, token deposits, investments, liquidity provision, and more. DeFi services aim to enhance financial inclusivity and provide greater accessibility to financial services for individuals worldwide.

DAO

Smart contracts operating on the blockchain and programmable for the autonomous execution of specific actions enable the creation of new business models, such as Decentralized Autonomous Organizations (DAO). DAOs can be used for the collective management of common goods, including intangible artworks, natural resources, industrial production, and social processes. They offer a transparent and decentralized approach to governance and decision-making.

Metaverse

The metaverse is a network of virtual worlds focused on social interaction, where people and their avatars can interact with each other and digital objects using virtual, augmented, or mixed reality technologies. It is considered the next evolution of the internet and is accessible through various devices, such as phones, computers, and virtual reality devices. The metaverse is not limited to gamers or developers but is intended for everyone, with the goal of reaching a billion people in the next decade. It offers new ways to connect, share experiences, and engage in activities such as hanging out with friends, education, shopping, work, and gaming.

1.3. Looking Ahead: UBIX Network

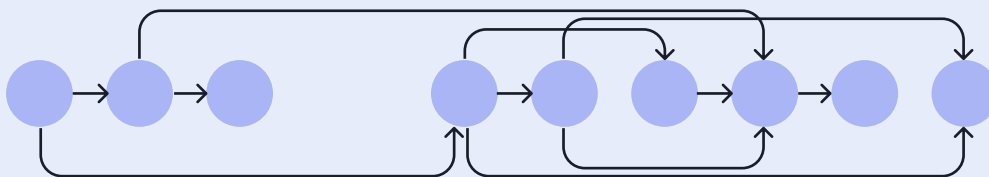


Figure 1.3. Directed Acyclic Graph (DAG) Structure

DAG

UBIX Network stands out by developing breakthrough solutions, connecting various blockchains within a single protocol and paving the way for a super application that integrates all services seamlessly. Directed Acyclic Graph (DAG) technology is the key enabler for such vision.

With DAG, UBIX Network can ensure that transactions can be conducted quickly and efficiently without the limitations of traditional blockchain technology. This enables UBIX Network to provide a smooth user experience where users can access a wide range of financial and convenient services. The protocol supports smart contracts (Java Script) and various types of tokens. With its robust infrastructure and scalable solutions, UBIX Network is empowering developers and businesses to build decentralized applications (dApps) that can revolutionize many of our industries. DApps are divided into numerous categories: exchanges, businesses, gambling, games, finance, development, storage, wallet, governance, property, identity, media, social, security, energy, insurance, health, etc. UBIX is bridging the gap between traditional and blockchain-based technologies, making it easier for organizations to adopt distributed ledger technology. This opens up endless possibilities for collaboration, efficiency, and transparency in the digital era.

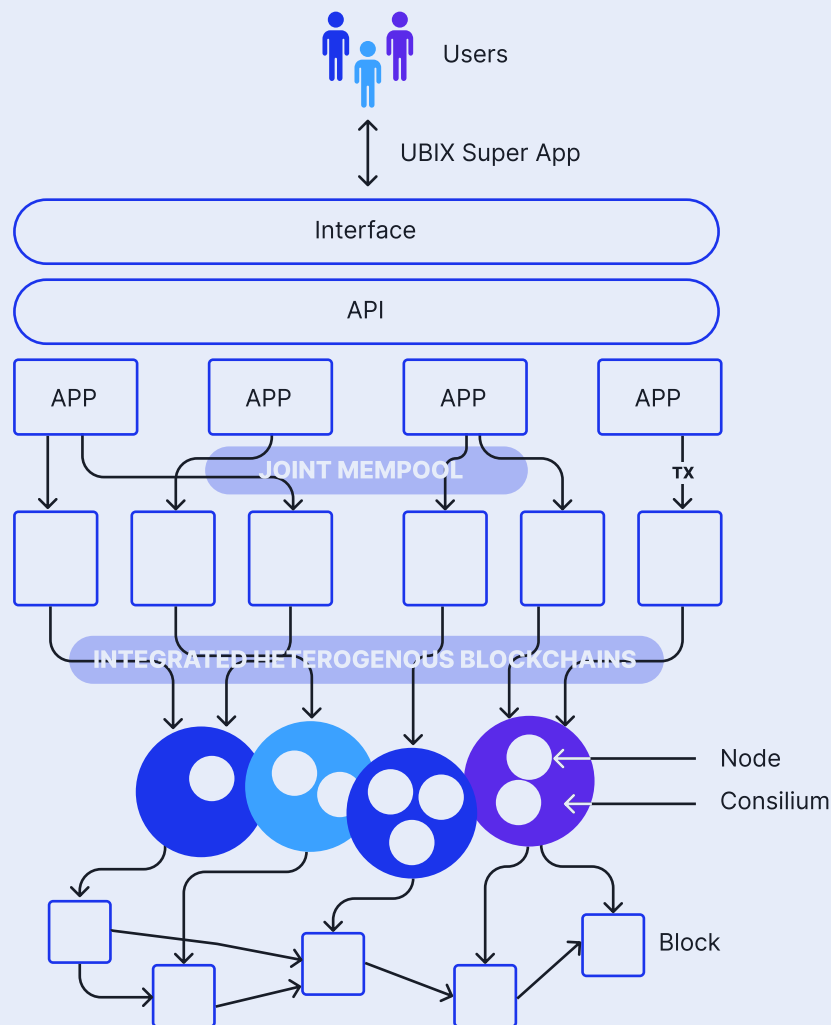


Figure 1.4. The general architecture of UBIX Network

2. Income and Savings

By 2030, robotics and AI will have a profound effect on the labor market and income structure. For example, unskilled sectors that involve routine processes may experience an increase in unemployment as these tasks become automated.

Conversely, certain individuals will retrain expeditiously for occupations that require greater creativity and "human-to-human" interaction, in which AI has not yet surpassed mankind.

It is important to note that complete automation is unlikely to happen, and instead, a hybrid scenario of human and AI collaboration is more probable.

The increase in unemployment among unskilled workers will push governments to implement an unconditional basic income.

In the past five years, the development of blockchain technology has led to explosive growth in cryptocurrencies and cryptographic tokens (NFTs). Crypto assets are anticipated to comprise a substantial proportion of the populace's savings by the year 2030. An increasing number of individuals will be engaged directly in the production process of said assets.

The populace's commitment to savings will become more conscientious as a result of the robotic assistants, which will enable people to plan their financial flows more easily and efficiently.

As part of this transformative area, UBIX Network aims to play a pivotal role in the integration of blockchain technology, contributing to the evolving financial ecosystem by providing efficient, secure, and automated transactions.

As blockchain technology continues to shape the future, UBIX Network stands out as a forward-thinking company, providing solutions that align with dynamic changes in the labor market, income structure, and the growing importance of crypto assets in the savings space.

2.1. Rise of the "Precariat" Class

CrowdFeeding

The Precariat is a class of socially undefined individuals lacking guaranteed employment. Examples include freelancers, bloggers, self-employed individuals, and others. The share of this class will grow for two reasons:

- The rise of the new Generation "Z" – young people not tied to a single job and highly valuing the balance between work and leisure;
- The development of the sharing economy and subscription model is a shift away from owning any property.

With the help of **CrowdFeeding**, several thousand people have already got the option to work part-time in conditions of flexible work hours.

Tokenize

4Tokens enables bloggers and influencers to issue tokens without the need for programmers, without writing a single line of code with immediate automatic listing on **UBIX.Exchange**.

2.2. Digital Nomads

Tax procedures and international border crossings will be simplified for workers who prefer remote employment, such as freelancers. Many states are introducing special tax and immigration regimes for digital nomads. Among them are: Estonia, Portugal, Thailand and Bali. The level of wage disparity between metropolises and provincial cities will be equalized due to the increase in people's mobility. The demand for online part-time work is rising significantly as a result of the Internet's expanding accessibility in highly populated countries in Asia and Africa.

CrowdFeeding

CrowdFeeding provides you with the ability to earn extra money anywhere in the world. You can work on tasks ranging from easy to hard, so it is suitable for people with different qualifications.

UbiStake

In the realm of improved working conditions and enhanced mobility, **UbiStake** introduces a unique distribution mechanism to simplify income and outcome calculations for businesses and individuals.

This innovative feature not only streamlines the financial aspect of remote work but also ensures that individuals receive fair and accurate compensation for their work.

2.3. Growth in the Share of Crypto in Savings

DeFi

The anticipated development of the cryptocurrency market is a further expansion of the proportion of personal savings allocated to cryptocurrencies. The increased transparency of regulations, advancements in decentralized finance (DeFi), adaptation of NFTs and the creation of user-friendly platforms all contribute to the increased accessibility and appeal of cryptocurrencies as a saving option on a global scale.

Cryptocurrencies have transitioned from being regarded as a peripheral element of the financial sector to becoming an integral part of the savings industry. They provide a dynamic and potentially lucrative substitute for conventional savings.

A blockchain-based financial system called Decentralized Finance (DeFi) promises to reproduce traditional financial services without intermediaries. DeFi will flourish as it continues to offer customers unparalleled access to financial services, including lending, borrowing, and trading, without geographical limits or centralized institutions. DeFi is predicted to become widespread due to DApp development, institutional interest, and blockchain technology improvements, transforming the financial environment with more inclusive and efficient financial solutions.

Ubixpay

NFT (non-fungible token) is a type of cryptographic token, each of which is unique and cannot be exchanged or replaced by another equivalent token. Essentially, it is a certificate of uniqueness that confirms the right to own a digital asset. In 2023, the NFT trend is not as valuable on the market, but by 2030, NFT and other crypto assets will account for a significant portion of people's savings. More and more people will be directly involved in the production of such assets.

UBIX Network introduced **Ubixpay**, a comprehensive crypto wallet that gives users a safe and simple solution to manage their digital assets.

UbiStake

UbiStake allows you to build a portfolio of various crypto assets. You can maintain the stability of the blockchain network by staking on shared masternodes by adding projects from the UBIX ecosystem to your portfolio.

The innovative concept of daily dividends allows you to keep your finger on the pulse and control the current status of supported projects in almost real time.

2.4. Unconditional Basic Income (UBI)

Technological advancement, automation, and the shift to the gig economy will drive the transition of states to the idea of an unconditional basic income. As a result, a significant portion of the population will lose employment, freeing up a considerable amount of leisure time for individuals.

UbiStake

In this evolving prospect, **UbiStake** emerges as an innovative platform that aligns with the concept of unconditional basic income. UbiStake connects users holding various UBIX Network tokens with PoS earning opportunities available through the UBIX Masternode, along with providing the ability to invest in crypto projects and get shares of the project's income together. So users can therefore enjoy automatic accrual of passive income by receiving airdrops, POS rewards, and dividend distribution on a daily basis.

As traditional financial structures undergo transformation, **UbiStake** offers an alternative option for individuals to capitalize on their financial resources. Users not only contribute to the UBIX Network's stability but also open up opportunities for earning money to go along with their free time. This innovative approach to generating income reflects the adaptability of UbiStake in the context of changing economic paradigms.

3. Expenses and Payments

The infrastructure surrounding people in 2030 will determine how they make payments or transfers. Financial services will be available in places where people can use them intuitively and without difficulty. The trend towards hyper personalization of offerings will become dominant. By 2030, financial services will be maximally digitized and become an invisible part of products and services. People will forget what it's like to have multiple accounts in different banks, search for ATMs to withdraw cash, and think about how to transfer money to the other end of the planet with minimal fees.

In shaping this seamless digital financial world, the **UBIX Network** takes a solid place by offering a suite of built-in services designed to elevate the user experience.

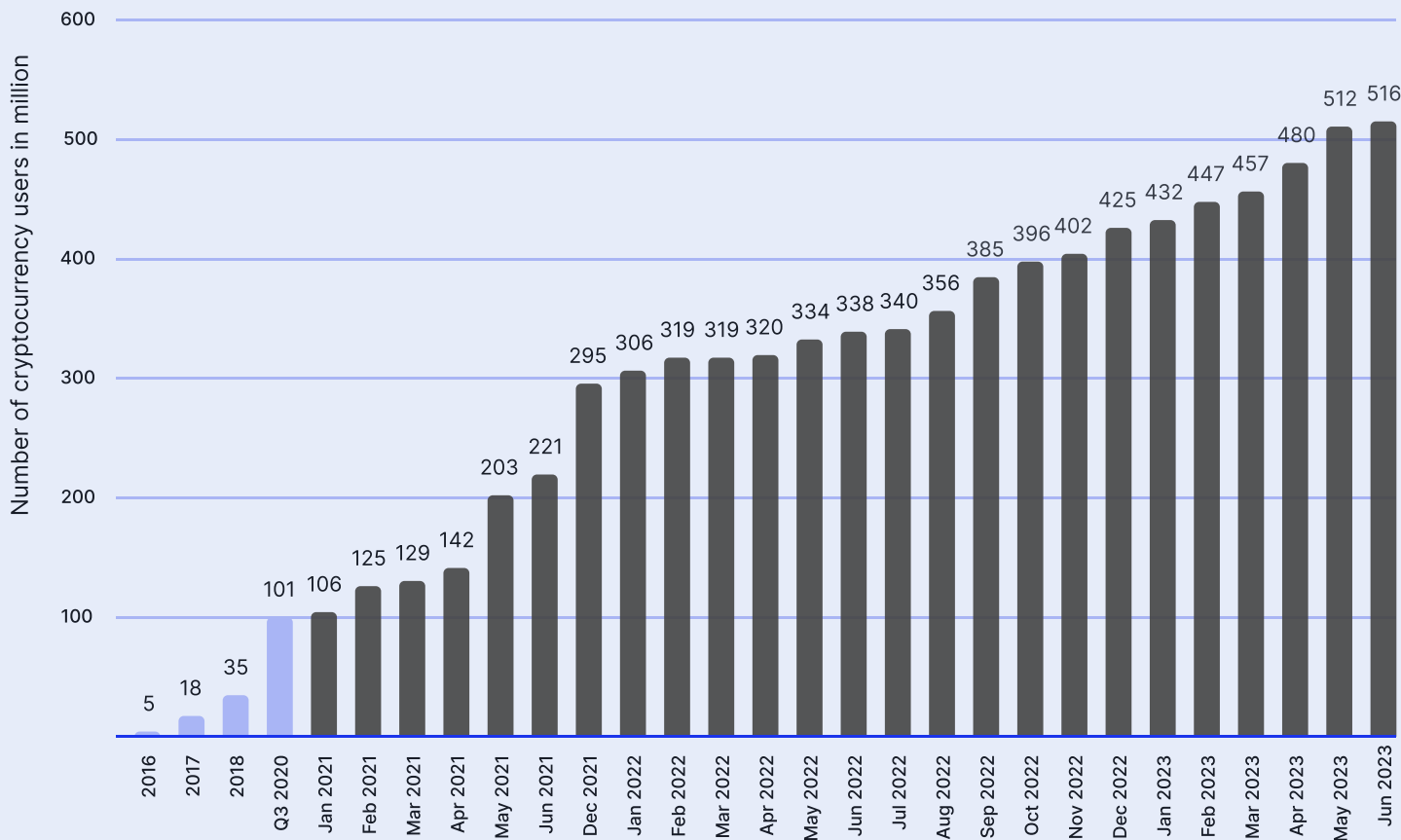


Figure 3.1. Number of identity-verified cryptoasset users from 2016 to June 2023 (in millions)

3.1. Ecosystems

Ecosystems will meet the maximum of customer needs, providing unique products and services ranging from communication to complex financial products. Offerings will be hyper personalized, as ecosystems will have a large amount of data for predictive analytics.

The competition of ecosystems breeds new characteristic - openness, seamlessness, ease of development, and promotion of products.

UBIX.Network

UBIX Network is developing several breakthrough solutions at once. Many different blockchains connected on the network level within a single protocol enable application integration via a common network without the use of gateways. Microservice architecture and general identification allow us to make the next evolutionary leap - moving from an ecosystem to a super application that integrates all services. A hybrid between VC and ICO, as well as the concept of daily dividends, allows you to develop internal services, which you can then market through the Crowdfunding platform.

3.2. Embedded Finance

The infrastructure surrounding people in 2030 will determine how they make payments or transfers. Financial services will be available in places where people can use them intuitively and without difficulty. The trend towards hyper personalization of offerings will become dominant. By 2030, financial services will be maximally digitized and become an invisible part of products and services. People will forget what it's like to have multiple accounts in different banks, search for ATMs to withdraw cash, and think about how to transfer money to the other end of the planet with minimal fees.

Transfer

Ubixpay is an innovative crypto wallet with decentralized identification that allows you to make transactions using accounts on social networks and instant messengers. In addition to identification, the wallet is integrated with financial services that enable not only the transfer but also the exchange, wrap, or stake crypto assets.

Stake

UbiStake provides users with a unique opportunity to earn and generate income passively by holding crypto assets, and in turn, companies distribute rewards correctly on a regular basis.

Tokenize

As part of the financial evolution, **4Tokens** emerged as a crucial component within the UBIX Network, offering a diverse range of issued tokens that align with the hyper-personalization trend. These tokens, which can be designed to cater to specific user needs, contribute to the maximally digitized financial services that will be available on the market.

Trade

UBIX Exchange, another integral part of the network, facilitates smooth and secure transactions, ensuring that users can seamlessly convert and manage their digital assets with minimal effort.

Notarize

Complementing the ecosystem, **Silent Notary** introduces an additional layer of security and transparency to transactions within the financial area as well. Silent Notary's capabilities in data verification and certification enhance the reliability of financial interactions, contributing to the overall trustworthiness of the network.

3.3. Decrease in Cash

By 2030, the share of cash in circulation will be minimized. Maintaining infrastructure for cash circulation is costly for governments compared to electronic money and digital currencies. Central banks in developed countries are already developing these concepts and plan to implement them within the next two to five years.

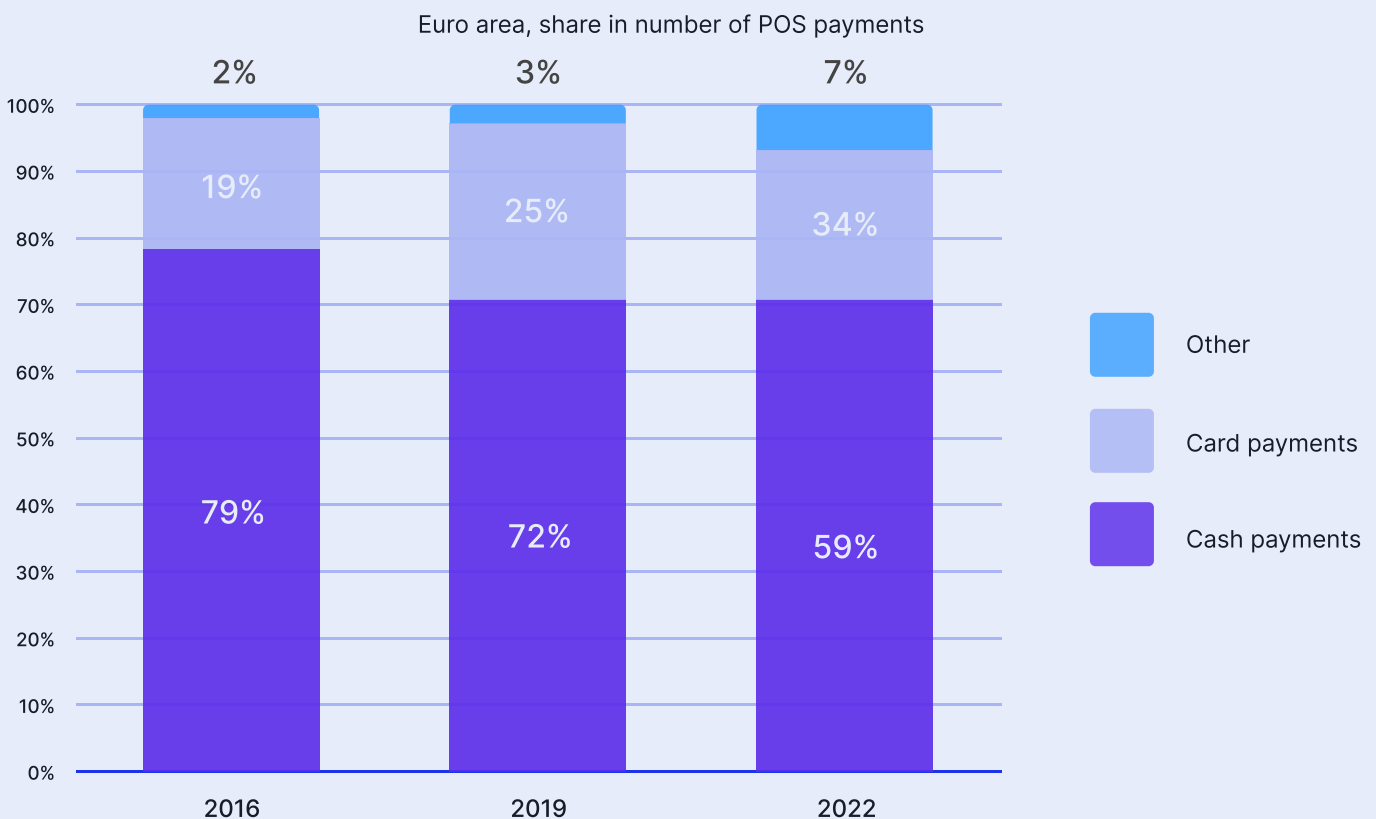


Figure 3.2. Cash payments stat Sources: ECB, Deutsche Bank Research

3.4. Cryptocurrencies

Source: Decentralized Storage Cryptocurrencies: An Innovative Network-Based Model for Identifying Effective Entities and Forecasting Future Price Trends, 2023

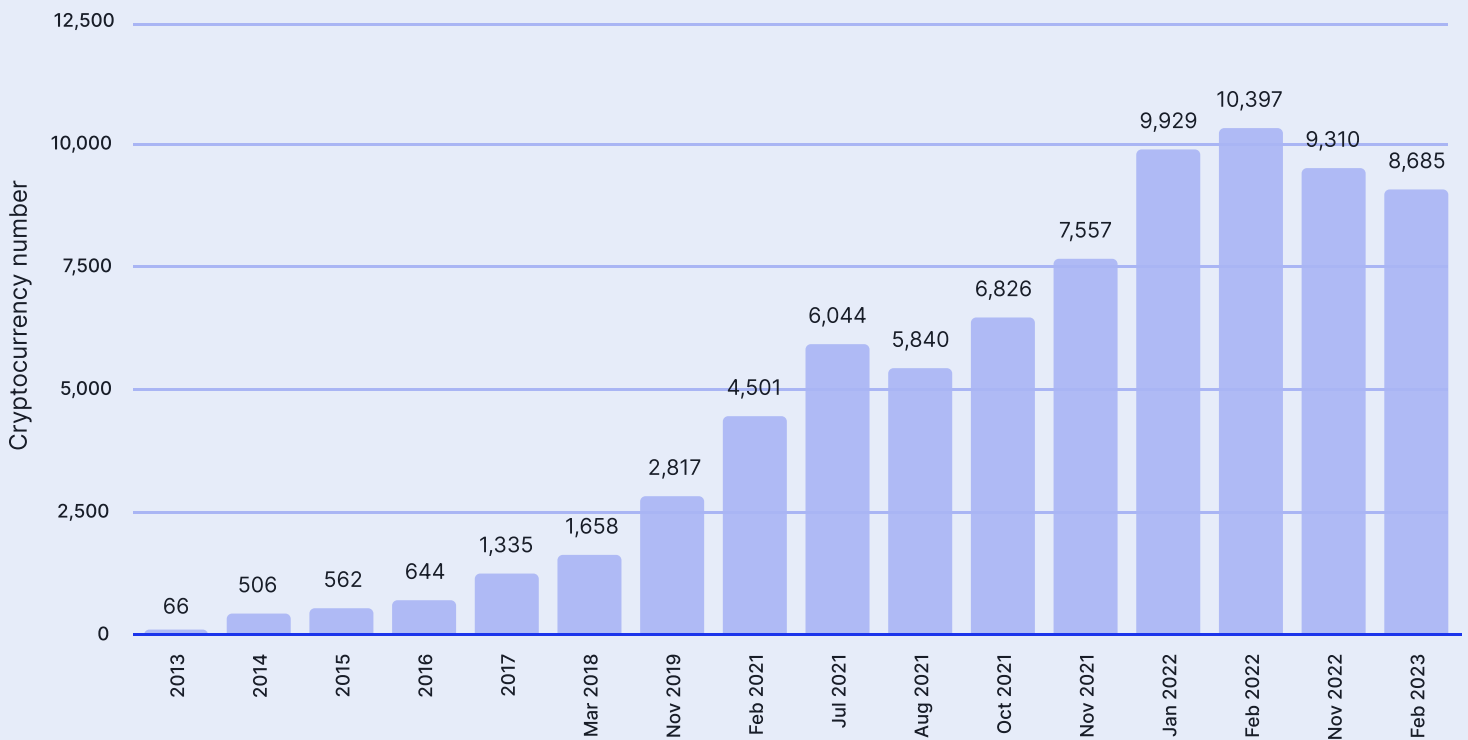


Figure 3.3. The number of cryptocurrencies worldwide from 2013 to February 2023

The cryptocurrency market is growing at explosive rates, exceeding 9,000 names today. Derivative financial instruments on cryptocurrencies are approved, and pension funds consider cryptocurrencies as a risk diversification. Despite some countries considering a complete ban on cryptocurrencies, they are gaining widespread use. Over the next 10 years, they will become an alternative form of asset for savings and payments.

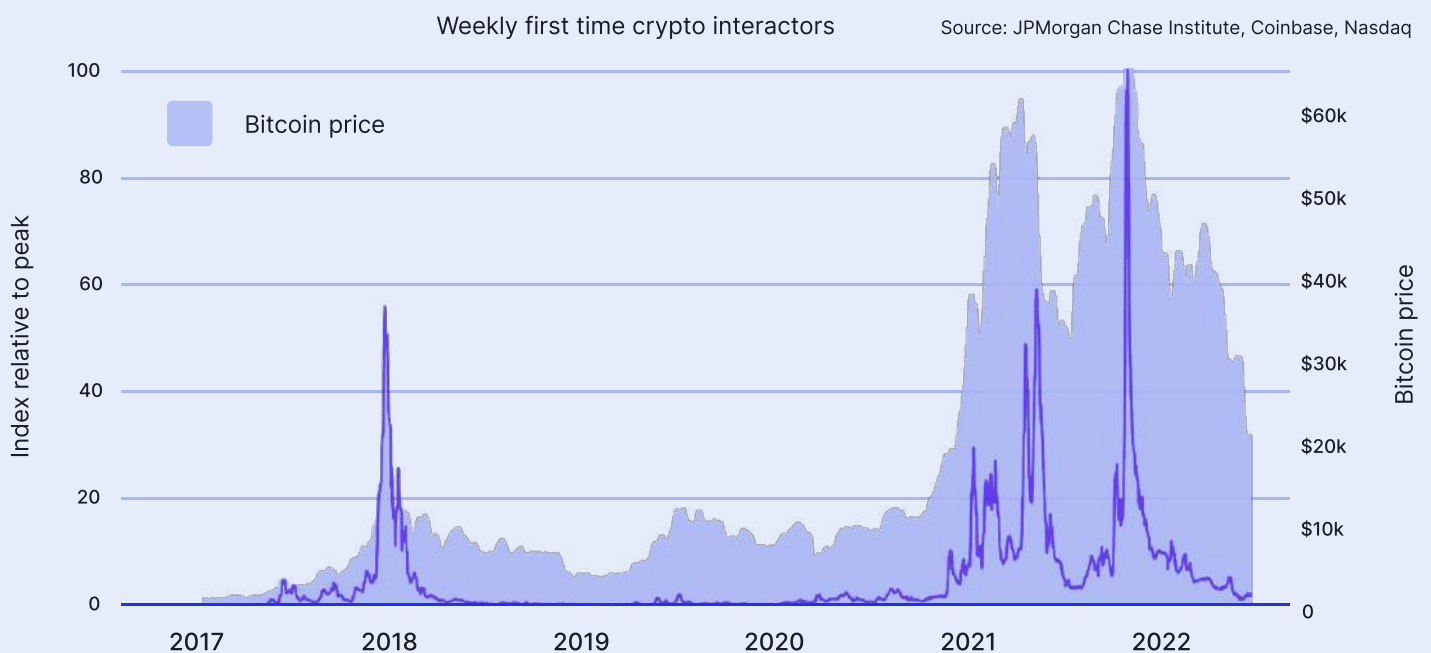


Figure 3.4. Weekly first time crypto users

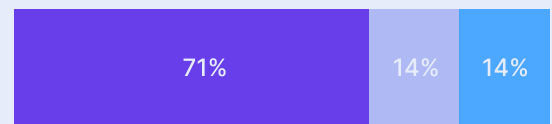
This growing acceptance and adoption of cryptocurrencies has prompted many companies and governments to explore the possibility of implementing their own digital currencies. Central banks are actively researching and developing their own central bank digital currencies (CBDCs), which could further revolutionize the financial industry. If successful, these CBDCs could be implemented within the next two to five years, providing a secure and efficient alternative to traditional forms of currency.

As technology continues to advance, it is expected that cryptocurrencies will become more widely accepted and integrated into everyday financial transactions. In these circumstances, it is very important to develop technologies that enable you to quickly create new seamless services that are fundamentally integrated with one another, which is the main concept for the development of the UBIX ecosystem.

Cryptocurrencies will receive broad, but not yet mass adoption in the next 10 years

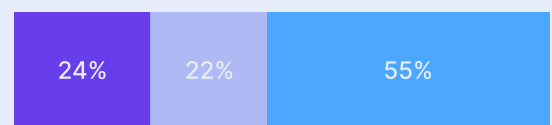
Expert opinion **Yes | I'm not sure | No**

Is there a future for cryptocurrencies as digital assets? (Percentage of respondents)



Will cryptocurrencies become a standard means of payment? (Percentage of respondents)

Opinion of those surveyed



According to "Financial Services 2030" Research by Frank RG

Consensus forecast: cryptocurrencies will receive broad, but not yet mass adoption as an accumulation instrument. Experts and respondents do not believe in cryptocurrencies as a full-fledged means of payments and transfers.

According to Deutsche Bank's assessment, in this decade, cryptocurrencies will undergo mass adoption, ceasing to be just a complement to existing monetary units and eventually turning into the "cash of the 21st century."

The majority of experts (71%) believe that cryptocurrencies as a class of assets will carve out their niche in the financial market. However, their use as an official payment means in certain countries are unlikely - most countries will not cede their monopoly on monetary issuance. The survey results (55% of responses were negative) support this viewpoint.

Cryptocurrencies will have a separate story because there will obviously be resistance from regulators. They will likely never grow rapidly enough. I don't think they will replace money, or this process will be greatly prolonged.

The world of cryptocurrency, as it looks today, will transform into something else. The virtual money will remain. The entire financial sector will find its role there.

“Cryptocurrencies will have a separate story because there will obviously be resistance from regulators. They will likely never grow rapidly enough. I don't think they will replace money, or this process will be greatly prolonged.”

“The world of cryptocurrency, as it looks today, will transform into something else. The virtual money will remain. The entire financial sector will find its role there.”

According to “Financial Services 2030” Research by Frank RG

4. Human Privacy

Technology has had a significant impact on human privacy. It has increased the threats to privacy rights, including surveillance, data breaches, and lack of transparency regarding the extent of these breaches. Companies that store data may also avoid taking responsibility for protecting individuals' privacy.

As billions of smartphones, laptops, cameras, and other devices collect data and analyze it using increasingly powerful and sophisticated software, users of that data are able to build more accurate profiles of individuals that can be monetized, used to track and predict movements and purchases, or ultimately used to manipulate the individual. AI is a major force behind a lot of the privacy-sensitive data analysis, such as search algorithms, recommendation engines, and advertising software. While existing consumer privacy and consent laws restrict access to some information, AI-powered analysis can still create highly accurate behavior predictions based on existing publicly available data. As AI improves, it magnifies the ability to exploit personal

information in ways that can intrude on privacy rights and other human rights by raising the analysis of personal information to new levels of sophistication and potential harm.

Recent increases in security breaches and digital surveillance highlight the need for improved privacy and security, particularly over users' personal data. Advances in cybersecurity and new legislation promise to improve data protection. Blockchain and distributed ledger technologies provide novel opportunities for protecting user data through decentralized identity and other privacy mechanisms. These systems can allow users greater sovereignty through tools that enable them to own and control their own data. Artificial intelligence provides further possibilities for enhancing system and user security, enriching data sets, and supporting improved analytical models.

Human privacy is a key concern when it comes to cryptocurrencies. With the use of blockchain technology, transactions can be conducted anonymously, protecting users' personal information and financial data. This enhanced privacy feature is attracting more individuals to adopt cryptocurrencies as a means of conducting secure and confidential transactions.



Figure 4.1. Elements of DIDs

Biometrics will become the main method of identification and payments by 2030

Will biometric technologies be the basis of identification by 2030?

Expert opinion **Yes | I'm not sure | No**



Opinion of those surveyed



According to "Financial Services 2030" Research by Frank RG

Consensus forecast: biometrics will become the main method of identification and payments for the customer by 2030.

The majority of experts (57%) believe that biometric technologies will become the primary means of identification in the next 10 years.

Among the advantages of biometrics are convenience and uniqueness of data, among the disadvantages are the security of collected data and expensive infrastructure. The latter problem will gradually be solved with the development of technologies and the reduction in the cost of sensors and cameras.

Among the alternatives to biometrics as a method of identification, experts mention wearable devices, unique tokens, or QR codes. Some experts allow for the use of invasive chips.

"Biometrics is one of the next steps in the interface, when I am - my own interface. Biometrics is one of the methods which, on the one hand, is even safer because it is easier to steal a card than a face or voice. But on the other hand, there will be a certain barrier - people always have difficulty adapting to new technologies."

"It seems to me that biometrics is such a generational story. Zoomers don't see anything scary in biometrics."

According to "Financial Services 2030" Research by Frank RG

4.1. Digital Identity

Source: DNS-IdM: A Blockchain Identity Management System to Secure Personal Data Sharing in a Network, 2019

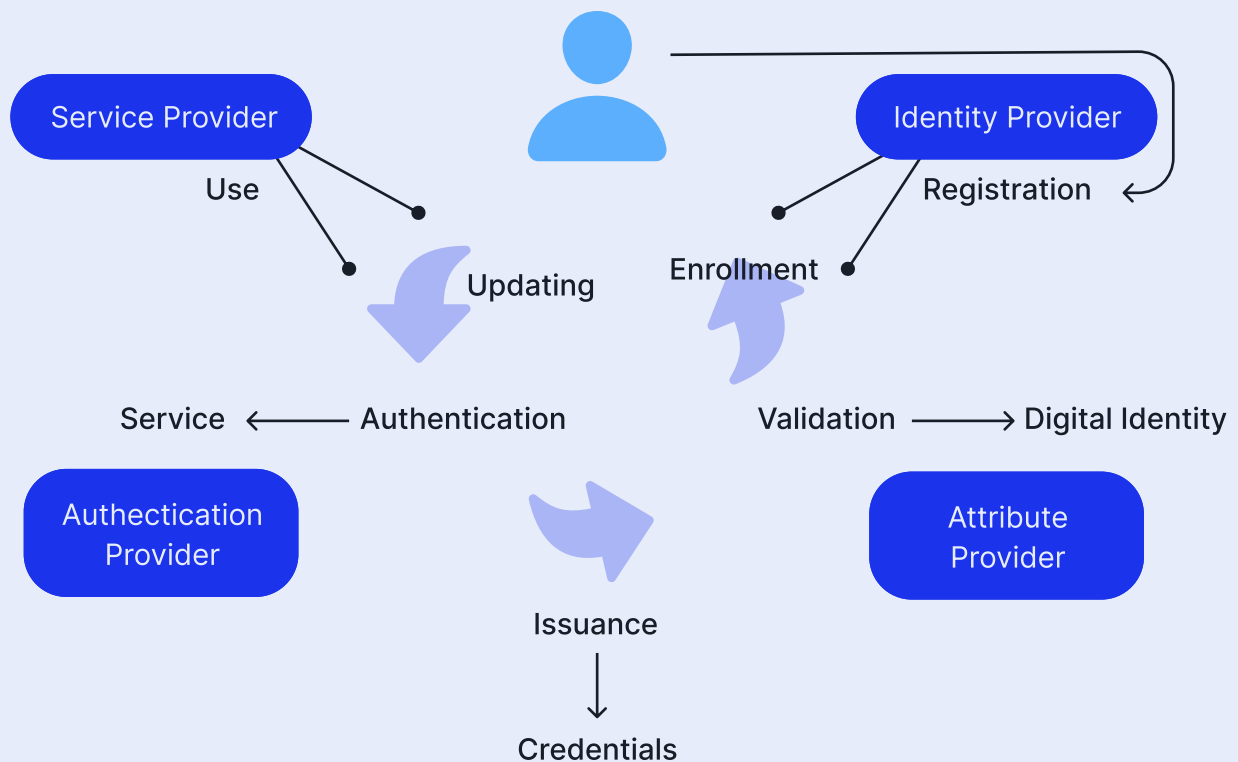


Figure 4.2. Digital identity life cycle and key roles

DIDs

By 2030, a significant portion of an individual's life will shift into the digital realm through ecosystems and metaverses. People will create digital avatars to identify and express themselves in the virtual environment. These avatars can be customized according to the owner's preferences. The emergence of cryptocurrencies gave a strong impetus to the development of cryptography, which made it possible to create new user identification technologies. Thanks to this, the user can now not only manage his own crypto assets but also manage all public data according to the owner's preferences.

Ubixpay

Amid this digital evolution, Ubixpay, as part of the broader UBIX Network, is already addressing the emerging need for secure and user-controlled digital identities. Today, Ubixpay already empowers users by providing the ability to set Decentralized Identifiers (DIDs) by linking social identifiers to their wallets. This enables the creation of a new class of services related to instant payment through various social networks and messengers, without the need to use payment gateways and disclose payment details.

Additionally, the development of decentralized identity solutions may offer individuals greater control over their identities, ensuring that they remain in charge of their personal data in the virtual world.

4.2. Personal Data Security

As people spend more time in the digital environment, they leave a larger digital footprint. Companies that own ecosystems and metaverses, along with governments, will accumulate an increasing volume of personal data. While this data will be utilized to enhance customer experiences and develop hyper-personalized offerings, the issues of personal data security and digital ethics will become more prominent. Many customers are already seeking full control over their data and its transmission to third-party applications and services. Software developers are aware of this trend, with companies like Apple serving as examples.

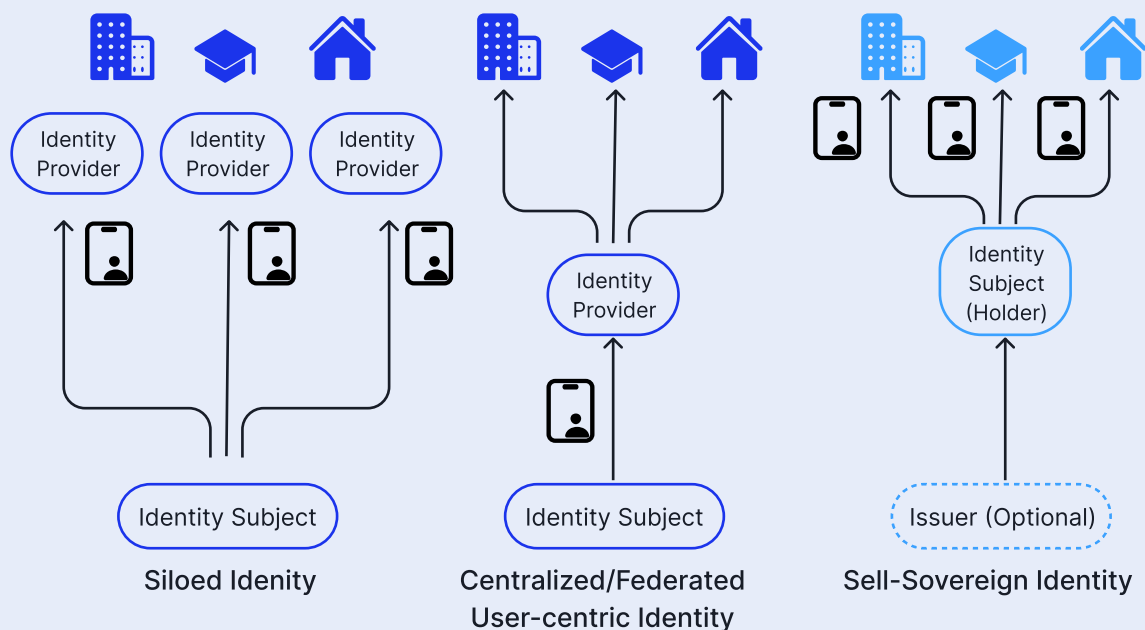


Figure 4.3. Digital Identity Paradigms

Source: A Tutorial on the Interoperability of Self-sovereign Identities

SSI

SSI stands for Self-Sovereign Identity, which is a concept that puts individuals in control of their own digital identities. With SSI, users have the ability to manage and control their personal data, deciding who has access to it and how it is used. This not only enhances privacy and security but also gives individuals the freedom to choose which services they want to engage with based on their preferences. Ubixpay's integration of DIDs is a step towards enabling SSI, allowing users to maintain ownership and control over their identity while enjoying the convenience of instant payments across social networks and messengers.

5. Public Policy

The state will combine production, a "smart" infrastructure, and the digital world into a single environmentally friendly ecosystem built around the people. This will lay the groundwork for the population's and the economy's overall efficient development.

Source: <https://appinventiv.com/blog/role-of-blockchain-in-government/>

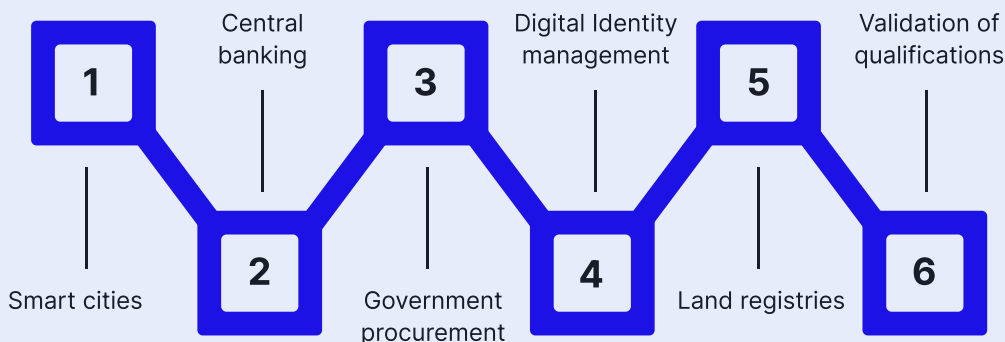


Figure 4.3. Blockchain use cases in government and public sectors

The way society develops will be greatly influenced by social dynamics, wherein younger generations will bear more and more responsibility for older ones. There will continue to be a rise in population inequality. Governments will begin to put social credit systems into place.

5.1. Grow of Social Inequality

The development of subscription services with exclusive paid options would lead to a rise in social and economic inequality in society because of biohacking and costly medical technologies. Owning things rather than using them and living offline will become privileges and attributes of high-income individuals. Lower socioeconomic levels will be more involved in the sharing economy and virtual world. Effective tax regulation will become a key aspect of combating social inequality.

UBIX Network aims to address these issues by providing a decentralized platform that enables equal access to digital services and resources. By leveraging blockchain technology, UBIX Network ensures transparency and fairness in transactions, reducing the potential for economic disparities. Additionally, the platform encourages collaboration and community-building, fostering a sense of inclusivity and shared prosperity among its users.

5.2. Social Credit System

Social Credit System is another initiative that aims to address social inequality. It is a government-led program in China that assigns a score to individuals based on their behavior and activities. This system aims to promote trustworthiness and discourage dishonesty, ultimately creating a more harmonious society. However, concerns have been raised about the potential for abuse and invasion of privacy within this system. Therefore, it is crucial to strike a balance between effective regulation and protecting individual rights in order to combat social inequality effectively.

UBIX Network is a decentralized platform that could potentially be used to address the concerns surrounding the Credit System in China. By utilizing DAG, UBIX Network can provide transparency and accountability, ensuring that individuals' scores are calculated fairly and securely. Additionally, UBIX Network can also empower individuals by giving them control over their own data, thus protecting their privacy rights while still promoting trustworthiness and social equality.

5.3. CBDC

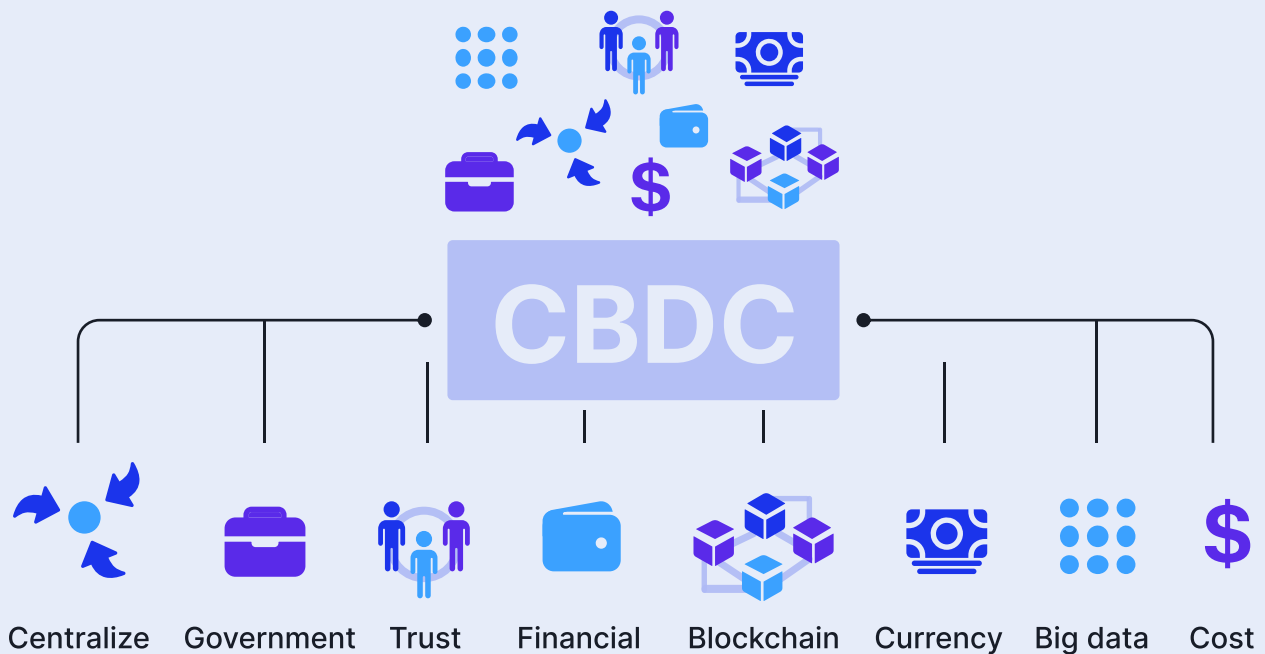


Figure 5.2. - Central bank digital currency connections

As the name suggests, central bank digital currencies (CBDCs) are a form of digital currency issued by a nation's central bank, but that name may lead some astray because although CBDCs have an electronic form, they are somewhat dissimilar to more widely known digital assets such as cryptocurrencies and stablecoins, and CBDCs are in fact not unlike digitized versions of the coins and notes that grease the wheels of daily economic life. Many central banks now hope that CBDCs will provide a comprehensive solution to the needs of digital consumers since their use would sidestep the requirement to change physical cash into a digital equivalent. For central banks, CBDCs also offer the advantage of extending the points of contact between the central bank and the general population and of reducing the costs associated with supplying money to the economy.

CBDCs may be categorized according to a variety of criteria, including what type of transactions they facilitate, the extent of private sector participation in the management or use of the CBDC, whether they pay interest, and the technological base on which they are built or that is deployed at each stage of their use. With regard to the type of transactions that they target, CBDCs can be split between wholesale CBDCs, which are used in transactions between central and commercial banks or financial institutions, and retail CBDCs, which may be used for the small-scale transactions that occur between, on the one hand, central banks or providers of financial services and, on the other, individual consumers.

Central banks of many countries have actively begun the practical use of digital currencies. This trend will result in direct user control of their assets and the exclusion of unnecessary intermediaries. This will lead to the explosive growth of new financial services that allow for more efficient use of digital assets.

CDR

The Crypto Depository Receipts (CDR) service will interact with CBDC by issuing corresponding cryptographic receipts, connecting ecosystem services with a new growing market. All UBIX Ecosystem services, such as Ubixpay, UbiStake, UBIX Exchange, will be available to new users immediately through a single super app.

Central banks in the next 10 years will widely launch national digital currencies

According to the results of a survey by the Bank for International Settlements (BIS), in which 65 central banks participated, only 14% of them are not conducting research in the field of national digital currencies.

Experts note that the arrival of digital currency can greatly affect the liquidity of the banking system and deprive large banks of one of their main advantages for the client - reliability. When all funds are stored in accounts at the Central Bank, the client is no longer concerned about the safety of funds in the bank.

According to "Financial Services 2030" Research by Frank RG

6. Financial Services

Source: "Financial Services 2030" Research by Frank RG

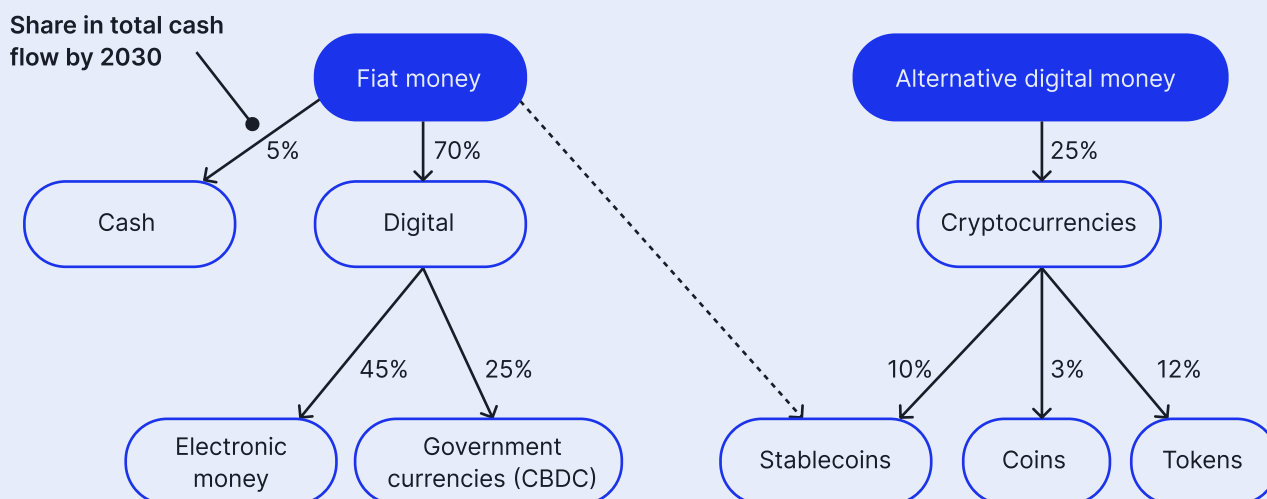


Figure 6.1. Forms of money by 2030

In the future digital world, financial assets, along with individuals, governments, and businesses, will need to adapt to changes in the surrounding environment. Digital currencies will prevail over fiat money, which has government security guarantees. In addition to electronic money in our bank accounts, digital sovereign currencies will join the scene. They will be accepted alongside cash and electronic means of payment.

In some developed economies, like Sweden and Norway, the share of transactions conducted using cash has already fallen below 5%. By 2030, other economies will approach this figure. Digital fiat currencies will continue to dominate the overall monetary circulation, with an increased share attributed to government-issued digital currencies (25% of the total monetary circulation). Cryptocurrencies, despite government regulation, are expected to play a significant role in payment transactions, especially in the digital environment (25%). Cryptocurrencies are categorized into:

- Coins: cryptocurrencies with their own blockchain (e.g., Eth, Bitcoin).
- Stablecoins: tokens whose value is pegged to fiat currency or another type of asset. Unlike other cryptocurrencies, stablecoins are backed by real assets such as dollars, gold, etc (e.g., USD Coin, USD Tether).
- Tokens: cryptocurrencies that do not have their own blockchain but are built on another blockchain (e.g., MANA – the currency of the Decentraland platform on the Ethereum blockchain).

6. Financial Services

Source: "Financial Services 2030" Research by Frank RG

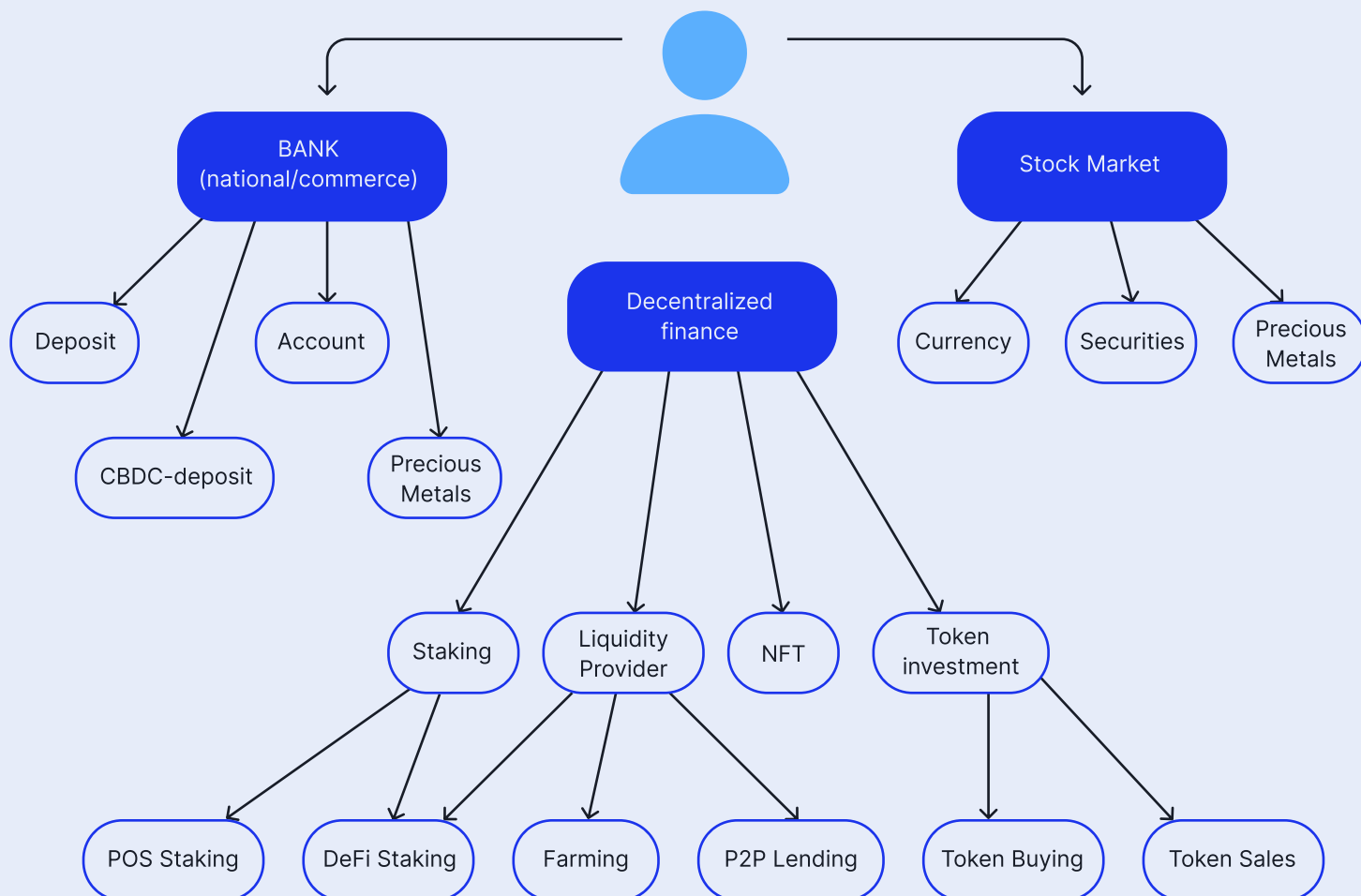


Figure 6.2. Types of savings and investments by 2030

With the development of distributed ledgers, blockchain protocols, and AI, new types of financial products will emerge by 2030. In addition to traditional bank deposits, Central Bank Digital Currency (CBDC) deposits will be introduced, encouraging citizens to store their digital currency in accounts with commercial banks or central banks rather than electronic wallets. Investing will become accessible to the masses through robo-advising, where individuals choose the level of interest and risk, and a robot executes all subsequent trading operations on their behalf.

Decentralized finance (DeFi) will provide access to new products by eliminating centralized intermediaries in financial operations. For instance, in peer-to-peer lending, one person can lend money to another at an algorithmically determined interest rate. Another tool is liquidity provision, a feature typically available only to market makers, investment

funds, or banks in the traditional stock market. In the DeFi space, any market participant can act as a market maker by providing tokens for decentralized exchange operations, earning a percentage of the commission paid in the same tokens. This process is known as DeFi staking. Farming is a similar process, but interest payments are made in other tokens, often the exchange's native tokens.

Token sales, equivalent to IPOs in the stock market but using tokens instead of stocks, are another investment tool. In 2017, the ICO (Initial Coin Offering) format was popular, where the company independently conducted the initial sale of coins. However, its popularity waned due to the lack of transparency and guarantees. Currently, popular token sale formats include IEO (Initial Exchange Offering), IDO (Initial DEX Offering), and SHO (Strong Holder Offering). In an IEO, a centralized cryptocurrency exchange acts as an intermediary and guarantor, while in an IDO, a decentralized exchange performs these roles. SHO is a format that, under certain conditions, creates secure conditions for both companies and investors during placement. In the DeFi world, there are other token sale formats, but they are more specific.

Source: "Financial Services 2030"
Research by Frank RG

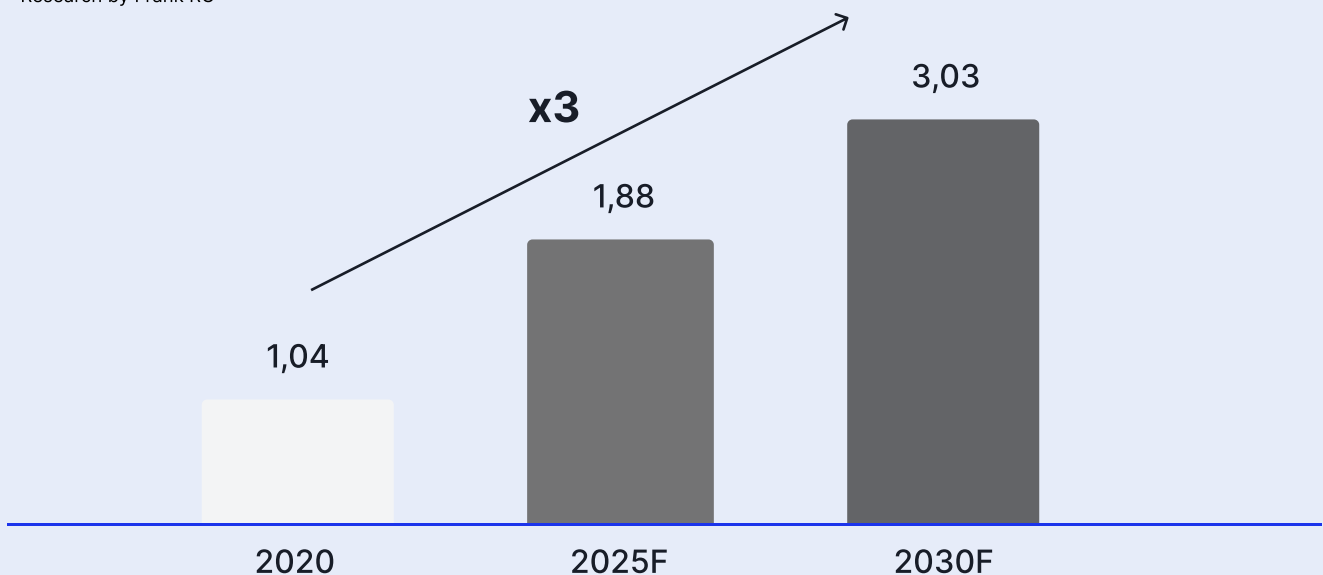


Figure 6.3. - Number of non-cash transactions in the world, trillion

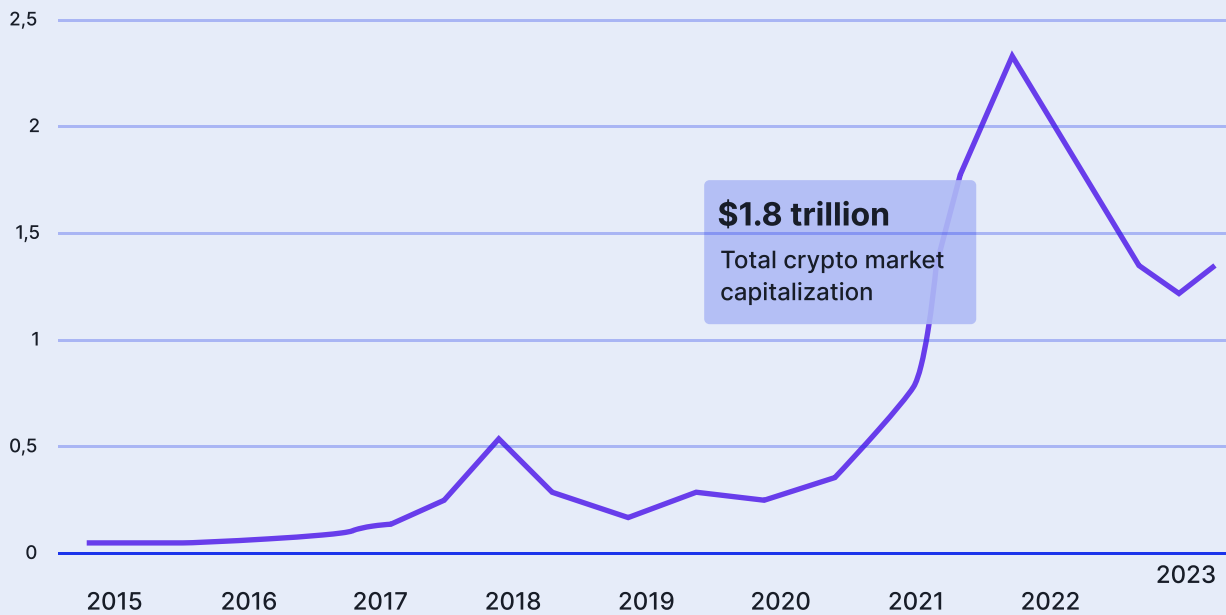


Figure 6.4. Cryptocurrency market capitalization, trillion

According to PwC's forecast, by 2030, the number of cashless transactions will triple. With the increasing penetration of the internet and smartphones, and as people gradually immerse themselves in the digital environment, the share of cash transactions will decrease to a minimum by 2030. In some developed economies, such as Sweden and Norway, the share of payments made using cash has already dropped below 5%. In addition to the global shift to online banking, the pressure on cash circulation will be further impacted by the introduction of Central Bank Digital Currencies (CBDC) by central banks in the next five years.

According to a survey by the Bank for International Settlements (BIS), in which 65 central banks participated, only 14% of them are not conducting research on national cryptocurrencies. Of the 86% who responded positively, 26% reported conducting research, 60% are experimenting with CBDC systems, and 14% have already begun pilot testing. The introduction of CBDC will simplify the storage of financial assets for the customer,

reducing the importance of the bank's reliability factor. Whether digital funds are stored in commercial banks or central bank accounts, they will be guaranteed by the central bank. With certain mechanisms for implementing digital currencies, commercial banks will experience a significant outflow of customer funds, forcing them to find new business models.

Positive Effects:

- Simplified storage of financial assets.
- Reduction of fraudulent operations through cash.
- Lower costs for international payments and transfers.
- Emergence of new financial instruments based on digital currencies.

Negative Effects:

- Reduced level of anonymity, increased control over financial transactions.
- Negative impact of national digital currencies on the development of decentralized cryptocurrencies.

Uncertain Effects:

- Influence on the global financial system.

Cryptocurrencies as a Payment Method and a New Asset Class

From their inception in 2008 until the present, cryptocurrencies have undergone several stages of development: from currencies used for shadow operations and fraud to large international projects valued in tens of billions of dollars. A financial infrastructure is being built on blockchain and cryptocurrencies, allowing users to earn through playing games (play-to-earn) or learning (learn-to-earn). NFT tokens enable the creation and sale of digital content, such as music, videos, drawings, and paintings, as well as the transfer of intellectual property rights.

Cryptocurrencies have created a new segment of the digital economy, but their future prospects depend on government regulation. According to Deutsche Bank's forecast compilation until 2030, cryptocurrencies are expected to gain broad but not yet mass adoption as payment and transfer instruments in countries where regulators do not set stringent barriers in their path. The positions of interdepartmental bodies in Russia, the second-largest country in the world by mining volumes,

regarding cryptocurrency regulation are unclear. The Central Bank recommends prohibiting their use within the country, while the Ministry of Finance advocates regulation.

Cryptocurrencies can coexist with the traditional financial system and government-issued digital currencies. Among cryptocurrencies, stablecoins stand out as tokens whose value is tied to the value of fiat money or goods (e.g., the US dollar). They serve as a bridge between the traditional financial system and cryptocurrencies. In the future, stablecoins could become the main currency on the internet, as they are more understandable and easier to regulate from the government's perspective.

Positive Effects:

- New user experience and opportunities for self-realization.
- Low fees, high speed, and transparency of transactions.

Negative Effects:

- Lack of backing by real assets and high volatility of cryptocurrencies.
- Use of cryptocurrencies for illegal operations.

Uncertain Effects:

- Creation of an internet financial system with new possibilities not available in the classical financial system.

7. Conclusion

UBIX is an ecosystem of services on the edge of global trends, utilizing its own scalable, integrated DAG-blockchain hybrid L1 protocol to empower individuals and businesses with secure and efficient financial solutions.

Blockheight	Non-zero Wallets	Integrated blockchains	Transactions
969331	32693	6	781615

The research that has been presented examines the dynamic aspects of finances, public policy, privacy, income, savings, expenses, and payments spheres in the near future. Now you can understand how the "Precariat" has emerged as a socially undefined class consisting of self-employed individuals, bloggers, and freelancers.

Substantially important components of the UBIX ecosystem are **CrowdFeeding** and **4Tokens**, which enable individuals and companies to effortlessly issue tokens and provide people with flexible work options. The rise of digital nomads is a confirmed event, predicting simplified tax procedures and enhanced mobility for remote workers.

CrowdFeeding is positioned as a global platform for earning extra income, catering to diverse qualifications. The crypto savings area highlights the shift from traditional finance to decentralized finance (DeFi).

UbiStake, within the UBIX ecosystem, facilitates portfolio building, staking on shared masternodes, and daily dividends, aligning with the promise of DeFi and the imminent transition to an unconditional basic income (UBI).

The research envisions the ascent of ecosystems designed to meet diverse customer needs, with particular emphasis on the groundbreaking solutions offered by UBIX.Network. Standing out for its integration of various blockchains, microservice architecture, and general identification, the network propels a transition toward a super application.

Ubixpay, identified as an innovative crypto wallet featuring decentralized identification, strategically addresses the forthcoming trend of hyper-personalization within financial services. By integrating financial services seamlessly into **Ubixpay**, alongside **UbiStake** and **UBIX.Exchange**, UBIX positions itself as a comprehensive ecosystem. The significance of **Silent Notary** in enhancing transaction and certification security within the financial realm is underscored.

Acknowledging the rapid growth of the cryptocurrency market, surpassing 9,000 names, the research forecasts cryptocurrencies emerging as a viable alternative asset class. Anticipating the transformative potential of Central Bank Digital Currencies (CBDCs), we are able to suggest their seamless integration with the UBIX ecosystem.

Privacy considerations in the digital age are thoroughly explored, with **Ubixpay** taking active steps to address the growing need for secure and user-controlled digital identities. The introduction of the Self-Sovereign Identity (SSI) concept underscores the importance of user empowerment over personal data.

In tackling public policy challenges, UBIX Network emerges as a decentralized platform dedicated to achieving equal access to digital services and combating rising inequality. The potential role of UBIX in addressing concerns related to China's Social Credit System is discussed, leveraging DAG for transparency and accountability.

In the future financial world, predicting a dominance of digital currencies, the decline of cash transactions, and the emergence of new financial products, UBIX has a multifaceted approach, spanning decentralized finance (DeFi), DIDs, token issues, exchange listings, and other convenient solutions, positions UBIX as a versatile ecosystem poised to navigate and contribute to the evolving financial landscape.

References

Appinventiv “What are the benefits of blockchain for government services?”, July, 2022

<https://appinventiv.com/blog/role-of-blockchain-in-government/>

Davoudi, Mansour and Ghavipour, Mina and Sargolzaei-Javan, Morteza and Dinparast, Saber “Decentralized Storage Cryptocurrencies: An Innovative Network-Based Model for Identifying Effective Entities and Forecasting Future Price Trends”, June, 2023

Deutsche Bank “The Future of Money”, 29 September, 2023

https://www.dbresearch.com/PROD/RPS_EN-PROD/PROD000000000530015/The_Future_of_Money.pdf

Jamila Alsayed Kassem, Sarwar Sayeed, Hector Marco-Gisbert, Zeeshan Pervez and Keshav Dahal “DNS-IdM: A Blockchain Identity Management System to Secure Personal Data Sharing in a Network”

<https://www.mdpi.com/2076-3417/9/15/2953>

JPMorgan Chase & Co “The Dynamics and Demographics of U.S. Household Crypto-Asset Use”

<https://www.jpmorganchase.com/institute/research/financial-markets/dynamics-demographics-us-household-crypto-asset-cryptocurrency-use>

Frank RG “Financial Services 2030”, September, 2023

<https://frankrg.com/research/finansovye-servisy-2030>

Heister, Stanton, and Kristi Yuthas. “How Blockchain and AI Enable Personal Data Privacy and Support Cybersecurity.” IntechOpen eBooks, 12 Jan. 2022,

<https://doi.org/10.5772/intechopen.96999>

Kerry, C. (2020), Protecting privacy in an AI-driven world, Brookings Institution,

<https://www.brookings.edu/research/protecting-privacy-in-an-ai-driven-world/>

Raynor de Best “Estimate of the monthly number of cryptocurrency users worldwide 2016-2023”, December, 2023

Soken-Huberty, Emmaline. “Is Privacy a Human Right?” Human Rights Careers, 16 June 2021,
www.humanrightscareers.com/issues/is-privacy-a-human-right

Yildiz, Hakan and Küpper, Axel and Thatmann, Dirk and Göndör, Sebastian and Herbke, Patrick “A Tutorial on the Interoperability of Self-sovereign Identities”, August, 2022

Yukinobu Kitamura “Quest for Good Money. Past, Present and Future”, November, 2022
<https://library.oapen.org/bitstream/id/50b16a1d-cc6c-40a5-b3f4-a1bd871d0adf/978-981-19-5591-4.pdf>



Explore our projects:

[UBIX Network](#)

[UBIX Exchange](#)

[CrowdFeeding](#)

[Silent Notary](#)

[UbiStake](#)

[4Tokens](#)

[Ubixpay](#)

[CDR](#)

Authors:

Dmitry Krasniakov

Alexey Petrov

Max Breus