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FORMATION OF PREREQUISITES FOR THE DEVELOPMENT OF SCIENCE-ORIENTED ENTREPRENEURSHIP BASED ON CRYPTO MARKETING

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ФОРМУВАННЯ ПЕРЕДУМОВ ДЛЯ РОЗВИТКУ НАУКОВООРІЄНТОВАНОГО
ПІДПРИЄМНИЦТВА НА ОСНОВІ КРИПТОМАРКЕТИНГУ

The article identifies the main opportunities created by financial instruments based on blockchain technology, namely, increasing economic efficiency and reducing costs through the use of decentralized network models; simplifying the creation of new businesses and entrepreneurial activities in conditions of capital control and restrictive economic policies; circumventing restrictions imposed by geographical jurisdictions. Based on the systematization of the key properties of crypto tools, the directions of their use in information technology (protection from digital threats), education (document storage and control), law (documentary evidence of the digital assets transfer), entertainment (content publishing and contract management) are shown. Along with the advantages of cryptocurrencies (the possibility of use by an unlimited number of people, transparency and continuity of turnover, adaptability to changes in the external environment), disadvantages such as the lack of environmental friendliness of creation, risks of uncontrolled withdrawal of capital abroad, the possibility of use for criminal purposes, uncompetitiveness compared to traditional money were also identified. Attention is paid to the main advantages of using smart contracts, in particular, faster settlement of transactions, savings in operating costs, democratization of access, cheaper and more flexible infrastructure. It is shown that the main barrier to the successful adaptation of new technologies is the low level of awareness and ownership of cryptocurrency and tokenization tools. Based on the stakeholder analysis, the strengths of the central bank digital currency have been identified: for business — optimizing the speed and security of payments, for the state — simplifying the implementation of government programs, for financial institutions — saving costs and reaching new consumers, for the community — increasing the level of inclusiveness of financial services. It is also shown that the need for significant technological investments, together with an insufficient level of financial literacy, create barriers to the introduction and scaling of this type of digital currencies. The benefits of creating an educational "hub" of crypto entrepreneurship are demonstrated, such as attracting investments, stimulating the development of innovative technologies, and forming an inclusive business value.

У статті визначено основні можливості, що створюються фінансовими інструментами на основі технології блокчейн, а саме — підвищення економічної ефективності та зниження витрат завдяки використанню децентралізованих мережевих моделей; спрощення створення нових бізнесів та здійснення підприємницької діяльності в умовах контролю капіталу та обмежувальної економічної політики; обхід обмежень, що накладаються географічними юрисдикціями. На підставі систематизації ключових властивостей кріптовалютних інструментів показані напрямки їх використання в сферах інформаційних технологій (захист від цифрових загроз), освіти (зберігання і контроль документів), юриспруденції (документальне свідчення передачі цифрових активів), розваг (публікація контенту і управління контрактами). Поряд перевагами криптовалют (можливість використання необмеженим колом осіб, прозорість і безперервність обороту, адаптивність до змін зовнішнього середовища), були виявлені і такі недоліки як неекологічність створення, ризики непідконтрольного державі виведення капіталу за кордон, можливість використання в кримінальних цілях, неконкурентоспроможність в порівнянні з традиційними грошима. Приділено увагу основним перевагам використання смарт-контрактів, зокрема швидшому врегулюванню транзакцій, економії операційних витрат, демократизації доступу, дешевшій і гнучкішій інфраструктурі. Показано, що головним бар'єром на шляху успішної адаптації нових технологій є низький рівень обізнаності та володіння інструментами криптовалют та токенизації. На основі стейкхолдерського аналізу визначені сильні сторони цифрової валюти центрального банку: для бізнесу — оптимізація швидкості і безпеки платежів, для держави — спрощення реалізації державних програм, для фінансових інститутів — економія витрат і охоплення нових споживачів, для спільноти — підвищення рівня інклюзивності фінансових послуг. Показано також, що необхідність значних технологічних інвестицій разом з недостатнім рівнем фінансової грамотності створюють бар'єри для впровадження і масштабування даного виду цифрових валют. Продемонстровано вигоди створення освітнього "хабу" криптопідприємництва, такі як залучення інвестицій, стимулювання розвитку інноваційних технологій, формування інклюзивної цінності бізнесу.

Key words: blockchain technologies, cryptocurrency, smart contracts, central bank digital currencies, stakeholders.

Ключові слова: блокчейн-технології, криптовалюта, смарт-контракти, цифрові валюти центрального банку, зацікавлені сторони.

INTRODUCTION

Over the past fifteen years, investors and entrepreneurs around the world have repeatedly faced extreme stressful situations. First in 2007—2009 during the outbreak of the global financial crisis, then in mid-2011 during the sovereign debt crisis in the eurozone, in 2020 during the COVID-19 pandemic. Uncertainty has become the most universal description of the world in recent decades, and its impact is felt in all markets. Accordingly, uncertainty in the global economy has an impact on markets in a broad sense and clearly on financial markets, while most major world currencies also depend on uncertainty. In this regard, exchange-traded instruments have changed and evolved in response to the market's need to make the exchange as simple as possible. Financial systems are actively developing, transforming and adapting to certain economic and technological requirements, creating an environment for the effective functioning of financial relations, since they are the circulatory system of world economies.

One of the key trends of recent decades has been the emergence and spread of digital currencies. Digital currencies are capable of developing existing payment systems and financial institutions, as they represent a new understanding of the form of money and the security of transactions. For example, since 2019, the United States has been actively conducting research and actions to introduce cryptocurrencies into the internal payment system. At the end of 2019, the US Congress passed a bill called the "Cryptocurrency Act of 2020". It revised the procedure for recognizing, licensing and registering digital currencies as a form of payment, as well as established a list of government agencies responsible for regulating and controlling the new currency [1, 2].

Due to the presence of significant potential benefits, the crypto market has expanded, and the practice of using cryptography in payment systems and financial contracts is expected to scale. So, as part of a recent study, Turkish researchers studied consumer interest in using cryptocurrency platforms for savings and investments over

the next three years. According to their findings, most consumers are highly motivated to invest in cryptocurrencies [3].

Despite the fact that global usage is growing, the number of people who do not own any cryptocurrency significantly exceeds the number of those who have it. This relatively low user share provides an opportunity for its growth in emerging markets. Expanding the use and ownership of cryptocurrencies could potentially provide alternatives to local financial asset markets and accelerate the pace of development of global financial systems. While the feasibility of government involvement in cryptocurrencies or individual ownership is a matter of debate, and its ultimate success probably won't be fully understood for some time, there is no doubt that cryptocurrency has emerged as a new asset class and that regardless of government actions, the overall ownership and use of cryptocurrency is growing rapidly.

Today it is difficult to assess the importance of this technology and the prospects for its development. However, digital currencies can become a new generally accepted means of payment, replacing the usual fiat money. In this case, the most successful cryptocurrency system belonging to a particular country can gain a significant advantage in the race for leadership in the financial and economic arena.

LITERATURE REVIEW

Cryptocurrencies have recently attracted considerable attention from researchers and investors. In particular, there is a heated discussion in the literature about cryptocurrencies as candidates for the role of a port during a storm [4]. Technology-based products seem ideal in this role because they are not associated with any higher authority, have no physical representation, and are infinitely divisible. Unlike traditional financial assets, the value of cryptocurrencies is not based on any other asset, the economy of a country or a firm [5]. However, most of the research focuses on the links between the stock and cryptocurrency markets, in particular on correlation [6]. Nevertheless, it is important to understand the role of cryptocurrencies not only as an investment tool, but also as a tool for financial and operational activities of enterprises.

According to other studies, the main catalysts of financial open innovation in recent years have been the actively developing processes of globalization and digitalization of world economies. In such conditions, increased regulatory requirements are imposed on payment systems and instruments, since risks are distributed among global economies [7, 8]. At the same time, the identification of micro-level factors and risks for scaling cryptocurrencies also plays an important role in the adaptation of these tools by business structures.

Cryptocurrencies occupy their niche in payment systems. At the same time, there is an assessment of how the financial industry uses cryptocurrency to increase the efficiency and well-being of investors as an alternative to

Table 1. Types of blockchains and directions of their use

SPECIFICATIONS	BLOCKCHAIN 1.0	BLOCKCHAIN 2.0	BLOCKCHAIN 3.0
ESSENCE	Cryptocurrency	Contracts	Applications
APPLICATION	Money transfers and digital payments	Trading stocks, bonds, futures, smart contracts	Databases and accounting systems in public administration, health, science, education, culture and art
OPPORTUNITIES	Increase economic efficiency and reduce costs through the use of decentralized network models. Simplification of the creation of new businesses and the implementation of entrepreneurial activities in conditions of capital control and restrictive economic policies.		Circumventing restrictions imposed by geographical jurisdictions. Efficiency, scale, accessibility and transparency of global business structures.
THREATS	Irreversibility - it is impossible to cancel the transfer of blockchain data, even if it was made by mistake.		Low adaptability - with an increase in the intensity of transactions, with an increase in the number of blocks and nodes, the efficiency of the entire system decreases.

Source: built by the author based on [12].

traditional investment methods [9]. Since the stakeholders of cryptomarketing are not only investors, but also the state, financial structures, and communities, a critical analysis of the benefits and prospects of participation in cryptotrading for these stakeholders is valuable.

Scientists also consider processes related to the circulation of cryptocurrencies, including blockchain, exchanges, wallets and mining. Consumer behavior and factors influencing the use of cryptocurrencies are analyzed, with an emphasis on speculation, trust in algorithms, purchasing power and demographics. In general, an idea is given about the complex dynamics associated with the introduction of cryptocurrencies and its potential impact on global finance [10]. At the same time, practical examples and lessons of applying financial innovations in various markets have not been sufficiently studied.

PURPOSE OF THE ARTICLE

The purpose of the study is to explore the possibilities and prospects for the practical application of crypto tools for the development of entrepreneurial activity, as well as to identify the main limitations for the effective implementation of financial innovations in successful business practice.

RESULTS

In order to carry out its activities, starting from the start of the business and throughout the entire operational activity, each enterprise requires the availability of financial assets, which act as key business tools.

Depending on the method of creation, there are three types of financial instruments:

- cash;
- digital financial instruments — information in electronic form about the availability of cash and other financial assets. These include deposit money and various online payment systems;
- crypto financial instruments is a complete electronic analogue of financial instruments with all the necessary details: electronic signature, seal, date and volume of issue, denomination, series, number, transaction history, owner. All types of crypto financial instruments provide a high

Table 2. The range of applications of blockchain technologies

SCOPE OF APPLICATION	KEY PROPERTIES	DIRECTIONS OF USE
Information technology	The work of the blockchain is carried out completely automatically. Interconnected devices are controlled not by people or modern computers, but by systems and programs.	The complex encryption and decentralized structure of the blockchain, the technical inability to crack it, make the blockchain a panacea for protection against digital threats.
Education	The impossibility of manipulating the data that is recorded in the system, the information can be added, but not overwritten.	Implementation into systems that store and control documents. It is easy to trace the authenticity of the document, as any user can see who recorded it and at what time.
Law	After saving the data to the block chain, they are not subject to change.	The use of technology as documentary evidence to confirm the transfer of digital assets and to store information about the owner of the actual property. Ensuring more effective regulatory reporting.
Entertainment	The blockchain can store data on all transactions, encrypted data on ownership rights, financing, and execute smart contracts (at the code level, exchange values without intermediaries).	Possibility to publish content, manage contracts, and make payments in one place.

Source: built by the author based on [13].

degree of security and require a separate infrastructure built into the Internet, which was achieved using blockchain technologies [11].

Blockchain is a multifunctional and multi-level information technology that is designed to reliably account for various assets. This technology can be used not only for making cryptocurrency transactions, but also in many other areas of public life. Blockchain is a chain of data blocks that is constantly growing as miners add new blocks with information about recent transactions. The convenience of this technology is that users can see which, when and what amount the transaction was made, but at the same time all personal information about the sender and recipient is not available. The types of blockchain tools and the possibilities of their practical use are presented in Table 1.

As can be seen from the Table 1, blockchain technology creates opportunities for both small and large businesses. At the same time, financial instruments such as cryptocurrency and smart contracts have the potential to be used in settlements, crowdfunding and small business operations. The key advantages that can arouse the interest of small and medium-sized enterprises are decentralization (network participants are equal among themselves and can exchange data without intermediaries) and transparency (possibility to check the history of any transaction). The possibility of implementing global business analytics, accounting and management (based on Blockchain 3.0 applications) is likely to be more interesting for representatives of large businesses. The main arguments in favor of technology for global companies are reliability (data substitution and hacker attacks are almost excluded, since special encrypted keys are used). It should also be noted that the blockchain is quite universal for use, since it can be used in various fields (see Table 2).

Blockchain in law and education opens up new opportunities mainly for public administration. The directions of use here relate mainly to the prospects of using technology for accounting and regulatory policy (the

main focus is on Blockchain 3.0). The use in information technology and the entertainment is mainly focused on business structures that can use cryptocurrencies and smart contracts (Blockchain 1.0 and Blockchain 2.0) to improve their business models and gain competitive advantages. Below, we will take a closer look at the role that financial instruments based on blockchain technology for the development of entrepreneurial activity.

The most well-known and widespread tool today is cryptocurrency, a virtual currency that is not provided with any real value, which is considered the main problem of its implementation and widespread. Cryptocurrencies are created as a reward for performing mathematical calculations — this work is called mining. The essence of mining is that users provide their computers to verify addresses and record transactions in the registry. As a reward for this, miners receive newly created cryptocurrencies and a commission for completed transactions. Cryptocurrency can also be obtained in exchange for ordinary fiat money or using an electronic wallet. Network security is maintained at the cost of physically scarce resources, but this at the same time makes networks inefficient from a resource point of view. The key idea of using cryptocurrencies is that no one can influence the course of payments and they are independent of anyone: neither from the state, nor from banks.

Thus, the main characteristics of cryptocurrencies are the following:

- transactions are irrevocable and are carried out by P2P;
- information about transactions is publicly available;
- the release of cryptocurrencies into circulation is decentralized;
- with regard to cryptocurrency, there is no problem of limiting liquidity even when developing the entire amount of cryptocurrency, since the unit of currency is divisible into smaller parts;
- cryptocurrency has no collateral, and its value is based only on the expectations of market players — to convert into other currencies or to exchange for products and services directly;
- cryptocurrencies are used by an unlimited number of people to make transactions for the purchase and sale of goods and services, payment for work, as well as for investment purposes [13].

What functions can cryptocurrencies perform for businesses?

Firstly, cryptocurrencies can be used to express the cost of goods and services, and they can also be used to pay for goods (there are online stores and cafes that accept cryptocurrencies as payment).

Secondly, the function of the means of payment is reflected in the technology of smart contracts, which make it possible to combine any payment terms, which resembles ordinary transactions, but there is no need for both parties to trust each other (therefore, it is possible to conclude a deferred payment agreement). The cryptocurrency performs the function of a means of payment, being highly liquid.

Thirdly, as for the function of a means of accumulation, cryptocurrencies can be stored in special electronic

Table 3. SWOT analysis of cryptocurrencies

Strengths	Weaknesses
1) The possibility of use by an unlimited number of persons when making transactions. However, this possibility is limited by the non-recognition of cryptocurrency as an official means of payment in national jurisdictions. 2) Transparency of the cryptocurrency turnover mechanism, all elements of which are under the control of a large number of independent entities. 3) Uninterrupted turnover due to the low probability of simultaneous failure in the work of all subjects. 4) Adaptability of the turnover mechanism to changes in the external environment, which is due to the independence of the subjects of the mechanism in terms of changing their behavior under the influence of external factors, openness of information about transactions and their volumes. 5) The independence from the political preferences and economic views of the subjects of the system, which allows to consistently adhere to the economic model embedded in the algorithm for issuing cryptocurrencies into circulation.	1) The risks of uncontrolled withdrawal of capital abroad. 2) The confidentiality of personal data of the parties, which makes it possible to use cryptocurrencies for criminal purposes.
Opportunities	Threats
1) The exchange of virtual currencies for foreign currencies that are not available for purchase in a national jurisdiction or for the purchase of foreign currency at a more favorable rate. 2) The ability to perform calculations with a significantly higher degree of confidentiality than when using fiat currencies, which allows for certain types of businesses to maintain the privacy of transactions. However, due to the low level of financial literacy, this same opportunity can lead to the involvement of businesses and citizens in criminal schemes. 3) With proper legislative consolidation at the level of the national economy, a new type of self-employment of citizens appears.	1) Non-ecological nature of creation: when mining cryptocurrencies, there is an unproductive transformation of natural resources (energy) into new entity, which is called cryptocurrency and which in itself does not contain any utility (it is made useful by the community that considers cryptocurrency as an informal money). 2) The absence of intermediaries, the traditional mechanism of monetary multiplication cannot be used, which determines only a limited (auxiliary) place of cryptocurrencies in the modern financial system. This explains the current global uncompetitiveness of cryptocurrencies in comparison with traditional money in their cash and non-cash (including electronic) forms.

Source: built by the author.

wallets. They will keep their value, and even increase it due to the complexity of the mining process.

To systematize the main parameters of cryptocurrencies, a SWOT analysis was conducted, the results of which are presented in Table 3.

Summarizing the results of the SWOT analysis of cryptocurrencies regarding the prospects for implementation by small and large businesses, the following can be noted:

1) For companies operating on a global scale, the key motivation for the introduction of cryptocurrencies is the ability to carry out international monetary settlements that are not available in national jurisdiction. But at the same time, the privacy of personal data of the parties makes it possible to use cryptocurrencies for criminal purposes, which is the main threat to the global scale of business.

2) For small and medium-sized businesses, the most attractive opportunity is to conduct calculations with a significant degree of confidentiality. However, due to the low level of financial literacy, this same opportunity can lead to the involvement of businesses in criminal schemes.

Thus, the main problems for using the possibilities of cryptocurrencies in entrepreneurship are issues of legality and awareness of business structures about the basic rules of financial transactions.

Let's consider another type of financial instruments based on blockchain technology — a token. A token is a unit of account that is used to display the digital balance in some asset and is accounted for in the corresponding data warehouse. The main types of tokens are:

— embedded tokens — records of digital assets that form part of the core of the blockchain and have utility within chain;

— tokens-shares — this type of crypto asset indicates the owner's right for shares of the company. In many cases, such shares are shares in decentralized autonomous organizations. The issue of tokens is usually carried out during a Initial Coin Offering (ICO), the funds raised from which are used to finance the development and construction of a business network;

— tokens-certificates certify the owner's right to a tangible asset;

— credit tokens confirm the loan issued. The issuer, accepting funds from the client, issues a token [14].

A token as a financial object is a separate option of a smart contract as an integral legal document in digital form. Smart contracts are, in fact, programs that are created based on computer logic and transmitted in the form of code. That is why the parties of an agreement or contract can be sure that all the terms of the contract will be complied with, and none of the participants will be able to change or interpret for themselves.

Potential benefits of tokenization include:

— Faster settlement of transactions due to 24/7 availability. Currently, most financial settlements take place two business days after the transaction is completed; theoretically, this time is necessary in order to give each party time to put their documents and funds in order. Instant calculations made possible by tokenization can lead to significant savings.

— Operational cost savings provided by 24/7 data availability and the ability to program assets. This is especially useful for asset classes whose maintenance or issuance is typically manual and therefore error-prone, such as corporate bonds. Embedding operations such as interest calculation and coupon payment into a token smart contract automates these functions and requires less practical human effort.

— Democratization of access. By optimizing time-consuming manual processes, servicing small investors can become an economically attractive proposition for financial service providers.

— Increased transparency. The example can be a smart contract for carbon credits, where the blockchain provides an immutable and transparent record of credits, even when they are traded.

— Cheaper and more flexible infrastructure. Blockchains are open source, so they are inherently cheaper and easier to iterate than traditional financial services infrastructure.

Based on the advantages of tokenization described above, it can be concluded that this technology is very attractive for business. At the same time, small enterprises can be more involved in investment, financial, and ope-



Figure 1. The legality of using cryptocurrencies in the countries of the world

Source: [10].

rational processes, as well as acquire more opportunities for development and scaling. However, the main barrier to the successful adaptation of new technologies is the low level of awareness of cryptocurrency and tokenization tools. Also, one of the restrictions is the non-acceptance by the jurisdictions of individual countries of transactions with similar financial instruments (see Figure 1).

Along with the fact that many countries recognize transactions with crypto tools, in some countries cryptocurrencies are not recognized at the legislative level,

some countries adhere to neutrality or restrictive policies in this area. A possible way to overcome these limitations is a hybrid tool, which we will consider below.

Central Bank Digital Currencies (CBDC) are a digital form of currency issued by central banks that is not linked to a physical commodity. The increased interest in CBDC is reinforced by the following trends:

— Drastic reduction in the use of cash. In Europe, the use of cash decreased by a third between 2014 and 2021. In Norway, only 3% of payment transactions are made in cash. This trend has forced central banks to reconsider their role in the monetary system [15].

— Growing interest in digital assets. In the United Kingdom, 10% of adults report owning digital assets such as cryptocurrency. The European Central Bank claims that up to 10% of households in six major EU countries own digital assets.

— The perception of central banks as innovators in the field of payments is decreasing. CBDC provides central banks with a new opportunity to have strategic discussions about cash use options in a public forum.

— Growing global payment systems. Many central banks are seeking to strengthen local governance of increasingly global payment systems. Central banks view CBDC as a potential stabilizing anchor for local digital payment systems.

In China, private cryptocurrency is prohibited, but the country still shows interest in digital assets (see Figure 1). In this regard, it is the practice of creating CBDC that has received special attention. The Chinese CBDC pilot project to implement e-CNY relies on private sector banks to distribute and maintain these accounts for their customers. At the end of 2019, the People's Bank of China began testing e-CNY using app-based payments and wallets for government services, purchases, transportation and other consumer lifestyle use cases. The pilot project was initially launched in four

Table 4. Potential benefits and possible challenges of CBDC implementation for key stakeholders

BUSINESS	GOVERNMENT	FINANCIAL INSTITUTIONS	SOCIETY
Advantages			
Increasing the speed and efficiency of electronic payment systems.	Simplify the implementation and increase the transparency of government programs.	The opportunity to reach out to untouched markets.	Contributes to the expansion of access to financial services. CBDC, accessible via mobile devices, can potentially increase the availability of financial services.
Improving the security of payments. Guarantees that the transaction is completed and cannot be changed — even without an official bank account, reduce the likelihood of fraud.	The ability to control transactions and tax them.	Savings on direct costs due to the transfer of costs from physical infrastructure to digital financing. Savings related to transaction monitoring and reporting.	
Barriers to implementation and scaling			
Lack of technological stability.	Lack of interesting projects to implement.	Significant investments in new technologies and infrastructure development are needed, which should be justified by potentially possible cost reductions.	Insufficient level of financial literacy and knowledge regarding digital currency.

Source: built by the author.

cities, then quickly expanded to five more. As of May 2022, 4.5 million trading wallets and 260 million transactions worth more than 83 billion yuan were conducted as part of the e-CNY pilot project [15].

The experience of China, as well as the essential analysis of this financial instrument, allowed to identify potential benefits, as well as barriers to the development and further scaling of CBDC. The results of the analysis are presented in Table 4.

As can be seen from Table 4, the introduction of CBDC has significant economic prospects for key business agents. At the same time, the main risks of implementing such programs are mainly their high level of innovation, and therefore uncertainty. The solution to this problem is seen in stimulating and organizing various educational events in the field of financial technologies, which would contribute to the maximum coverage of key stakeholders in terms of depth and volume of knowledge. The practical meaning of this is that the future development of blockchain markets and cryptomarketing should be associated with the strengthening of theoretical and practical education for current and potential users.

Based on the conducted research, it can be argued that the use of cryptocurrencies creates opportunities to increase the stability of enterprises in conditions of instability of the global market of external resources (in particular, price fluctuations in the currency and energy markets). Nevertheless, the use of cryptocurrency encounters a barrier consisting in the need for appropriate skills from business entities. Participation in crypto trading requires an understanding of the basic economic and legal categories, awareness of the opportunities and limitations that the crypto market provides. A promising model for overcoming the key barrier is the creation of a "hub", the essence of which is to provide specialized educational services to business entities based on a University at the expense of decentralized or government sources of funding. The potential benefits of the key participants in the model are presented in Table 5.

Thus, taking into account the significant advantages that open up for business and the community in the field of using cryptocurrencies and smart contracts, a promising area for further research is the development of a project model of an educational "hub" of cryptomarketing.

CONCLUSIONS

1) The use of financial instruments based on blockchain technology creates the potential to increase efficiency when used in calculations and crowdfunding. Decentralization and transparency make it possible to exchange data without intermediaries and monitor any transaction.

2) The reliability and versatility of tools based on blockchain technology determine good prospects for the spread of cryptomarketing among major players in the global market, as well as in the field of public administration.

3) The main advantages of using crypto tools (cryptocurrency, smart contracts, CBDC) are the ability to carry out international monetary settlements that are not available in national jurisdiction; conducting

Table 5. Benefit sharing based on the creation of an educational "hub" of crypto entrepreneurship

GOVERNMENT	BUSINESS	UNIVERSITY
Stimulating the development of national jurisdiction, innovative technologies accompanying the development of the cryptocurrency market (in particular, the use of blockchain technology in various industries).		
	The emergence of a new investment attraction tool.	
The formation of a source of income to the national budget from entrepreneurial activities related to the turnover of cryptocurrencies and trade.		
	Popularization of financial innovations among key stakeholders.	
The emergence of means of creating new jobs.		
	The development of university entrepreneurship.	
The formation of an inclusive business value by increasing the scientific and educational level of potential entrepreneurial units and involving more people in innovative entrepreneurial activities.		
	Strengthening the useful University-Business exchange, a better understanding of mutual needs and goals.	

Source: built by the author.

settlements with a significant degree of confidentiality; increasing the degree of involvement in investment, financial, operational processes; increasing the stability of enterprises in conditions of instability of the global market of external resources.

4) The most significant problems that hinder the promotion of the crypto tools are the low level of financial literacy and awareness of business structures about the basic rules of financial transactions. In this regard, the future development of blockchain markets and cryptomarketing should be associated with the strengthening of theoretical and practical education for current and potential users.

5) A promising way to overcome the key barrier is to develop and implement an educational project based on the University, focused mainly on business entities and interested representatives of the community.

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