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About the journal

The International Scientific Periodical Journal "Modern Technology and Innovative Technologies" has been published since 2017 and has gained considerable recognition among domestic and foreign researchers and scholars.

Periodicity of publication: Quarterly

The journal activity is driven by the following objectives:

- Broadcasting young researchers and scholars outcomes to wide scientific audience
- Fostering knowledge exchange in scientific community
- Promotion of the unification in scientific approach
- · Creation of basis for innovation and new scientific approaches as well as discoveries in unknown domains

The journal purposefully acquaints the reader with the original research of authors in various fields of science, the best examples of scientific journalism.

Publications of the journal are intended for a wide readership - all those who love science. The materials published in the journal reflect current problems and affect the interests of the entire public.

Each article in the journal includes general information in English. The journal is registered in INDEXCOPERNICUS.

Sections of the Journal:

Library of Congress Classification Outline	Sections
Subclass TJ / TJ1-1570	Mechanical engineering and machinery
Subclass TK / TK1-9971	Electrical engineering.
Subclass TA /TA165	Engineering instruments, meters, etc. Industrial instrumentation
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Subclass TK / TK1-9971	Electrical engineering. Electronics. Nuclear engineering
Subclass TN / TN1-997	Mining engineering. Metallurgy
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Subclass T / T351-385	Mechanical drawing. Engineering graphics
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TL1-484, Subclass TE / TE1-450, Subclass TF / TF1-1620	and pavements, Railroad engineering and operation
Subclass TH / TH1-9745	Building construction
Subclass T / T55-55.3	Industrial safety. Industrial accident prevention
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Requirements for articles

Articles should correspond to the thematic profile of the journal, meet international standards of scientific publications and be formalized in accordance with established rules. They should also be a presentation of the results of the original author's scientific research, be inscribed in the context of domestic and foreign research on this topic, reflect the author's ability to freely navigate in the existing bibliographic context on the problems involved and adequately apply the generally accepted methodology of setting and solving scientific problems.

All texts should be written in literary language, edited and conform to the scientific style of speech. Incorrect selection and unreliability of the facts, quotations, statistical and sociological data, names of own, geographical names and other information cited by the authors can cause the rejection of the submitted material (including at the registration stage).

All tables and figures in the article should be numbered, have headings and links in the text. If the data is borrowed from another source, a bibliographic reference should be given to it in the form of a note.

The title of the article, the full names of authors, educational institutions (except the main text language) should be presented in English.

Articles should be accompanied by an annotation and key words in the language of the main text and must be in English. The abstract should be made in the form of a short text that reveals the purpose and objectives of the work, its structure and main findings. The abstract is an independent analytical text and should give an adequate idea of the research conducted without the need to refer to the article. Abstract in English (Abstract) should be written in a competent academic language.

The presence of UDC, BBK

Acceptance of the material for consideration is not a guarantee of its publication. Registered articles are reviewed by the editorial staff and, when formally and in substance, the requirements of the journal are sent to peer review, including through an open discussion using the web resource www.sworld.education

Only previously unpublished materials can be posted in the journal.

Regulations on the ethics of publication of scientific data and its violations

The editors of the journal are aware of the fact that in the academic community there are quite widespread cases of violation of the ethics of the publication of scientific research. As the most notable and egregious, one can single out plagiarism, the posting of previously published materials, the misappropriation of the results of foreign scientific research, and falsification of data. We oppose such practices.

The editors are convinced that violations of copyrights and moral norms are not only ethically unacceptable, but also serve as a barrier to the development of scientific knowledge. Therefore, we believe that the fight against these phenomena should become the goal and the result of joint efforts of our authors, editors, reviewers, readers and the entire academic community. We encourage all stakeholders to cooperate and participate in the exchange of information in order to combat the violation of the ethics of publication of scientific research.

For its part, the editors are ready to make every effort to identify and suppress such unacceptable practices. We promise to take appropriate measures, as well as pay close attention to any information provided to us, which will indicate unethical behavior of one or another author.

Detection of ethical violations entails refusal to publish. If it is revealed that the article contains outright slander, violates the law or copyright rules, the editorial board considers itself obliged to remove it from the web resource and from the citation bases. Such extreme measures can be applied only with maximum openness and publicity.

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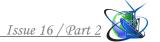
Abstract. In a rapidly evolving society, people are increasingly shopping online. Therefore, it is necessary to get acquainted with the possibility of saving not only time but also money when buying online. The article is devoted to the study of the development of cashbacks and cashback services, analysis of Ukrainian and foreign markets of cashbacks. It is determined that at the moment there are two areas of cashback: bank cashback and special cashback services. The dynamics of the growth of cashback users in the world is analyzed and the scheme of cashback services is substantiated. An analysis of the current state of the cashback market in Ukraine has established that the range of Ukrainian cashback services is not large. The possibility of increasing the share of online stores with cashback in Ukraine will give an impetus to increase the number of these services. A good step in this direction would be to increase the percentage of cashback when buying online, not difficult to withdraw funds without restrictions from cashback cards. The absence of a fee for the annual use of cards with a cashback function will also serve to attract new customers to cashback services and customers to online stores. The analysis of results of work of the Internet cashback services and bank of cashback services is carried out. There are a number of advantages of the cashback service, which gives grounds to say that this is the next effective stage in the development of e-commerce in Ukraine and the world..

Keywords: e-commerce, cashback, cashback services, cashback card, online store.

Problem statement.

Modern countries are significantly different depending on the readiness to participate in the digital economy and benefit from it. The dominant factor determining the digitalization of trade and, in particular, international trade, is the Internet. Some countries are dynamically and actively implementing e-commerce in international trade, and others are still remains cautious. It is noteworthy that due attention should be paid to the readiness of countries to enter the e-commerce and digital economy more widely. For developing countries, this will require additional support from the international community [1]. The ability to shop online has become entrenched in recent years for Internet users, but not everyone knows about the ability to get some of the money spent on shopping back. For such purposes, there is cashback, which relatively recently appeared and began to be actively used in Ukraine.

In modern conditions, cashbacks and cashback services are tools to stimulate e-commerce, encouraging customers to make purchases online. But the lack of popularity of their use in Ukraine encourages the analysis of theoretical aspects of this issue, establishing the causes and finding practical problems of their widespread use in the Ukrainian e-commerce market. Therefore, the study of cashbacks and



cashback services is relevant at this stage of the digital economy, as they are a stimulus not only for e-commerce, but affect the development of the economy as a whole today and set trends for its future development.

Analysis of recent research and publications.

Such economists as Yatsenko O.M., Hryazina A.S., Shevchyk, O.O., Marusey T.V. and other studied the issue of e-commerce and its features in the Ukrainian market. A.V Volokytin, A.P. Manoshkyn opened the topic of doing business using the Internet, including sales of goods and services, banking and payment systems, advertising and placement of information, procurement. However, the issue of considering cashback services as the next stage in the development of e-commerce in Ukraine and the world was not considered, which aroused considerable interest in this area of research and determined the relevance of the topic.

Goals setting.

The aim of the article is to study the essence of cashback services, assess the state of the markets and the popularity of cashback services in Ukraine, their impact on the effective development of e-commerce in Ukraine and in the world.

Presentation of the main material of the research.

Recent years have shown that every year the Internet is increasingly penetrating people's lives. Soon the Internet will find its place in all areas of modern business, which employs such business models that in real life are impossible to imagine. It is already felt that the Internet is becoming an attribute of the business life of everyone who seeks to prosper and improve the economic situation in the country. The Internet today is a whole industry that is rapidly penetrating all areas of human activity [2].

At the same time, the Internet as a new territory for doing business provides ample opportunities to reflect the real economy of the state in the virtual universe. The rapid development of E-commerce opens up new prospects for doing business. It actively attracts modern technologies to the country and has a positive impact on other industries. It is possible that the Internet - commerce will be the catalyst that will lead to the creation of completely new models of market relations, completely new associations of partners and, ultimately - a completely new economy.

The use of information technology has led to radical changes in traditional ways of doing business and the emergence of a new type of economic activity - e-business. The active development of the Internet contributes to the formation of network formations that significantly affect the sphere of trade, so the Internet is not only a place for exchanging information, but also a platform for buying and selling both electronic content and material goods [3].

Right now, this industry is in a stage of rapid growth, which will continue in the coming decades. A huge number of companies around the world see great commercial potential on the Internet and the opportunity to take their business to a whole new level. Therefore, the e-commerce market in Ukraine is developing rapidly and one of such methods is cashback services.

Cashback (from the English. Cashback or American. Cash back - cash back) - is money that can be withdrawn to a bank card, mobile phone or e-wallet, with the ability to dispose of these funds outside of a particular online store [4]. The term "cashback" is used in such areas as trade, banking, gambling and is essentially a



special bonus program to attract customers. In e-commerce, cashback services means the return of part of the cost of funds spent on purchases to the buyer's account in the personal account of the cashback service.

The history of cashback began in 1891, when the American company Green Shield came up with a publicity stunt to attract new customers. Green Shield produced stamps that buyers could exchange for discounts, merchandise or cash. Prior to that, other sellers also created various promotions, such as issuing copper tokens. Such a monetary surrogate has become popular. These tokens could be collected and exchanged for goods from a special catalog. But this tool has attracted new customers only for a certain period.

Stores began to mass produce their own cards designed to receive discounts, but with the growth of popularity, the accompanying problems became noticeable. It is inconvenient for customers to keep dozens of different cards. To get a card of a store where you make only one purchase is lazy or not profitable. The store can change the terms of bonus programs without notifying the customer, and then all the accumulated bonuses will suddenly turn into a pumpkin.

From the point of view of the store, bonuses are intended only to increase the loyalty of current customers and give little to attract new ones. After all, a person must already know somewhere about the store to come to it and get your card. But if this person already knows about the store, then there is no marketing sense to further stimulate it with discounts.

The digital economy has given cashback a new impetus. Banks have introduced refunds into their debit and credit solutions, stores have received new cashback partners in addition to contextual advertising and banner exchange, and customers have found a convenient virtual tool that has a greater economic impact than any high-interest deposit.

There are a lot of cashback services, because there are many stores on the Internet, each of which fights for its customer with competitors. For example, a store is ready to give a 10% discount to all its new customers, but partners can agree on special conditions and knock out a 15% discount. Or set a 5% discount, but introduce additional bonuses - for example, a quick withdrawal of funds against competitors who set a 50-day limit. Thus, all the key competitors present in each major cashback service gain new customers largely through cash backers who come up with original promotions.

Cashback mechanics do not stand still. So, recently there was the first block chain-cashback service BITTLE, in which the user receives tokens for each purchase. Bitlle cryptocurrency is implemented on the basis of Ethereum block chain technologies and is not currently traded on any exchange. BTL currency owners may be lucky in the future if block chain cashback gains popularity.

Cashback can be added to any stock, as well as a bank cashback card can be used to pay, but the interest is charged on the amount you pay to the store [5].

This mechanism gained significant development at a time when partners - modern cashback services - were added to this scheme. It is the partner who attracts customers and, receiving significant discounts, customers become regular customers. Gradually, the number of such services increased, which served as an impetus for the



creation of schemes for the transfer of money for goods [6].

Currently, there are two areas of cashback: bank cashback and special cashback services. In the first case, the cashback is returned from the acquiring fee (servicing of bank card payments), which is paid by the companies that accept card payments. Purchase fees usually exceed 2% of the payment amount. Cashback provided by banks is almost the same everywhere and is 1% of the amount with a limit on the amount of cashback per month. The size of the cashback in this case does not depend on the seller, but only on the bank issuing the debit card. The exception is the joint shares of banks and retailers, when the return can be more than 1%, then the retailer pays to increase the return on the card, hoping to increase sales during the promotion [7].

The banking sector has recently begun to develop in the direction of issuing cards with a cashback function, but is already gaining momentum, because this feature is very convenient for customers. When the cardholder makes purchases, part of the cost is automatically credited to the card. There are also different types of bonus programs, where it is not money that is credited, but points. Also, some banks provide cashback when shopping in individual stores, restaurants, or cafes and gas stations. Banks are also interested in using this tool, because having money on bank cards, they can lend it at interest. In addition, the bank takes the interest for the payment of purchases with their card from the shops and the same percentage either partially compensates the cashback laid down in the card, or fully covers it [6].

One of the conditions of purchase on a cashback card is often the purchase of goods and services exclusively from partner companies. But most often the bank's partners are luxury stores, restaurants, airports, gas station network, where products are offered at an inflated price. In this mechanism, everyone benefits, except the client. For example, the store, to increase the number of customers, transfers the percentage of the purchase of the bank in which the card was issued with cashback. That is, when paying for a card purchase, the bank receives an acquiring commission from the store. After some time, the credit institution credits the cardholder to the accumulated cashback points. In most cases, the commission from the store where the product was purchased is cashback. In this situation, each party received its reward. The store has increased sales, the bank, without spending its own funds, has expanded the range of services that will increase customer loyalty, and the customer has purchased expensive and high-quality goods much cheaper. However, very few people think about the real benefits of such an offer before being led to such offers by the bank.

In [8], it was noted that the main tool to stimulate sales and increase loyalty, in addition to tariffs for ordinary bank card transactions, is cashback. The person as a user perceives this information as additional income on the card, which helps him to immerse himself more and more in the service.

The use of bank cards with a cashback function has both advantages and disadvantages (Table 1).

Abroad, cashbacks are a traditional service. The number of their users is growing, probably at the rate at which the number of Internet users is increasing (Fig. 1).



Table 1

Advantages and disadvantages of bank cards with cashback

Advantages	Disadvantages
Use both debit and credit cards, where the percentage of cashback on the credit card is higher	Paid annual maintenance
Refund of part of the cost of all purchases	Low rates outside the special categories
There are categories with increased cashback. For certain types of purchases specified by the bank, the return percentage is higher	Restrictions on the withdrawal of these accumulated funds
Profit comes to the card and can be used	Sometimes there are additional requirements

Source: [6]

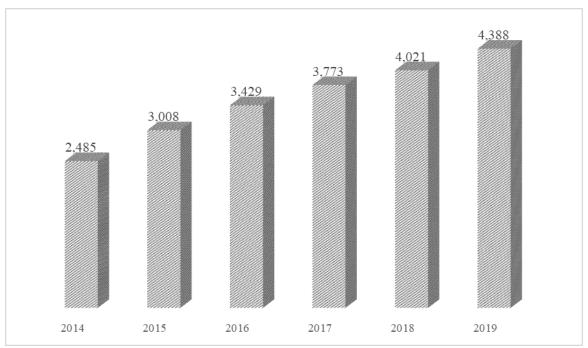


Figure 1 – The dynamics of growth of cashback users in the world, million people

Source: [9]

In comparison, the number of people in Ukraine who use this method of savings is not very large and it is growing slowly. For example, if in Ukraine from one cashback service about UAH 1.77 million was withdrawn from purchases, in the US this amount will be 10 times higher [9]. As shown by the most popular queries on service sites, no matter what the trend of cashback, most users do not fully understand what it is and do not believe in the honesty of such a means of saving.

In Ukraine, cashback has gained popularity since 2015 and the number of banks with this function has increased from 2 to 15 banks. At the end of 2019, according to «Prostobank Consulting», only 11 out of 30 banking institutions offer cashback service in one or another variation.

Of course, the technological revolution in the calculation and use of cashback was made by Monobank, when it gave the opportunity to get up to 20% in some categories of their money. It is clear that this was a strong marketing move when they entered the market. And when the base market was already formed, Monobank



changed the terms of cashback, leaving only 1% on credit money. And to get more, you need to have your money in the account.

But at the same time, cashback from partners was added to the two categories of cashback that can be selected each month from the proposed list. And it's also interesting. For example, in December, they offer 5% bank cashback for purchases in the Eldorado network and this cashback is valid for all purchases, including promotional offers. Moreover, you can choose the two categories per month that you plan to actively use. In the summer, for example, it was convenient for me to choose the categories "Travel" and "Clothing and footwear" and use them during European trips to tickets, hotels, sales in shopping malls - it's really a nice return. Monobank has a very convenient mobile application - today it is the most innovative Internet bank in Ukraine. And they also have an affiliate program - this is an additional advantage of this card [10].

Banks promise customers mostly several cashback options:

About 0.35-1% for all non-cash purchases.

On a regular basis, 1-5% of cashback in certain categories - online shopping, beauty salons, restaurants or gas stations, etc.

About 0.5-1% - for all non-cash purchases, up to 20% - for higher categories.

Up to 20% for certain categories of purchases chosen by the customer or the bank itself on a monthly basis.

Up to 20% when paying by card for goods and services in partner stores.

Cashback can be charged for transactions in all outlets or only for purchases in partner stores. If the loyalty program is valid in all stores, it is easiest to earn bonuses, but you can forget about large amounts, as the bank will return a maximum of 1% of the payment [11].

Also important is the ability to monetize this cashback - that is, withdraw it from the cashback account to the main account to reduce the amount of money I have to put in my account to update the credit limit or replenish the debit balance. Not all banks allow this to happen.

For example, Privatbank has a "conditional" cashback - the Bonus + program, which allows you to return part of the money spent (if they are spent in institutions connected to this system). But this money cannot be monetized - you can only use it as a discount on subsequent expenses. It should be noted that the Bonus + program from Privatbank became a pioneer in the field of cashback in Ukraine and gave users the opportunity to return some of the money spent. Today it is probably the most common banking cashback program (because Privatbank cards are the most common in Ukraine) and at the same time the least profitable (personal opinion of the author). But I also use it [10].

Table 2 compares loyalty programs in Ukrainian banks.

The second direction of cashback - special cashback services. The essence of their work is quite simple and transparent: most stores are willing to share a percentage of the order amount as a reward for this buyer. The refund service shares part of the received commission with its clients. So everyone wins:

- the store earns money by selling goods, gets loyal customers, saves on advertising;



- cashback service receives a fee from the store, part of which is given to the buyer, and part is kept as a profit;
- the buyer returns part of the amount spent in cash and saves on purchases [7].

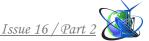
Table 2

Terms of loyalty programs of Ukrainian banks

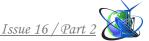
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O.Bank	O.Card	At the expense of credit funds - 0.5% for purchases in stores (not online) under certain codes. Online shopping: at the expense of credit funds - 5%, at the expense of own funds - 2%. For purchases in online stores Play Market, App Store, iTunes - 30% at the expense of credit (10% - at your own expense), if the description of the transaction contains the words "Apple", "Google",	All purchases, if the transaction through the terminal at the point of sale corresponds to the bank codes on which the cashback applies.	On the 10th of each month, the bank automatically withdraws cashback to the main account. Provided that the amount is more than UAH 25, if the amount is less cashback is not charged. The maximum amount of cashback per month is UAH 500. Taxed - 19.5%.
Alfa-Bank	Cash'U Club loyalty program is valid on all cards, except co-branded cards and A-Club cards	"iTunes". At the expense of own or credit means - from 0,5% to 20%.	Each month, the bank offers from 3 to 10 categories, from which you can choose from 2 to 7. The number of available categories depends on the status of the user, who goes from "User" (30 bonuses) to "Guru" (8 thousand bonuses). There are also special offers from partner stores.	You can withdraw cashback to the main account by returning the payment for the purchase made in the last 30 days. The minimum amount to return cashback per month is UAH 50. The maximum amount of cashback per month in higher categories is UAH 3,000. In general, you can withdraw a maximum of 5 thousand UAH per month. Or take part in a raffle. Taxed - 19.5%.
Tascombank	PudraCard, Plate, Big Five, Retirement, Weekend Card (can only be reissued)	PudraCard: for loans in the category "Clothing and footwear" - 5%, "Pharmacies and beauty salons" - 3%, at their own expense	Depending on your card: gas stations, supermarkets, pharmacies, beauty salons, clothing and footwear, online shopping	You can withdraw cashback to the main account. The maximum amount of cashback per month - from 10 to 777 UAH

		- 1% for these		(depending on
		categories (in		your card and
		boutiques,		funds spent: the
		showrooms,		minimum monthly
		specialty clothing		amount of card
		and footwear stores,		payments - 1
		establishments b '		thousand UAH, the
		uty spheres). Plate:		more costs, the
		0.5% for all		more cashback you
		purchases on the		can get). Every
		Internet,		quarter the bonus
		supermarkets and		account is reset.
		gas stations. Big		Taxed - 19.5%.
		Five: for credit funds		
		1-2% in trade and		
		service networks, at		
		own expense +		
		purchases on the		
		Internet - 1%.		
		Pension: 2% for		
		purchases in		
		pharmacies and 1% -		
		in supermarkets.		
		Weekend Card:		
		credit card payments		
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		regardless of		
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		online purchases -		
4 70 1	G 1	2%, all others - 1%.	T	**
A-Bank	Green and	At the expense of	Every month the	You can transfer to
	Universal Gold	own means - from 2	bank offers 6	the main account
		to 20%, at the	categories of	the amount of
		expense of credit	purchases, you can	more than 100
		means - 1%.	choose 2 of them.	UAH. Taxed -
		Cashback from	There are separate	19.5% of the
		partner stores - up to	categories of	amount. The maximum amount
		20% (regardless of the calculation - own	partner stores - there are no	of cashback per
		or credit funds).	restrictions on the	month is UAH
		or cream rullus).	number.	500.
Idea Bank	Card Blanche	Card Blanche White:	Depending on your	On the 10th of
IGCa Dalik	White and Card	only at the expense	card: online	each month, the
	Blanche Online	of credit funds - gas	shopping, grocery	bank automatically
	Dianone Omine	stations, cafes, bars	stores, gas stations,	withdraws
		and restaurants - 3%,	cafes, bars and	cashback to the
		grocery stores - 2%.	restaurants.	main account.
		Card Blanche	i osmaiaiim.	Taxed - 19.5%.
		Online: for credit		17.070
		funds - 5% for		
		online purchases, 1%		
L		carrier parenabeb, 170		I



OTP Bank	OTP Tickets Travel Card, Global Auto Card, Vodafone Bonus Card	for payments at gas stations, cafes, bars and restaurants, 0.5% in grocery stores, at own expense - 2% only for online purchases. The bank also charges 10% for the first purchase with a Card Blanche White or Card Blanche Online card. OTP Tickets Travel Card: 2% for purchases on the Tickets.ua website, 1% for all purchases, except for outlets in the European Economic Area or online stores registered there (in particular, Uber, Bolt, Wizz Air, Booking. com). Global Auto Card: up to 3% for purchases at filling stations (at Okko gas station additional discount - 1 UAH / liter of gasoline or diesel or 30 kopecks / liter of gas). Vodafone Bonus Card: up to 40 bonuses for every UAH 100 spent when paying by card, at the beginning of the year 100 bonuses for each month of active card use (more than 5 card payment)	Depending on your card: tickets, gas stations, mobile services, other shops.	OTP Tickets Travel Card: bonuses can be used to pay for tickets, train and bus tickets, hotel reservations, travel insurance policies, tickets to concerts and events (at the maximum discount you can buy a ticket for 150 UAH). Bonuses are valid for 365 days. Global Auto Card: bonuses can be exchanged for a discount when buying fuel. Vodafone Bonus Card: bonuses can be exchanged for rewards (for example, replenishment of a mobile account and the Internet, packages of minutes for calls, etc.).
Forward Bank	Coco card debit and credit	use (more than 5 card payment transactions at the expense of credit funds). Up to 20%, depending on the	Each month, the bank automatically	On the 8th of each month, the bank
		categories and	provides 3	automatically



		calculation with own or credit funds. The minimum amount of cashback per month at the expense of own or credit funds is UAH 5. The maximum amount of cashback per month at the expense of own funds - UAH 300, credit funds - UAH 1,000.	categories for which cashback is accrued.	withdraws cashback to the main account. Taxed - 19.5%.
Ukrsibbank	New Card and Sport Card. Separate loyalty program Obvious benefit - operates on All Inclusive debit cards.	New Card: 5% for online purchases. Sport Card: 5% for purchases in sports shops and fitness clubs. Only at their own expense. Obviously, it gives discounts on purchases in partner stores.	Depending on your card: online shopping, sports shops and fitness clubs. Under the Obvious Benefit program - purchases in partner stores.	On the 16th of each month, the bank automatically withdraws cashback to the main account. The maximum amount of cashback per month is UAH 500. Not taxed.
Piraeus Bank	On all debit cards	At its own expense - 1% of cafes, bars, restaurants, gas stations, Duty Free shops. The minimum amount of cashback per month is UAH 30 (after taxes). The maximum amount of cashback per month is UAH 300.	Cafes, restaurants, bars, gas stations, shops.	On the last day of the month, the bank automatically withdraws cashback to the main account. Taxed - 19.5% of the amount.
Globe Bank	All cards have a Globus Bonus loyalty program (subject to online registration)	For every UAH 10 spent when paying by card through the terminal, the bank charges 1 bonus.	All purchases, if the transaction through the terminal at the point of sale corresponds to the bank codes on which the cashback applies.	Bonuses can only be exchanged for gifts. The bank's website has a catalog of rewards, which indicates how many bonuses each reward costs. The cheapest gift is animal feed (100 bonuses). You can top up your phone for UAH 30 for 360 bonuses, buy headphones for 504 bonuses. The most expensive



				gift is a sports watch for almost 24 thousand bonuses. It is not taxed.
Concord	One, Debit and Salary cards	At their own expense - 1% on all purchases in retail chains or online (namely for the purchase of goods, not payment for services).	All purchases, if the transaction at the point of sale corresponds to the bank codes on which the cashback applies.	You can transfer to the main account the amount of more than 100 UAH. A maximum of UAH 1,000 can be withdrawn per month (accumulate - without restrictions). Taxable - minus 19.5% of the amount.
Lviv	On all cards	For all purchases at own expense: Visa Gold - 0.5%, Visa Classic 0.35%.	All purchases, if the transaction through the terminal at the point of sale corresponds to the bank codes on which the cashback applies.	A day later, the bank automatically withdraws cashback to the main account. Taxed - 19.5%.
Accordbank	The best MC World card (issue costs UAH 150, must have a credit limit of over UAH 1,000)	At the expense of own or credit means: from 1% to 20% - on the raised categories, 1% - on all purchases. The maximum amount of cashback for one operation is UAH 50.	Every month the bank offers 5 categories, you can choose 2 of them. In addition, 1% for other purchases, if the transaction through the terminal at the point of sale corresponds to the bank codes on which the cashback applies.	You can transfer to the main account the amount of more than 100 UAH. Credited within 3 working days. The maximum amount of cashback per month is UAH 500. Taxed - 19.5%.

Source: [11]

The scheme of cashback services is shown in Fig. 2.

It is worth noting that the Internet has broken the monopoly of traditional shops on trade. The process of buying online can be much more convenient and the prices more favorable. The last factor for most buyers is decisive. And here the position of online stores is enhanced by cashback services, which allow the buyer to return part of the amount spent on online shopping, making it even cheaper. Consider what these services are and how they work.



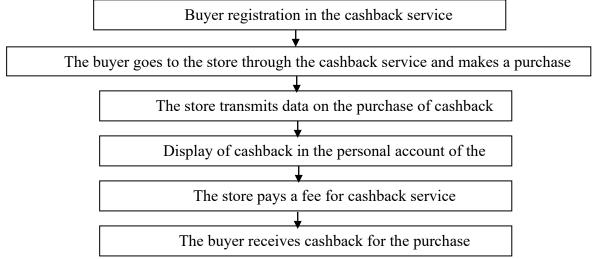


Figure 2 – Scheme of cashback services

Source: [6]

There are about a dozen online cashback services in Ukraine, among the most popular are: Grivasi.com, LetyShops, Smarty.Sale, PayBack, Moneta, Cash4brands, Backit, BonusPark, Kopikot, ShopoPro, etc.

We will analyze the activities of cashback services currently in operation and analyze the benefits of cashback services.

Letyshops - is considered to be the most popular service in Ukraine. Currently, more than a thousand stores are connected to it, most of which are focused on the CIS market. The size of cashback on Aliexpress is average, it is 1.95% for the purchase of equipment and 3.9% for all other goods. An interesting section of products with cashback up to 90% - shopping enthusiasts will appreciate it.

The advantages, in addition to a large selection of stores, are as follows:

- 1) promotions are held with extremely favorable conditions;
- 2) double cashback is often offered on Aliexpress;
- 3) promo codes are provided, prizes are drawn, for active users there are a lot of bonuses;
- 4) a valid loyalty program for wholesale or just regular customers. After accumulating a certain amount of money, the cashback becomes 30% higher;
- 5) a relatively small percentage of negative reviews 30% less than other services.

An interesting fact is that over three years of using the service was paid more than \$ 1 million - it says a lot about the reliability.

You can register in one or two clicks, depending on whether you go through the registration procedure through social networks or through the official website of Letyshops. In the latter case, you will need to come up with not only a password but also a login. But there may be problems with the use, to get exactly the return, you need to read the instructions and follow it carefully.

You can withdraw funds to your phone, WebMoney, PayPal, VISA card or Mastercard of Ukrainian banks. Withdrawal is allowed after accumulation on the account of UAH 250.

Cash4Brands is another proven service, especially convenient for purchases



from a mobile phone. He has been working for 3 years, during which time he has paid about UAH 25 million. You can also register through the social network or by going to the official website. After registration you need an e - mail confirmation. After registering, you will need to see the instructions for using the service in your personal account, after which you can proceed to shopping.

The service has a convenient and clear system for increasing the percentage of cashback depending on the amount of your purchases. 150 hryvnias spent on shopping will give you a bronze medal and a supplement to the cashback from 5 to 10%, 1000 hryvnias will give you "silver" and an increase in cashback to 10-20%. After spending UAH 5,000, you will receive "gold" and 30%, and UAH 10,000 will allow you to acquire the status of "Premium" and return up to 68% of the purchase amount.

Together, the service allows you to receive cashback in the amount of:

- 1) 1.6-12.69% when buying phones;
- 2) 3.1-5.21% when buying everything else.

You can display on WebMoney (without a minimum amount), top up your mobile phone, and on a Visa and MasterCard.

There are many sites that offer cashback services. Some work only with stores in a certain country, others are international such as:

TopCashback. Users of the service can receive cashback from more than 3,500 stores worldwide. Unlike other sites, TopCashback allows you to withdraw any amount from your own account, and it also has a special support center, where you and 6 million other users will be sure to help.

BeFrugal.com. One of the best cashback sites, which works with more than 4,000 stores, including the top 500 in the world ranking and helps save, on average, up to \$ 27 per order. Refunds are made within 7 days, you can receive them via PayPal or in the form of Amazon gift cards.

All this is very profitable and pleasant, so every year the number of people who buy online and use online cashback services is increasing. In addition to buying goods online, people also go to shops, supermarkets, refuel at gas stations, buy flowers, medicines, visit cinemas and often pay by card.

It is convenient, safe, and often profitable to use payment cards for payments. When choosing a bank card, customers pay attention to service fees and the opportunity to receive additional bonuses. The most popular reward option is cashback. Therefore, having two or three cards of different banks in the wallet for Ukrainians has become the norm to use each of them with the maximum benefit for different payments.

A classic of the genre is the standard version of cashback, when a fixed percentage of the amount spent is charged for the purchase of certain goods or services. However, in this case, the customer is faced with a number of restrictions on the number and range of product categories, as well as the maximum amount of payments per month.

Currently, the main competitor to standard cashback is loyalty bonus programs, when a percentage of the money spent is accumulated in the form of bonuses that can be monetized at a convenient time. In this case, there are no special limits - the more



often the customer pays by card and the more he spends, the more he earns bonuses. We will analyze the cashback bank services Alfa-Bank Ukraine: Maximum card and Cash`U CLUB.

Therefore, the "Maximum" credit card from February 1, 2019 joined the bank's loyalty program - Cash'U CLUB. If earlier cashback (up to 5%) was charged exclusively for purchases in 3 categories - restaurants, gas stations and retail chains and only for the use of credit funds, and the maximum amount was only UAH 500 per month, now with the help of "Maximum" the customer returns up to UAH 10,000 per month, and the maximum cashback reaches 20%.

The Cash'U CLUB has a bonus system. It does not matter whether the client uses credit or own funds - for every 2 hryvnias spent, 1 bonus will be accrued. You can exchange them for money at any time through the Alfa-Mobile Ukraine application at the rate: 1 bonus = 1 kopeck. This is a standard calculation. But there are additional conditions in the program, with which the bonus account grows much faster. These are advanced categories of purchases - "SUPERbonuses", according to which bonuses are multiplied by a certain factor. For example, in February in the "SUPER bonus" category "Flowers and Garden" cashback will be 20%, as the standard bonuses in it are multiplied by 40.

In the table 3 shows a comparative analysis of the considered cashback services according to the main criteria.

Comparative analysis of cashback services

Table 3

Comparative unarysis of cusinductive vices				
Criterion	Cashback service			
Criterion	LetyShops	Kopicot.by	Cash4brands	
The average				
duration of	30 days	60 days	from 14 days	
cashback approval			1	
The minimum	15 BYN	15 BYN	1 BYN	
payment amount	IJDIN	IJ DIN	IDIN	
Availability of	+	+	+	
browser extensions	٢	Г	F	
Availability of a	+		+	
mobile application	1	-	l	
	Visa, Mastercard,		Visa, Mastercard,	
Withdrawal of	Qiwi, Paypal,	Visa, Mastercard,	Qiwi, Paypal,	
funds	WebMoney,	Qiwi, cellphone	WebMoney,	
	cellphone		cellphone	
~ ^ 11 1	1 1 1 . 0			

Source: formed by the author on the basis of data [12, 13, 14]

The percentage of cashback was not used as a criterion for comparison, as for different stores and products it may differ, which objectively assess the cashback service.

A new tool in the field of cashback in Ukraine is that from January 10, 2020, the Ukrainian startup "Penalties UA" with the cooperation of the Ministry of Infrastructure launched the service "Safe Driving", which determines the level of driving safety and charges cashback for violations. insurance [15]. The driver needs to turn on this service while traveling, and with careful use, for speed, without sudden



braking and talking on the phone, cashback is charged - up to 18% of the sum insured. The size of the discount depends on the driving style. This tool aims to reduce the number of accidents on the roads of Ukraine. Today the service is used by about 10,500 people.

Visa's offer for cashback in bitcoins is interesting. In the summer of 2019, Visa launched a block chain-based payment service for corporate clients. And already in May 2020, the company left an application for "digital fiat currency", ie, cryptocurrency, which will be issued by a centralized body.

The development of the history of Visa with cryptocurrencies did not end there. In December 2020, the company announced its plans to launch a credit card with the startup BlockFi, which will issue cashback in bitcoins.

This product will change the landscape for earning bitcoin in several major ways:

- It's the first credit card in the crypto ecosystem and the first time the bitcoin logo has been featured prominently on a physical card.
- The 1.5% rate is the highest bitcoin rewards rate available for any card product in the market and accrues with every purchase.
- The \$250 bonus in bitcoin returns \$50 in bitcoin above the \$200 annual fee after spending \$3,000 on the card in your first three months.

Consumers prefer credit cards over debit cards for the numerous benefits that they offer, including better purchase protections, greater reward rates, and opportunities for building credit.

We hope this card will be a valuable personal financial tool for our clients to earn bitcoin while making everyday purchases. Additionally, we hope it helps expose more people to bitcoin and ultimately creates more bitcoin owners.

BlockFi is currently collecting applications for the card, but this service is available only to users of the service in the United States with further implementation in other markets [16].

Here are 10 main criteria that should be considered when choosing a cashback service. The criteria are in order from the most important to the most insignificant [17].

- 1. Cashback rate.
- 2. Reliability.
- 3. Multicurrency.
- 4. Minimum withdrawal threshold.
- 5. Options and withdrawal commission.
- 6. Browser extensions.
- 7. Promotions and promo codes.
- 8. Loyalty program.
- 9. Mobile applications.
- 10. Ease of navigation and completeness of information.

First of all, it is important to consider the size of the cashback, because you want to return the money as much as possible. Of course, it is important to consider reliability. To do this, a rating of cashback services has been created that work honestly and can be trusted. It is also important to take into account the minimum



withdrawal threshold, because in some services it can be quite high and if you rarely shop online, then such services will not work. At the same time, often the top cashback services hold various promotions for their users, as well as provide promo codes for a higher percentage of cashback. Undoubtedly, this is an advantage and it is worth paying attention to. An important component is the loyalty program. However, it is important to keep in mind that the cashback service will provide low rates if it has a loyalty program [17].

As for the situation in the world, we can say that some large world banks also provide cashback, but they include one category with a high rate of return. In this case, the leaders of the bank and some leaders of one industry enter into a contract under which it is profitable for them to cooperate and it is profitable for consumers to buy. This is a positive point, because no one forbids the use of another bank in another area that provides cashback in this area. Therefore, if domestic banks take into account the importance and benefits of cashback service, then the amount of funds coming to the bank and the number of consumers who will become customers in the future will increase accordingly [10].

Conclusions.

Thus, cashback is a tool that works in the form of a refund of part of the amount purchased over the Internet goods or services. Cashback is an incentive to attract customers to online stores and banking institutions. Therefore, online services and banks around the world have begun to include this attractive service in their activities on a large scale: the use of cashback services, buying goods online, making purchases with bank cards, which accrue a percentage of cashback when paying with these cards - all this development of e-commerce and mobile commerce and stimulates the development of the economy as a whole.

The range of Ukrainian cashback services is also small. The growing share of online stores with cashback in Ukraine will increase the demand for such services. Incentives to attract new customers and buyers will be to increase the percentage of cashback, simple withdrawal of funds without restrictions. When creating startups and new projects, the state should take into account the possibility of a cashback function, which will serve to promote this tool among citizens. The mechanisms of application and conditions for providing cashback in Ukraine need further refinement in order to demonstrate the exceptional benefits of using cashback by buyers.

From a practical point of view, it can be noted (on the example of a Monobank card) that a significant advantage is the availability of cashback because each month it provides an opportunity to choose two categories of goods and services for which cashback will be charged. Its size depends on the categories. Currently, the maximum - 10% - are given for payments in public transport, entertainment and spending on "beauty". The categories themselves can be changed once a month. The minimum amount for cashback withdrawal is UAH 100.

Therefore, if the client has not collected such an amount in a month, it does not burn and moves on to the next month. There are no restrictions on the timing of the accumulation of cashback. In practice, the category of products and flowers is almost always chosen, because often paying by card in institutions of this field - interest is returned. Hearing offers and information about cashback, consumers are skeptical



that this is even possible because the first thoughts are that it is impossible to buy something and to return at least the minimum amount of money, but the cashback service works. The study showed that the use of cashback is effective and profitable for all participants in this process, so it can be argued that the future of it and cashback service is the next stage in the development of e-commerce.

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Анотація. У суспільстві, яке швидко розвивається, люди все частіше роблять покупки через інтернет. У зв'язку з цим виникла необхідність ознайомитися з можливістю економії не тільки часу, а й коштів при покупці через інтернет. Стаття присвячена дослідженню розвитку кешбеків та кешбек-сервісів, аналізу вітчизняного та зарубіжного ринків кешбеків. Визначено, що на даний момент існує два напрямки кешбек: банківський кешбек і спеціальні сервіси кешбек. Проаналізовано динаміку приросту користувачів кешбеком у світі та обтрунтовано схему роботи кешбек-сервісів. Аналіз сучасного стану ринку кешбеку в Україні встановив, що коло українських кешбек-сервісів не ϵ великим. Можливість зростання частки інтернет-магазинів з кешбеком в Україні даватиме поштовх на збільшення кількості даних сервісів. Гарним кроком в даному напрямку буде підвищення відсотків кешбеку при купівлі в мережі інтернет, не складне виведення коштів без обмежень з кешбек карток. Відсутність плати за річне користування картками з функцією кешбеку також слугуватиме залученню нових клієнтів до кешбек-сервісів та покупиів до інтернет-магазинів. Проведено аналіз результатів роботи інтернет кешбек сервісів та банк кешбек сервісів. Наведено ряд переваг кешбек сервісу, який дає підстави стверджувати, що це ϵ наступним ефективним етапом розвитку електронної комерції в Україні та світі.

Ключові слова: електронна комерція, кешбек, кешбек-сервіси, кешбек-картка, інтернет-магазин.

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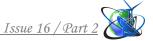
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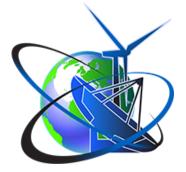
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