

# STRATEGIC MANAGEMENT OF ENTREPRENEURSHIP ACTIVITIES IN THE FIELD OF CRYPTOCURRENCY CIRCULATION

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## ABSTRACT

*Over the past few years, there has been an exponential increase in interest in cryptocurrencies and the ideas that they carry and which have a huge impact on the marketing environment, economic and social relations now, and in the future possibly on the whole structure of society as a whole. It is proved that in the future, cryptocurrency will face a rapid rise and formation of it as a self-regulating and full-fledged participant in electronic money or a complete collapse and degeneration of this system into something else, but with slight differences in the functioning mechanism. Today, cryptocurrency has a large number of opportunities and strengths, which was proved during the SWOT analysis, the rapid growth rate of capitalization and exchange rate and the great interest of the Ukrainian population in it, as evidenced by the results of our survey.*

**Keywords:** Cryptocurrency System, Mining, Blockchain, Management Decision-Making Effectiveness, SWOT Analysis.

**JEL Classifications:** M21

## INTRODUCTION

Globalization, unrestrained growth of money markets, general computerization and development of IT technologies have led to the emergence of a huge number of additional financial instruments and new forms of interaction between people. One of these innovations is electronic money. The increase in the production and use of cryptocurrency as means of circulation, payment and investment is happening rapidly in the world. The position of ignoring the existence of this financial instrument causes a closed national economy and complications in the implementation of foreign economic relations.

The 21st century is a time of rapid development and technological progress. Every day, innovation is increasingly entering our lives, improving it and making it easier. Money plays the key roles in society, and it would be strange if they were not influenced by progress.

Cryptocurrency is a digital monetary instrument whose existence is based on a cryptographic principle. This virtual money is a unique cryptographic code and has no tangible analogue, it can be put into a wallet, exists only on the network and does not go beyond it.

## REVIEW OF PREVIOUS STUDIES

The Blockchain system is a multi-functional technology for accounting for various assets and is a decentralized transaction log (Garbowski et al., 2019; Drobyazko et al., 2019).

If we talk about the object of these transactions, cryptocurrency, namely, the currently popular Bitcoin, then it can be defined as a digital means of expressing value, which does not have a central issuer and arises as a reward to participants in the blockchain for providing their computer capabilities to maintain the operability of this system (Gainsbury & Blaszczynski, 2017).

Although for higher versions of the blockchain this risk disappears, when using bitcoin transfers, there is the possibility of fraud on the part of one of the parties (Gandal et al., 2018).

For Bitcoin and a number of other coins, mining is the only way to increase emissions. Miners receive a reward, since their activity ensures the functioning and integrity of the entire system (Hayes, 2017).

According to forecasts, all BTC coins will be received by 2045 (LeMahieu, 2018).

Due to the increasing complexity of cryptocurrency mining, pools began to be formed- Miners association (like Minergate, which unite miners) (Hilorme et al., 2019 a & b).

Each member of the pool receives a reward equivalent to mining power (Li & Wang, 2017; Makedon et al., 2019).

## METHODOLOGY

Study methods are analysis, comparison, synthesis and generalization; methods of economic and mathematical modeling, methods of mathematical statistics, strategic analysis-SWOT-analysis.

One of the main tools of strategic management, which assess the complex internal and external factors affecting the development of the company is SWOT analysis.

The main goal of the SWOT analysis is to obtain reliable data on the company's capabilities and the threat of its promotion in the market of goods and services. Therefore, to achieve this goal, the following tasks are set for the SWOT analysis: identification of marketing opportunities that match the resources of the company; identification of marketing threats and development of measures to neutralize their impact; identification of the strong points of the company and comparing them with market opportunities; identification of company weaknesses and development of strategic directions for overcoming them; identification of competitive advantages of the company and the formation of its strategic priorities.

In order to carry out the SWOT analysis at the enterprise, appropriate information support is required, which should include: database; methods and models required for the SWOT analysis; set of organizational and methodological techniques necessary to improve the reliability of information support. The technique of the SWOT analysis is based on an approach that allows you to study the external and internal environment of the enterprise at the same time. Using this technique, you can establish the relationship between strong and weak points, which are typical for the enterprise, and external threats and opportunities. First, we identify strong and weak

points, as well as threats and opportunities, then we establish the relationship between them, which can be used to develop an enterprise strategy.

When conducting the SWOT analysis, it is necessary to carefully determine the scope of each SWOT analysis, understand the differences between its elements, be objective and use versatile input information, and avoid spatial and ambiguous statements. The SWOT analysis should be carried out with the participation of all the most important members of this organization. This concerns the general identification of strong and weak points that should be clearly visible within the organization. The SWOT analysis can be performed using the brainstorming method. The quality of the analysis can be improved by involving people outside the organization in its analysis. Such persons may act as impartial arbitrators who are able to evaluate proposals, and also, by raising specific issues, provoke the organization to rethink its provisions and actions. When conducting the SWOT analysis, especially the analysis of chances and threats, previously conducted studies of public opinion should be used.

## RESULTS AND DISCUSSIONS

Cryptocurrency today already performs one of the main functions of money: to be a means of accumulation and savings. Indeed, most of those who bought cryptocurrency do not carry out other operations with it - they only store it. However, in order to become a full-fledged monetary unit, cryptocurrency must begin to fulfill other mandatory functions of money: to become a means of circulation and learn to fulfill the role of a unit of account, that is, act as a measure of value in the economic system.

Cryptocurrency has appeared recently and is only at the beginning of its development. Provided that it can demonstrate progress as a medium of exchange and in the role of a unit of account, the same as it has demonstrated in the role of a means of accumulation, it will be recognized and popularized, but cryptocurrency will face problems on the way to this.

Most cryptoconversions are clones of Bitcoin or other cryptocurrency systems and are characterized by different parameter values (for example, different block times, currencies and release schemes). These cryptoconversions are not much different from the original and are often called altcoins. Examples: Dogecoin and Ethereum Classic. The total market capitalization (i.e. the market price multiplied by the number of existing currency units) of all cryptocurrencies has more than tripled since the beginning of 2016 and peaked at \$ 300 billion in January 2017.

A lot of cryptocurrencies have appeared, which, when borrowing single concepts from Bitcoin, provide new and innovative functions that have significant differences.

They can attract the introduction of new mechanisms, as well as decentralized computing platforms with the capabilities of the “*smart contract*”, which provide very different functionality and allow you to accept non-monetary use cases. These “*cryptocurrency and block innovations*” can be grouped into two categories:

1. new (public) blockchains that have their own technologies (e.g. Ethereum, Peercoin, Zcash);
2. dApps/Other that exist on additional levels built on top of the existing blockchain (e.g. Counterparty, Augur).

Despite the fact that Bitcoin remains the dominant cryptocurrency in terms of market capitalization, other cryptocurrencies are increasingly reducing the historically dominant share of the Bitcoin market: while Bitcoin's market capitalization accounted for 86% of the total cryptocurrency market in March 2015, it fell to 72 % in March 2017.

Ether (ETH), Ethereum's own cryptocurrency, has established itself as the second largest cryptocurrency. The remaining cryptocurrencies in total doubled their share of the total market capitalization from 3% in 2016 to 6% in 2018. Confidential cryptocurrencies DASH and monero (XMR) are becoming more popular and currently account for 8% of the total capitalization of cryptocurrency markets.

We performed the SWOT-analysis of the use of cryptocurrency, which is presented in Table 1.

<b>Strong points</b>	<b>Weight coefficient</b>	<b>Scoring</b>	<b>Product</b>	<b>Weak points</b>	<b>Weight coefficient</b>	<b>Scoring</b>	<b>Product</b>
Cryptocurrencies cannot be counterfeited, and transactions cannot be appealed.	0.3	10	3	Anonymity contributes to the fact that Internet scammers use it with great activity.	0.3	7	2.1
Transactions are anonymous.	0.3	6	1.8	It has no official status and is even banned in some countries.	0.4	6	2.4
No currency pegs, interest rates, and transaction fees.	0.3	9	2.7	Price volatility. After the appearance of digital currency, unit prices fluctuate over a wide range.	0.2	4	0.8
Transactions using digital currency is instant.	0.1	7	0.7	Problematic return. Only the payee can return the coins.	0.1	4	0.4
<b>Total</b>	<b>1</b>	<b>32</b>	<b>8.2</b>	<b>Total</b>	<b>1</b>	<b>21</b>	<b>5.7</b>
<b>Opportunities</b>				<b>Threats</b>			
Opportunity to earn.	0.3	10	3	Rigid legal regulation.	0.3	6	1.8
Growth in investment.	0.2	7	1.4	Money laundering.	0.2	7	1.4
Cryptocurrency has the ability to act as a means of expressing value.	0.2	9	1.8	Volatility may lead to cryptocurrency crash.	0.3	8	2.4
Rapid development and global transformation.	0.3	10	3	Destabilization of the economy and the possibility of creating a market for smugglers	0.2	6	1.2
<b>Total</b>	<b>1</b>	<b>36</b>	<b>9.2</b>	<b>Total</b>	<b>1</b>	<b>27</b>	<b>6.8</b>

After conducting the SWOT-analysis of cryptocurrencies and arranging the points on a 10-point scale, we concluded that cryptocurrency has both strong and weak points (8.2 and 5.7 points, respectively). Among the strong points, it can be distinguished that the cryptocurrency is not tied to the exchange rate and it is impossible to counterfeit it, which gives it many opportunities in the future.

Among the weak points, the lack of official status was most appreciated. Among the opportunities we highlight the prospect of earning and the possibility of rapid development and global transformation.

The greatest threat to cryptocurrency is the volatility of the exchange rate, but this danger is caused by unstable demand and supply for digital currency, and as soon as it enters the masses, the exchange rate will stabilize. Despite its popularity and price increase, digital currency is still

associated with a certain risk. Before investing in cryptocurrency, it is necessary to weigh certain risks, such as fluctuations in its value and an incompletely formed regulatory policy on the part of governments of different countries. Although the cryptocurrency has been gaining rapid popularity, it still represents a relatively small part of the global financial ecosystem.

Despite the presence of weaknesses, there are a lot of opportunities for cryptocurrency, and with proper legal regulation and the elimination of significant shortcomings, it will be rapidly developed and popularized among the population.

## RECOMMENDATIONS

After analyzing the Bitcoin exchange rate, we can say that this indicator is not stable compared to the current monetary units, but this is all due to the novelty of this asset in the market of economic relations. As for the forecasts of the Bitcoin exchange rate for the future, we have established that it will grow over the next 4 years. Now, fluctuations in the exchange rate caused by an unstable supply-demand ratio, as soon as these indicators are equal, cryptocurrency will confidently enter the economy of all countries. In the future, they will be embodied in a new form, which is rather difficult to predict, but it can be confidently said that both electronic money will supplant paper and digital money, cryptocurrency will supplant fiat money.

## CONCLUSIONS

The study on cryptocurrency as the mainstream of the modern market makes it possible to draw the following conclusions.

Cryptocurrency is a digital monetary instrument which existence is based on a cryptographic principle.

Based on the SWOT analysis, we can conclude that today cryptocurrency has a large number of opportunities and strong points, fast growth rates of capitalization and exchange rate and a great interest of the population on it, as evidenced by the results of our survey.

Cryptocurrency development trends were analyzed using mathematical statistics methods. For the dynamics of the Bitcoin exchange rate, as the most famous among cryptocurrencies and its forecasting, 5 different models were built. The observations correspond best to the power model and the polynomial model of the fifth degree. For both of them, the coefficient of determination (0.9605 and 0.9736, respectively) is outside the confidence interval (0.95), which in statistics is considered an indicator of good agreement between the actual data and the calculated ones.

We have revealed that the main disadvantage of digital currency is the volatility of the exchange rate, which can lead to the collapse of the entire cryptocurrency system.

Cryptocurrency is an evolution of means of payment. Since Bitcoin and other cryptocurrencies are independent of the state and anonymous currencies, their “*regulation*” appears only in the form of introduction and development of measures to protect consumers and the absence of destruction of existing financial and economic institutions and traditional payment systems, which could lead to a violation of stability in the economy.

Cryptocurrency does not pose a threat to the development of the economic system; rather, it can affect its expansion: accessibility anywhere in the world opens up new markets for suppliers of goods and services, and the movement of capital from developed countries to developing countries contributes to the accumulation of wealth in both and increase consumption.

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