

непотрібністю роль третьої сторони відносин – банків. Отже, такі платежі порівняно дешевші, ніж при використанні звичайних грошових коштів.

При всьому різноманітті позитивних характеристик, в криптовалюті є і недоліки.

Якщо користувач втратив пароль від свого електронного гаманця, це означає для нього втрату всього, що знаходиться в ньому коштів. Оскільки немає ніякого контролю за проведенням транзакцій за допомогою цифрових грошей, немає і гарантій їх збереження.

Відносно криптовалюти можуть робитися спроби різних негативних впливів з боку національних регуляторів грошового обігу. Оскільки з часом процес добування криптогрошей все більш і більш ускладнюється, то за допомогою обладнання окремих користувачів стає все менш рентабельним. Вартість цифрових грошей варіюється в залежності від попиту і пропозиції. Закон цей потрібен тільки криптобізнесу, а саме бізнесу, який займається обміном. Ті, хто використовує крипту в особистих цілях, цей закон не буде стосуватися. У нашій же країні криптовалюта не заборонена. У Конституції написано, що громадяни вільні, тому і використовуємо свою свободу.

Єдине, що буде стосуватися фізичних і юридичних осіб в цьому законі, це те, як правильно платити з цього податки.

В Україні централізована криптовалюта, така як біткоіни, не користуватиметься популярністю як засіб платежу для щоденних витрат. Для цих цілей є більш простий інструмент, зокрема гривня. Він зрозумілий і стабільний. Тому що, біткоін може скакати до плюс 10% в день, а тому бізнес ніколи не буде використовувати такі інструменти, особливо бізнес, у яких маржинальність може бути один відсоток. Розвиток системи біткоінів в нашій країні це питання часу і ефективної побудови системи контролю над виконанням цифрових операцій.

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BITCOIN AND CRYPTOCURRENCIES AS A NEW STAGE IN THE EVOLUTION OF MONEY

When the wave is coming, it is better to be on the board for surfing than swimming against the tide. The surfer can not tell the wave where to go: the best thing it can do is to stay afloat and use the wave impulse. Those who are able to feel the wave and foresee its direction will be ahead of all. The wave always reaches the shore, but it can not be said about the surfer.

Bitcoin is not just a wave. This is a tsunami.

Bitcoin is the world's first decentralized digital currency. This currency is fundamentally different from all previously created electronic currencies and payment systems. It is not tied to any physical assets or "official" currencies, and the price of a digital coin - bitcoin - is regulated solely by market demand and supply.

Bitcoin is also a worldwide payment system through which it is possible to conduct transactions with this currency. Its main difference from traditional payment systems is that the Bitcoin system does not have any managing and processing center - all operations occur exclusively in the network of equal customers.

Bitcoin is historically important and will be in our life for a long time. Any new kind of money solves important problems of the previous kind of money. Money has two purposes - storage of wealth (savings) and the implementation of transactions.

For the first time money as an economic tool appeared in ancient times.

A) Barter - the exchange of goods or services with another person without the participation of money. The barter system was used for several million years, and long before the money was invented. In ancient times, this system often could include people of only one locality, but today, using the Internet, barter is global. Barter has a lot of problems. Suppose I have a sack of wheat, and I need gloves, and you produce gloves, but you only need half a sack of wheat. And what next? I will get only one glove? In the above example, it is difficult to determine the exchange rate of wheat and gloves. And besides, what if you need to move, for example, if your kingdom is attacked? How are you going to transport all this wheat or gloves?

B) Precious metals. Gold and silver are rare metals. Yes, it is difficult to extract them. But they are difficult to forge, because they can be weighed. Thus, a rarity in combination with the impossibility of a fake makes them a good choice as money. I can convert my wheat into gold coins, you can convert your gloves into gold coins, and now we can make an exchange and buy everything we want. But this is not an ideal means of saving money. If my kingdom is attacked and I have to move, then I can not easily take all the gold with me and leave, because of the weight of the cargo will have to leave it to the conquerors. Secondly, if you want to buy a house: will you carry a cart of gold bars with you to make a deal? Or worse, you need to move to another country and carry the savings of your entire life: will you transfer all your gold bars into a new house? Yes, gold has a practical application in the form of a jewelry industry or as a conductor of electricity. It can be said that gold as a means of calculation is backed by real application and practical value. But this kind of money still not a perfect choice.

B) Paper money. With the advent of paper money, it was much easier to pay for goods and services. But a number of problems emerged, such as instability and inflationary depreciation. Also it is necessary to take into account the excessive release into circulation, the influence of political attitudes in the world, the loss of trust of the population, etc. Paper money has a high level of protection against counterfeiting, but scammers do not slumber and periodically create fakes.

So let's go back to Bitcoin. On 3th January, 2009, the first 50 Bitcoins were generated. A new, absolutely unique currency, which will have a great future. The advantages of Bitcoin compared to other currencies are obvious and take the concept of money to a new level.

1. Zero or very low commission.

The commissions are not related to the size of the transaction and are not tied to your location. Often transactions in crypto-world are free. The commission requires only in the formation of technical transactions to ensure network operation. Recently, using the cryptocurrency, \$ 99 million was sent for 2.5 minutes and the commission was only 40 cents. The transaction with using of other traditional payment systems in the same conditions will spent much more time and money. Also, there is no monthly fee, limits and other restrictions in crypto-world.

2. 24/7/365

You can think about your business, not about when the bank is a weekend or lunch time. If you wanted to send a transfer at 2 a.m. on Sunday - then it will be send at 2 a.m. on Sunday.

3. Instant transfers

At banks, transfers between accounts take 3-5 business days on average, and maybe even more if it's the foreign transfers. Cryptocurrency transactions are instant. However, when working with large amounts, it is recommended to wait for several confirmations by the transaction network, usually it takes less than an hour. Small sums are transferred in a matter of minutes.

4. Safety, reliability, security

In cryptocurrency proven cryptography method is used to store access keys that divided into public and private keys. Similar algorithms are used by banks and other financial organizations to protect their data. And the total processing power of the Bitcoin network, which is used to protect the history of transactions exceeded the computing power of any supercomputer in the world in 2012. The only way to damage a Bitcoin network is to collect 51% of the computing power in the world, which in principle is unrealistic.

5. Technological advantage

Excellent divisibility (each Bitcoin (1 BTC) is divided up to 8 decimal places, so 1 Bitcoin can be divided into 100,000,000 parts (0.00000001 BTC) by analogy with metal coins), simple transfer and verification of the authenticity of virtual coins, while preserving many advantages of cash.

6. New opportunities

Smart contracts, multi-signatures and other progress made for the convenience of business and users. You can create transactions with the guarantor when, for example, two of three signatures are required to complete a transaction. Smart contracts allow you to set much more complicated conditions for performing operations.

7. Easy start

Absence of difficult registration, age and any restrictions. To get started, you do not need anything other than access to the Internet. You download the Bitcoin client to your computer or smartphone, it generates the address of your wallet. From now on, you can accept and send cryptocurrency.

8. Easy reception and sending of donations

To receive donations, it's enough to publish your Bitcoin address. At the same time, the sender of donations can send them to the addressee, which guarantees that there are no abuses by the authorities. As, for example, it happened with bank transfers to the victims of the earthquake in Nepal, which were forcibly transferred to the personal account of the prime minister. Also, you can make donations without revealing your identity, and without fear of persecution by the state.

9. Supranational system

Cryptocurrency is the same supranational technology as the Internet. Around the world in recent years the number of points that working with cryptocurrency only increases. Even a large business like Microsoft or Dell are already taking Bitcoin for their products. With further distribution, you will not need to think about converting between local currencies, losing on commissions and recalculating the value of a commodity into a familiar currency to understand how much it costs.

10. Open technology

Bitcoin source codes are open and available to anyone who wants to learn to make sure that the program performs only the declared functions and nothing more. The software is distributed under a free MIT license. The system is much less dependent on the human factor, credibility of the issuer or controlling bodies is replaced by algorithms, mathematics and cryptography. Decentralization and open development guarantee that Bitcoin will not close one day, taken under control or other harmful actions.

11. Market pricing

The cost of cryptocurrency is not dictated by the authorities. You are not forced to accept crypto currency forcibly and only in it to make certain payments, as it happens with government money. The cost of cryptocurrency is determined only by the ratio of demand and supply in the market. Free market economy.

12. Ability to bypass any sanctions

Despite the high volatility due to the free market, fluctuations in the rate of the cryptocurrency may be much less than the fall in the exchange rates of national currencies in the event of political instability in the state, or even a declaration of default. There is no dependence on central banks, local and not only laws, religion, politicians and other attempts to intervene and limit your operations. Including, with the help of sanctions.

13. Getting rid of intermediaries, such as correspondent banks

This reduces transaction time, transaction cost, and reduces the risk of errors. Decentralization, P2P interaction.

14. Full control over your funds

It is often impossible to manage your property without your consent, it is punishable by law. But, as soon as you sold your property, that is, exchanged it for money, new rules come into play. Your money can be managed. Including, it is quite lawful. Its possible to block your bank account, return back the transaction. Without any notice, invest your money, or give it to someone at interest. Information about the money on the account is nothing more than a record that the bank owes you, you no longer have control over them. It is more difficult to carry out such manipulations with cash, but even without touching them in your pocket, banks can reduce their purchasing power by issuing new money. In fact - diluting your share of ownership. For example, 3 months ago you could buy a laptop for a certain amount, and today only a calculator. All have become accustomed and do not pay attention to this, the term inflation is known even to people far from economics. Although, if someone takes a laptop from you, and in return leaves a calculator - this will cause a minimum of indignation. In the same way, by sending emissions to certain groups of individuals or organizations, it is possible to redistribute wealth without even going into the pocket of specific citizens. With Bitcoin, such manipulations are impossible, in view of the limited emissions (21 million coins, and on 26th April, 2018, 17 millionth Bitcoin was created) and the lack of control over other people's means. Transactions can not be turned back, your account can not be frozen.

15. Privacy

Absence of financial censorship. Nobody can forbid someone to transfer funds or someone to receive them. Only you are the master of your money. Also, no one can limit you in the number of wallets and addresses, you can open them as much as you need. Even the new address for each transaction.

16. Eliminating opacity

Now when checking balances on bank accounts, you can often find small inconsistencies in a smaller party for the client. When applying for support, it often turns out that it was some kind of technical overdraft when withdrawing funds. Even if the client has turned off the overdraft. Often, with international transfers, banks or payment systems automatically convert money in their own way, far from the most profitable rate. Sometimes even double conversions take place, when the funds are converted into local currency, and then again into the currency in which the transfer was nominated. In cryptocurrencies such is not present. The commission, if any, is indicated before the transaction is committed, you know it in advance and know exactly how much the host will receive.

17. Control where necessary

If desired, you can link specific addresses to specific people or organizations to monitor financial transactions. For example, this can be done with the state institutions to monitor the target expenditure of funds.

18. Features of the blockchain (constructed according to certain rules, a continuous series of blocks that containing information)

Cryptocurrency technologies can be combined with others, extracting additional advantages. For example, the blockchain can be used for decentralized rights management, transaction registration, creation of alternative independent accounting systems. You can significantly reduce the cost of notary services, simplify, automate or even eliminate some outdated organizations such as passport desks. Some banks are now experimenting with the replacement of SWIFT for blockchain. Decentralized services are being developed to store information, secure communications and other services. In particular, these are also new opportunities for business.

In conclusion, I can say that at the end of March 2018 in Buenos Aires, Argentina, the G20 summit was held, a group of 20 major economies of the world. Regulation of the cryptocurrency has become one of the main topics discussed among the representatives of states. Participants of the G20 recognized that, given the current economic situation, citizens have the right to use cryptocurrencies. In addition, regulators are aware that the adoption of digital money will help governments improve the welfare of the population. Ministers also agreed that the traditional economy is going through a transition process and it is already impossible to separate digital technologies from it. The future has already come.

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РИЗИКИ ТА ІНФОРМАЦІЙНА БЕЗПЕКА ПІДПРИЄМСТВ

Економічна система все більше стає відкритою і відповідно уразливою до зовнішніх ризиків і загроз. Будь-яке підприємство стає все більш залежним від змін умов зовнішнього середовища не лише країни відповідної локації, але й світової економіки.

Метою розгляду у нашій статті є детальний аналіз із виявленням груп факторів ризику бізнес-середовища функціонування і загроз економічній безпеці підприємств з акцентом на інформаційну складову.

В основу нашого дослідження покладено аналітичні спостереження німецької фінансової транснаціональної корпорації Allianz SE (щорічно опубліковані у Allianz Global Corporate & Specialty (AGCS)). Основним напрямком діяльності компанії є страхування. Станом на 2013 рік, це найбільша у світі страхова компанія, 11 за величиною фінансова група та 25 найбільша компанія за оцінкою журналу Forbes. Також це найбільша фінансова компанія за обсягом доходу, станом на 2012 рік. Група Allianz присутня у більш ніж 70 країнах на 5 континентах (в т.ч. і в Україні). Майже 140 тис. співробітників обслуговують близько 88 мільйонів клієнтів [1].

Спостереження базуються на ґрунтовному аналізі близько 2000 експертами із 80 країн ризиків і загроз, що виділяють ризик-менеджери для успішного функціонування бізнесу у різних країнах світу. Найперше експерти оцінюють ризики і загрози безпеці підприємств з точки зору їх імовірності та величині збитків (прямих і непрямих втрат) [2].

За даними експертів [2] збої у виробництві ось уже шостий рік займають верхній рядок серед найважливіших ризиків в Європі, Азіатсько-Тихоокеанському регіоні, на Близькому і Середньому Сході (таблиця 1). Цей ризик, на жаль, властивий будь-якому підприємству незалежно від обсягів бізнесу. За даними опитування експертів, кібер-інциденти вперше названі в числі найбільш шокуючих факторів, що сприяють збоєм у виробництві, в той час як самі збої у виробництві стали, на їхню думку, найбільш вагомим причиною втрат після кібер-інцидентів. Згідно з даними Cyence Risk Analytics, в разі недоступності хмарного сервісу у постачальника хмарних послуг, що триває більше 12 годин, збитки можуть скласти 850 млн. дол. в Північній Америці і 700 млн. дол. в Європі, виходячи з того, що від