

# ГЕОГРАФІЧНІ НАУКИ

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## USING CYPRED CURRENCY IN THE HOSPITALITY INDUSTRY

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Financial sector, as well as all other aspects of business, has not escaped the introduction of IT-technologies. Not only have these technologies accelerated all transactions, but also made them relatively cheap and instant. If earlier payments were primarily conducted only in traditional currencies by banks and other relevant entities, recently the Bitcoin and other similar cryptocurrencies took its place as a universal currency. This article is devoted to the topical matter of cryptocurrencies, their functions and mechanisms of emission.

**Keywords:** Currency system, cryptocurrency, Bitcoin, decentralized system, the risk of inflation.

**Relevance.** Tourism is a dynamic, open sphere of life that quickly takes over modern trends and fashion. Innovative developments from any sphere of life easily enter the tourism industry. Considering the rapidly changing of system of settlement in the world and how the tourism market easily perceives these changes. It is worth considering one of the possible options for the calculation – the use of alternative, electronic types of currencies.

The growth in demand for electronic currency opens up new horizons for businesses dealing with transactions at the macro level. Each transaction costs a certain percentage of the amount transferred, this mechanism is used in conventional banks. But on the world's market came "Noutlus" of modern cryptography – Bitcoin.

Please note that this topic has not been investigated previously by scientists of tourism direction. Most of works on alternative types of payments are written by economists and programmers. But today it is impossible to ignore this kind of payments.

The purpose of this study – to investigate the possibility of using electronic types of currency in the tourism market.

The object of the study – alternative, electronic types of currency

The subject of research – the possibility of applying alternative, electronic types of currency in the tourism sector.

Tasks of this work:

- To consider the general principles of crypto currency and also bitcoins;
- To indicate the advantages and disadvantages of this currency
- To analyze the legal framework
- To suggest an alternative currency for the tourist market

Main part. First it is necessary to consider the general principles of modern electronic currencies. It will give the possibility to understand how data systems have emerged and how they work, the main difference between this type of payment and the generally accepted. But the main thing is to understand how expedient the use of these methods of payment in the tourist market is. Consider the advantages and disadvantages.

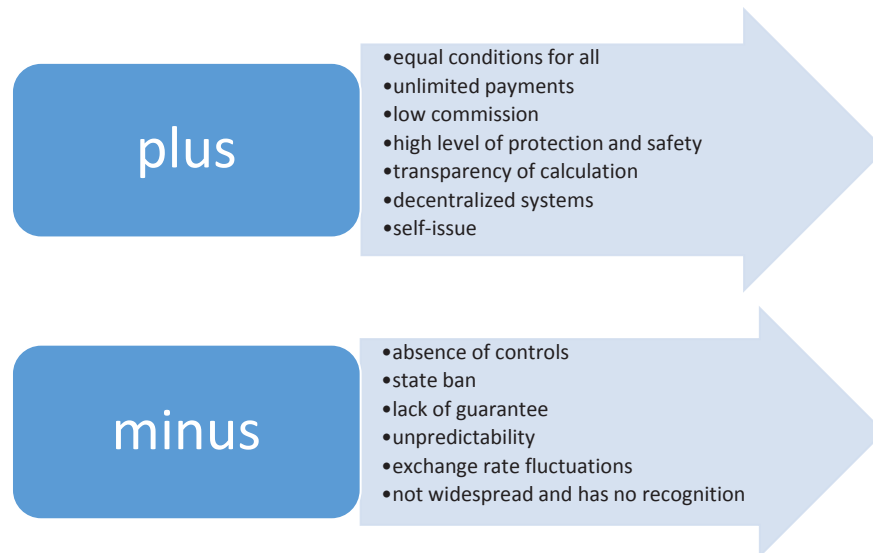
Bitcoin – "Electronic Money Transfer System of Peer-to-Peer Network", published (created?) in 2008 by Satoshi Nakamoto. Is an electronic payment system based on cryptographic proof instead of trust, allowing any two willing parties to transact directly with each other without the need for a trusted third party. Transactions that are computationally impractical to reverse would protect sellers from fraud, and routine escrow mechanisms could easily be implemented to protect buyers. In this paper, we propose a solution to the double-spending problem using a peer-to-peer distributed timestamp server to generate computational proof of the chronological order of transactions. The system is secure as long as honest nodes collectively control more CPU power than any cooperating group of attacker nodes [2].

Introduced as a peer-to-peer electronic cash system, Bitcoin experienced explosive, exponential growth during its initial years. Users were drawn by properties of Bitcoin that allowed for cheap money transfers, instant confirmations, worldwide compatibility, round-the-clock operation, and no limitations on minimum or maximum transaction amounts. This electronic form of money quickly became popular with diverse groups of users all around the world. Merchants used Bitcoin to tap into a global marketplace [3].

The steps to run the network are as follows [3]:

- 1) New transactions are broadcast to all nodes.
- 2) Each node collects new transactions into a block.
- 3) Each node works on finding a difficult proof-of-work for its block.
- 4) When a node finds a proof-of-work, it broadcasts the block to all nodes.
- 5) Nodes accept the block only if all transactions in it are valid and not already spent.
- 6) Nodes express their acceptance of the block by working on creating the next block in the chain, using the hash of the accepted block as the previous hash.

Consider the advantages and disadvantages of using this type of calculation (payment) what will make it possible to weigh the rationality of use and outline the range of aspects that can be used in tourism.



**Fig. 1.1. Pluses and minuses (Advantages and disadvantages) of bitcoin**

*Development of author*

It is worth considering that one of the most expensive cryptocurrency today is Ethereum: it costs nearly 300 dollars per one.

Therefore, the creation of a closed currency for the tourism industry is the next way to speed up the turnover of the financial side of the business. Accelerating the work of finance will increase the speed of implementation and creation of new products, with no bank fees for each transaction or cross-rate.

The main question that arises is how to create your own cryptology for a this economic sector. To do this, it is necessary to have the following main resources:

- Small server
- The code of cryptology (it is possible to generate the code using the service github.com)
- Transaction Library
- The name of cryptology (I suggest "Voluptuariyn" based on the Latin meaning "tourism")
- Developing of the cryptography and defining its price for participants

To register a currency, you must present a graphic interpretation. At the same time for properly work of the system, it is necessary to generate a certain amount of coins to be issued to participants for real currency funds.

The safety of this type of organization of the financial flow is due to the closure of the system and the algorithm of encryption of so-called "keys and electronic signatures." The system is designed in such a way that a new currency is created with limited speed and the total amount of money in the system is limited. Therefore, in the long run, the depreciation of savings is not threatened by the fact that some country has included its printing press.

This system will allow automated accounting of all operations to perform duties before tax services. The system will keep accounting from the moment it starts working, so it will lead to increase the reliability of all operations and reducing of fraud.

During the creating of this project there is some dissonance with the administrative legal system. In order to implement this mechanism it is necessary

to organize a group of partners (hotels, transfer, restaurants, etc.) into a "cooperative group of partners", which may have its own currency as "Voluptuariyn".

It is also important to consider the regulatory framework that regulates this process. That will allow to estimate how legal is the use of new methods of payment and how well the legal framework is adapted to the current needs of the market.

According to Art. 2 of the Law of Ukraine No. 1087-IV of 10.07.2003 "On Cooperation", as amended and supplemented (hereinafter – Law No. 1087), a cooperative is a legal entity formed by natural and / or legal persons who are voluntarily united on the basis of membership for conducting joint economic and other activities in order to meet their economic, social and other needs on the basis of self-government.

According to Art. 8 of Law No. 1087, the charter of the cooperative is a legal document regulating its activities. The charter of the cooperative must include, in particular, information on the procedure of setting the size and payment of contributions and shares by the members of the cooperative and responsibility for breach of obligations about their payment.

In order to ensure statutory activities, the cooperative, in the manner prescribed by its charter, at the expense of shares (including additional) of members and associate members of the cooperative, forms a unit fund (Article 20 of the Law N 1087). When displaying the contribution received in the tax accounting, one should proceed from the fact that in exchange for the contribution received, the corporate rights are transferred to the founder.

In accordance with clause 1.8 of Art. 1 of the Law of Ukraine No. 334/94-VR of December 28, 1994 "On the taxation of corporate profits" (as amended by the Law of Ukraine dated May 22, 1997 N 283/97-VR), as amended and supplemented (hereinafter referred to as Law No. 334 ), corporate rights are the property rights to the authorized capital of a legal entity or its share, including rights to management, obtaining the corresponding share of the profit of such legal entity, as well

as assets in case of its liquidation in accordance with the current legislation, regardless of that such legal entity was created in the form of a business partnership, the enterprise was founded on the property of one legal or physical person, or in other organizational and legal forms.

In this case, according to subparagraph 4.2.5 of clause 4.2 of Art. 4 of the Law No 334, amounts of money or value of property received by a taxpayer in the form of direct investments or reinvestments into corporate rights issued by such a taxpayer, including monetary or property contributions, in accordance with agreements on joint activity in the territory of Ukraine without the creation of a legal entity, are not included in gross income.

This legal scheme will allow organizing not only a reduction of taxation but also an independent system of financial partnership. For example, members of the cooperative join the organization with a certain monthly contribution of 10,000 Voluptuarion coins. A certain circular scheme of assistance is provided for each cooperative link, with interest to be returned to those who participated in the formation of the collective fund. The Circular Closed Care Scheme is shown in Figure 1.2

Such an organization of funds is not subject to banks and their financial position. Cooperation creates credit services on collective agreements of partners. There are 4 participants, each month they allocate 10,000 coins, after which for the first month the total amount of 40,000 was allocated to the hotel. On the second month to the restaurant, on the third – to museum, on the fourth – to operator. But for all four months the subscription fee for each participant is determined by 10 000 coins.

This will have a positive impact on the company, a single injection of a large sum can help the company raise its sales percentage, which it will return by pieces later without bank interest. Let's consider the general scheme of the system of "cooperative group based on cryptology". The general scheme of the work of the electronic currency of tourism is shown in Fig.1.3

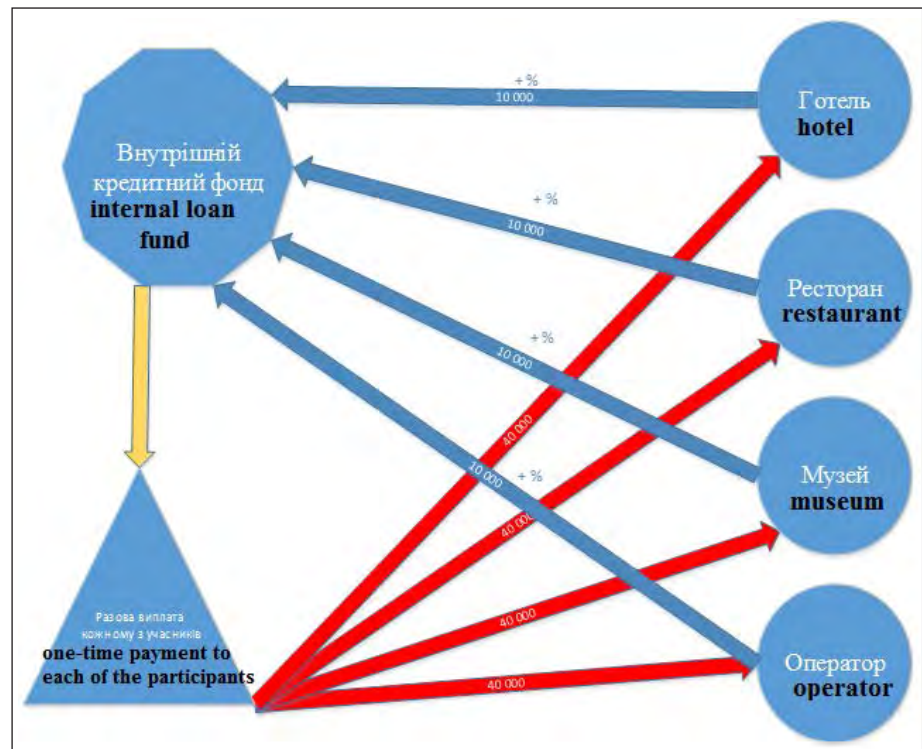


Fig. 1.2. The Circular Closed Care Scheme

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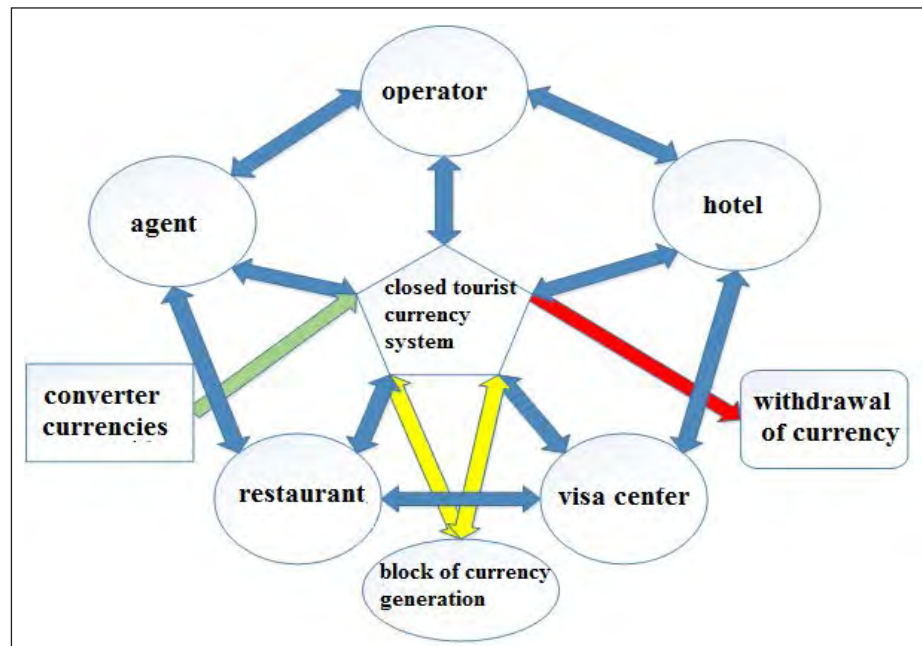


Fig. 1.3. Scheme of the work of the electronic currency of tourism

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The real currency comes through the "Real Currency Converter" and transforms into a cryptographic currency. The real money remains in the system, but goes to the "Block of cash generation", so the money is sent to the investment fund of the system. Which additionally generates profits. Cryptocurrency becomes the main currency for trading relations, as in the system itself. For the request of a participant, funds can be converted into a real bank transaction and received in cash.



We also get the opportunity to use only the cryptocurrency in the system until the real currency works on the assets of the investment module.

The real currency can be used to upgrade a particular module of the system. That is, the entire system can invest in itself, for example, to repair a hotel room, or purchase equipment for a certain point of attraction.

Cryptocurrency is transformed not only into electronic money, but for a certain period of time it replaces real ones, thus bringing additional profit as well as reducing tax deductions by 20% for all operations inside of this system.

**Conclusions.** Obviously, electronic money is a very flexible tool that allows to expand the direction of cash use. Only electronic money can provide micro-payments that are necessary for information business and the sale of publications. Such electronic money can be seen for special use, for example, only for tourism, which is very convenient for controlling money in the family and business.

This work demonstrates the importance and relevance of more in-depth research of the possibility of using modern methods of calculation (payment) in the tourism market.

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## ВИКОРИСТАННЯ КРИПТОВАЛЮТИ В ІНДУСТРІЇ ГОСТИННОСТІ

### Анотація

Туристична сфера, як і всі інші сфери бізнесу, не уникла проникнення ІТ технологій. Такі технології не лише прискорили всі транзакції, але й зробили їх відносно дешевими і миттєвими. Якщо раніше платежі переважно проводилися банками та іншими відповідними структурами тільки в традиційних валютах, то останнім часом місце універсальної валюти посідають біткоіни та інші аналогічні криптовалюти. Ця стаття присвячена актуальній темі криптовалют, їхнім функціям і механізмам емісії.

**Ключові слова:** валютна система, криптовалюта, біткоіни, децентралізована система.

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## ИСПОЛЬЗОВАНИЕ КРИПТОВАЛЮТЫ В ИНДУСТРИИ ГОСТЕПРИИМСТВА

### Аннотация

Туристическая сфера, как и все другие сферы бизнеса, не избежала проникновения ИТ технологий. Такие технологии не только ускорили все транзакции, но и сделали их относительно дешевыми и мгновенными. Если раньше платежи преимущественно проводились банками и другими соответствующими структурами только в традиционных валютах, то в последнее время место универсальной валюты занимают биткоины и другие аналогичные криптовалюты. Эта статья посвящена актуальной теме криптовалют, их функциям и механизмам эмиссии.

**Ключевые слова:** валютная система, криптовалюта, биткоины, децентрализованная система.