

INNOVATIONS AS THE MAIN LEVER OF A BUSINESS ENTITY IN INCREASING
 INVESTMENT ATTRACTIVENESS

DOI: 10.32620/cher.2019.2.04

Formulation of the problem. The problem of increasing the investment activity of an enterprise is quite relevant, since in a developing economy, investment is a financial resource, on the basis of which enterprises can build their long-term strategic policy. *The purpose of the research* was to develop methodological, scientific-practical recommendations for assessing and increasing the investment attractiveness of a service enterprise, taking into account the impact of innovative implementations. *The object of research.* The article focuses on the innovation of the process equipment of the installation for automatic heat treatment of welded joints by conducting a comparative analysis of the possibilities available. *The hypothesis of the research.* The concept of the utility of investments may include the realization of investment goals that are different from the only possible behavior of an economic agent in the neoclassical theory of goal — maximizing profit or income. *The methods used of the research* were the practical side of the built relationship between the population and authorities at all levels. *The statement of basic materials.* The actual implementation of the obtained research results determines the novelty of the type of service on the Kazakhstan market, in particular, the city of Ust-Kamenogorsk and the East Kazakhstan region. In addition, the article recommends ways to improve the efficiency of the research object, allowing to obtain a significant economic effect and investment attractiveness of the business entity, the presented project is beneficial and expedient for implementation in the production process. *The originality and practical significance of the research.* The effectiveness of the project can be determined by calculating the net present value of the project, the profitability index and the payback period of the project. *Conclusions.* The payback period, taking into account discounting, is the period from the initial moment to the “payback time, including discounting.” The payback time with discounting is the earliest time in the billing period, after which the net present value of the investment becomes, and in the future remains non-negative.

Key words:

investment activity, innovation process, customer service for goods, quality of service.

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ІННОВАЦІЇ ЯК ОСНОВНИЙ ВАЖІЛЬ СУБ'ЄКТА ГОСПОДАРЮВАННЯ В ПІДВИЩЕННІ ІНВЕСТИЦІЙНОЇ ПРИВАБЛИВОСТІ

Постановка проблеми. Проблема підвищення інвестиційної активності підприємства є досить актуальною, оскільки в економіці, що розвивається, інвестиції є фінансовим ресурсом, на основі якого підприємства можуть будувати свою довгострокову стратегічну політику. *Метою дослідження* є розроблення методологічних, науково-практичних рекомендацій щодо оцінки та підвищення інвестиційної привабливості сервісного підприємства з урахуванням впливу інноваційних реалізацій. *Об'єкт дослідження.* Стаття присвячена нововведенням технологічного обладнання установки для автоматичної термообробки зварних з'єднань шляхом проведення порівняльного аналізу наявних можливостей. *Гіпотеза дослідження.* Поняття корисності інвестицій може включати реалізацію інвестиційних цілей, які відрізняються від єдиної можливої поведінки економічного агента в неокласичній теорії мети – максимізації прибутку або доходу. *Методи дослідження* включають практичну сторону побудованих відносин між населенням і владою на всіх рівнях. *Виклад основного матеріалу.* Фактична реалізація отриманих результатів дослідження визначає новизну виду послуг на казахстанському ринку, зокрема, місто Усть-Каменогорськ та Східно-Казахстанська область. Крім того, у статті рекомендуються шляхи підвищення ефективності об'єкта дослідження, що дозволяє отримати значний економічний ефект і інвестиційну привабливість суб'єкта господарювання, представлений проект є вигідним і доцільним для впровадження у виробничий процес. *Оригінальність і практичне значення дослідження.* Ефективність проекту може бути визначена шляхом розрахунку чистої поточної вартості проекту, індексу прибутковості та терміну окупності проекту. *Висновки.* Термін окупності, з урахуванням дисконтування, є періодом від початкового моменту до "часу окупності, включаючи дисконтування". , а в майбутньому залишається неотрицательним.

Ключові слова:

інвестиційна діяльність, інноваційний процес, обслуговування клієнтів товарів, якість обслуговування.

ИННОВАЦИИ КАК ОСНОВНОЙ РЫЧАГ СУБЪЕКТА ХОЗЯЙСТВОВАНИЯ В ПОВЫШЕНИИ ИНВЕСТИЦИОННОЙ ПРИВЛЕКАТЕЛЬНОСТИ

Постановка проблемы. Проблема повышения инвестиционной активности предприятия является весьма актуальной, поскольку в развивающейся экономике инвестиции являются финансовым ресурсом, на основе которого предприятия могут строить свою долгосрочную стратегическую политику. *Целью исследования* являлась разработка методических, научно-практических рекомендаций для оценки и повышения инвестиционной привлекательности сервисного предприятия с учетом влияния инновационных реализаций. *Предмет исследования.* Статья посвящена инновациям технологического оборудования установки автоматической термической обработки сварных соединений путем проведения сравнительного анализа имеющихся возможностей. *Гипотеза исследования.* Концепция полезности инвестиций может включать реализацию инвестиционных целей, которые отличаются от единственно возможного поведения экономического агента в неоклассической теории цели – максимизации прибыли или дохода. *Методы исследования* были практической стороной выстроенных отношений между населением и властью на всех уровнях. *Изложение основных материалов.* Фактическая реализация полученных результатов исследования определяет новизну вида услуг на казахстанском рынке, в частности, в городе Усть-Каменогорске и Восточно-Казахстанской области. Кроме того, в статье рекомендуются способы повышения эффективности объекта исследования, позволяющие получить значительный экономический эффект и инвестиционную привлекательность субъекта хозяйствования, представленный проект является выгодным и целесообразным для внедрения в производственный процесс. *Оригинальность и практическая значимость исследования.* Эффективность проекта может быть определена путем расчета чистой приведенной стоимости проекта, индекса рентабельности и срока окупаемости проекта. *Выводы.* Период окупаемости с учетом дисконтирования - это период от начального момента до «времени окупаемости, включая дисконтирование». Срок окупаемости с дисконтированием - это самое раннее время в расчетном периоде, после которого чистая приведенная стоимость инвестиций становится и в дальнейшем остается неотрицательным.

Ключевые слова:

инвестиционная деятельность, инновационный процесс, обслуживание клиентов по товарам, качество обслуживания.



Formulation of the problem. A successful business, results of work and long-term viability of any enterprise depends on a continuous sequence of reasonable management decisions. Each of these decisions ultimately has economic implications for the operation of the enterprise. In essence, the process of managing any enterprise is a series of economic decisions. Some decisions are major, such as investing in new equipment, borrowing large sums of money or manufacturing new products and providing new services. Most of the other decisions are part of the day-to-day process of managing all departments of an enterprise. Common to all decisions is the basic principle of “economic compromise,” according to which, before each decision, the manager must weigh the benefits, costs, and alternatives.

One of the most important areas of activity of any enterprise is investment operations, i.e. operations related to the investment of funds in the implementation of projects that will ensure that the enterprise benefits in a sufficiently long period of time. Entrepreneurial activity is the manufacture of products or the provision of services aimed at making a profit. In order to achieve more efficient business conditions, the constant implementation of new projects and ideas is necessary. Proper assessment of the investment attractiveness of an enterprise enables an enterprise to receive stable income, make informed decisions and remain competitive for a long time.

Analysis of recent research and publications. The economic evaluation of any investment project must take into account the peculiarities of the market, in particular the mobility of many parameters characterizing the project, the uncertainty of achieving the final result, the subjectivity of interests of various project participants and, as a result, the multiplicity of criteria for its evaluation [1].

Also no less important for the study is the term “investment attractiveness” Different points of view of economists on the nature and content of investment attractiveness are considered. Currently, the terms “investment attractiveness”, “investment potential” and “investment climate” are widely used in modern economic and management literature. In some sources, these concepts are used as synonymous, in others - with different semantic content.

Traditionally, the concept of "investment attractiveness" means the existence of such investment conditions that affect the investor's

preferences in the choice of an investment object. The principal disadvantage of such a traditional approach is that the investment attractiveness is viewed as certain given, with little or no suggestion of the possibility of active change. More precisely, the economic essence of investment attractiveness is given in the definition of L. Valinurova and O. Kazakova. They understand by the term set of objective characteristics, properties, assets and opportunities that lead to potential effective demand for investment. Such a definition is broader and allows to take into account the interests of any participant in the investment process.

There are other points of view (including L. Gilyarovskaya, V. Vlasova and E. Krylov and others) when investment attractiveness refers to an assessment of the effectiveness of using own and borrowed capital, analysis of solvency and liquidity (a similar definition is the structure of own and borrowed capital and its placement between different types of property, as well as the effectiveness of their use).

In theoretical and methodological research and financial management, the concept of “investment attractiveness” is common along with the definitions of “investment climate”, “investment preference”, “investment attractiveness of climate” and others, characterizing the strategy of developing an investment orientation one way or another (Table 1).

The purpose of the article is to analyze innovations as the main lever of a business entity in increasing investment attractiveness.

The statement of basic materials. Systematization of approaches to investment attractiveness from the point of view of various economic scientists shows that the main points discussed are:

1 Determining the place and role of investment attractiveness in the financial management system - is the investment attractiveness functional and subordinate to other strategic areas of development or is it a corporate-wide strategy for enterprises engaged in the development and implementation of investment projects.

2 Recognition of the isolation of investment attractiveness on the mechanisms of its formation and implementation in view of the features of intra-company organization and resources, the use of scientific and technological base and multi-factor nature of the results of investment activities directly dependent on the "human factor".



The concept of "investment attractiveness of the enterprise" from the point of view of various authors

Author	The concept of investment attractiveness
M.N. Kreinina	Investment attractiveness depends on all indicators characterizing the financial condition. However, if the problem is narrowed down, investors are interested in indicators that affect the profitability of the enterprise's capital, the stock price and the level of dividends.
E.I. Krylov	Investment attractiveness - is an independent economic category, characterized by the stability of the financial condition of the company, return on capital, stock price and the level of dividends paid; Investment attractiveness is also formed due to the competitiveness of products, customer-oriented enterprise, expressed in the most complete satisfaction of consumer needs.
I.S. Kradinov	The investment attractiveness of an enterprise is a system of economic relations between business entities regarding the effectiveness of business development and maintaining its competitiveness on the basis of its own and attracted capital.
G.S. Staroverov	Investment attractiveness is a generalizing characteristic of the advantages and disadvantages of individual investment objects from the perspective of a particular investor according to the criteria he forms.
V.M. Tarasov	The investment attractiveness of the industry is an objective economic category, characterizing the totality of funds that determine the investor's behavior relative to the industry, at a particular point in time.
A.V. Denchuk	The investment attractiveness of industrial enterprises is a component of the methodological support for the intensification of investment activities. The content of the investment attractiveness of an enterprise is the economic or socio-economic feasibility of investment, based on coordinating the interests and opportunities of the investor and the recipient of investments (including the issuer), which ensures the achievement of the goals of each of them an acceptable level of return and risk investment.
I.V. Goncharenko	Investment activity is a part of business activity, since the task is not only to receive capital from the investor, but to dispose of it, to make a profit; Investment or investment resources are capital intended for the production of goods and services.
D.V. Veseloe	The term "investment attractiveness of an enterprise" can be considered in two ways: - in a "broad" sense, determined on the basis of a combination of all factors that influence the investment attractiveness of an enterprise (country, industry and operating at the level of the enterprise itself); - in the "narrow" sense, determined on the basis of factors operating at the level of a particular analyte enterprise.
M.M. Stanekova	Investment attractiveness - is the presence of economic effect (income) from investing free cash in corporate securities with a minimum level of risk. It is possible with the help of market activity indicators to evaluate investment attractiveness.
G. Pribytkova	The investment attractiveness of an organization is a generalized characteristic from the point of view of prospects, profitability, efficiency and minimization of the risk of investing in development at the expense of the organization's own funds and attracted funds from investors.
I.M. Volkov, V.Grachev	The investment attractiveness of the industry is a combination of various objective characteristics, properties, means and capabilities of the industry, which determine the effective demand for capital-forming investments of a specific industry; The investment attractiveness of the economy - the improvement of investment legislation, the stabilization of the banking system, the provision of tax incentives, the protection of investors' rights, informational openness.
N.V. Smirnova	Investment attractiveness is an assessment of the objective possibilities of the state of the object and directions of investment, which is formed during the preparation of the investor's decision making.
V.V. Glukhov, T.P. Nekrasov	Investment attractiveness is a function of the innovation potential.
LeThiThuyNga	Investment attractiveness as a set of objective financial and economic characteristics, values and indicators of the state of an object for a specific date, meeting the requirements of each type of investors in terms of the "return-risk" ratio for investing in the respective categories of objects provided that the achievement of the investor's goals over a certain period of time.
FamNgocThang	The investment attractiveness of an enterprise means an economic category characterizing the efficiency of using the enterprise's assets, its solvency, financial stability, ability for innovative development on the basis of increasing capital yield, technical and economic level of production, quality and competitiveness of products.

Source: compiled by the authors based on [2 – 6]



3 Justification of the degree of centralized state regulation and the formation of the main institutions of the investment process development.

4 Inclusion of the investment attractiveness of the business entity in the number of priority directions of the socio-economic system and the predestination of the rationally oriented nature of the investment strategy instead of the technocratic and administrative approaches.

Among the most significant differences pointing to the institutional nature of the category “investment – enterprise attractiveness”, we note the following:

1. The category “utility”, considered in the context of investment decisions, is more significant than this category, understood in the traditional, narrowly neoclassical sense.

The concept of the utility of investments may include the realization of investment goals that are different from the only possible behavior of an economic agent in the neoclassical theory of goal — maximizing profit or income. For example, one of the modern directions of the new institutional economic theory is the agreements economy (conventionalism) provides for several possible modalities of actions in the system of various ways of coordinating the activities of economic agents. From this it follows that the utility of investment decisions can be assessed from different angles, dictated by different modalities of action. Thus, the neoclassical principle of maximizing profits and income can only be a private version of the mechanism of goal-setting when planning investments from a variety of possible alternatives.

2. The subjectivism of the category “investment attractiveness of an enterprise” is limited by objective frameworks, in contrast to the subjectivism of the category “utility” in the traditional sense. Investors' expectations regarding the achievement of their goals - initially subjective - are expressed in certain assessments. And the procedure for assessing investment attractiveness is governed by certain rules and regulations, that is, it has an institutional nature.

Therefore, as a result of the appraisal process, the objectification of investors' expectations occurs: the range of possible expectations is limited by the framework of the objective procedure of the appraisal procedure [7].

In modern, rapidly changing socio-political and economic conditions, the enterprise faces the challenge of ensuring not only survival, but also continuous development, and realizing

the existing potential in the future. Issues of strategic behavior of economic entities of particular importance: the profitability of products and the investment attractiveness of enterprises largely depend on the ability of producers to respond flexibly to the dynamic movement of the market, to use its market conditions and pricing mechanism, information technology and communications.

As one of the measures to increase the investment attractiveness of SAEM-Service-A LLP (object of study), it is proposed to introduce an induction heating unit for the automatic heat treatment of welded joints ELISIT-80TX-5FC.

This is facilitated by a number of reasons:

- firstly, it is the automation of the process of heat treatment of pipelines;
- secondly, the reduction of electricity consumption in comparison with the previous installation "Transformer throttle TD-500" almost doubled;
- thirdly, it is an innovation for the service company in the field of repair and installation work.

At the moment, the installation “Transformer throttle TD-500” is in operation at the enterprise.

Comparative characteristics of the installation “Transformer throttle TD-500”, which the company had during the period under review (2015-2017) and the installation “ELISIT-80TX-5FC”, which the company is offered to introduce “SAEM-Service-A” in 2018 are presented in the table 2.

Disadvantages of the installation “Transformer throttle TD-500” in comparison with the installation “ELISIT-80TX-5FC”:

- difficult to manufacture, maintain and repair;
- requires a large layer of thermal insulation;
- requires more time for installation and operation;
- takes a long time to cool;
- requires a lot of time and effort to remove the insulation.

The “ELISIT-80TX-5FC ”installations include induction heating of the upgraded “ELISIT” series, which has all the advantages of modern industrial equipment:

1. High efficiency.

2. Heating of modern power elements (high efficiency) eliminates the need for a specialized cooling station.



Table 2

Comparative characteristics of the installations “Transformer choke TD-500” and “ELISIT-80TX-5FC”

The name of the indicator, unit of measurement	“Transformer throttle TD-500”	“ELISIT-80TX-5FC ”
Purpose	Heat treatment of pipelines	Automatic heat treatment (annealing, tempering) of welded joints of high-pressure pipelines; heating of pipe ends before welding, preheating.
Rated power kW	40	80
Supply network	380 V, 50 Hz, 3 phases	380 V, 50 Hz, 3 phases
Heating time	Permanent	Heating is gradual. The heating and cooling time can be adjusted.
Power cable for connecting the inductor, m	50-60	20
Temperature control, number of thermocouples	2	1
Heating temperature, C°	Up to 275	up to 850

Source: compiled by the authors

3. Low losses of the transformer-capacitor unit are provided by using cores of amorphous nanocrystalline alloys, as well as capacitors with a small tga .

4. High reliability is provided by nine types of protection and unique circuit solutions based on modern components.

5. Low maintenance costs.

6. Light weight and size.

7. Easy to connect and maintain.

8. 100% ready for operation, no need for commissioning.

9. Convenient and intuitive interface with the operator.

10. Availability of a built-in programmable timer and the possibility of connecting exter-

nal temperature sensors (pyrometer, contact sensors) to control the heating.

11. A memory for 30 modes of operation.

12. Wide opportunities for automation, connecting external devices and programming the algorithm of their work.

13. Easy to integrate into an existing process line.

14. The use of modern materials for insulating inductors.

As a result of these advantages, the company has to follow the increase in productivity, decrease downtime, saves electricity, and reduces the influence of the human factor.

The cost of purchasing a new installation is presented in Table 3.

Table 3

The cost of the purchase of "ELISIT-80TX-5FC"

Equipment identification	Capital costs, thousand tenge	Service time	Depreciation, thousand tenge
"ELISIT-80TX-5FC"	4580	10	458

Source: compiled by the authors

Capital expenditures for the purchase of the “ELISIT-80TX-5FC” unit amount to 4,580 thousand tenge. The service life is 10 years with depreciation of 458 thousand tenge. The company plans to perform the installation "ELISIT-80TX-5FC" up to 170 joints per year. The main indicators of the services of automatic heat treatment of welded joints for 2018 are presented in Table 4.

Comparative calculations of revenues before and after the purchase of the installation for the automatic heat treatment of the ELISIT-80TX-5FC pipelines are presented in Table 5.

The table shows that after the introduction of the automatic heat treatment of the ELISIT-80TX-5FC pipelines, revenues increased by 1,414,280 tenge (22.7%), costs decreased by 85,113 tenge (16.3%), profits increased by 22,656,600 tenge (220, 2%).



Table 4

The main indicators of the service of automatic heat treatment of welded joints with the installation "ELISIT-80TX-5FC" for 2018

The name of the indicator, unit of measurement	2018-year
1 Revenue from the provision of 1 service, tenge	45000
2 Cost of 1 service, tenge, including:	25623
2.1 Salary of 1 worker	4180
2.2 Electricity costs	312,01
2.3 Inventory	21131
Profit from the provision of 1 service, tenge	14377
Number of welded joints, pcs.	170
Revenue from the provision of services, tenge	7650000
Cost of services, tenge	4355910
Profit, tenge	3294090

Source: compiled by the authors

Table 5

Comparative table of revenues with the installation "Transformer throttle TD-500" and after the purchase of "ELISIT-80TX-5FC"

Indicators, tenge	Before	After	Δ
Income	6235720	7650000	1414280
Expenses	5207230	4355910	-851320
Profit	1028490	3294090	2265600

Source: compiled by the authors

The cost reduction occurred due to the reduction of electricity costs (by almost 2%) and due to the refusal of services from contractors for the control of pipeline joints. The profitability of sales (the ratio of profit to revenue) services for automatic heat treatment of welded joints of high-pressure pipelines using the ELISIT-80TX-5FC installation is calculated:

$$R_{S(2018)}^{sub} = \frac{3294090 \text{enge}}{7650000 \text{enge}} \cdot 100\% = 43,06\%$$

The profitability of sales (the ratio of profit to revenue) of the service of automatic heat treatment of welded joints using the "Transformer throttle TD-500" installation is calculated:

$$R_{S(2018)}^{sub} = \frac{1028490 \text{enge}}{6235720 \text{enge}} \cdot 100\% = 16,49\%$$

Thus, the profitability of sales of services for automatic heat treatment of pipelines from the installation "ELISIT-80TX-5FC" is higher than the profitability of selling services from the installation "Transformer throttle TD-500" by 26.57%. This is a very good indicator, which is obviously significant already in the first year of operation of the new installation. In 2019, the number of welded joints performed by the automatic thermal treatment unit "ELISIT-80TX-5FC" is planned to increase by 8-10%, and then in subsequent years to increase by 10-15% until 2022. Following from the increase in the number of welded joints using a three-period moving average, we make a forecast of revenue from the provision of services until 2022 (Table 6).

Table 6

Net profit forecast

Period	Revenue from the provision of services, tenge	Forecast
1-quarter of 2018	1530000	-
2-quarter of 2018	1912500	1785000
3-quarter of 2018	1912500	2040000
4-quarter of 2018	2295000	4102500
Year 2019	8100000	6465000
Year 2020	9000000	9000000
Year 2021	9900000	9900000
Year 2022	10800000	6900000

Source: compiled by the authors



Following from the increase in the number of welded joints using a three-period moving average, we make a forecast of the cost of services sold until 2022 (Table 7). Using the fore-

cast data from tables 6 and 7, we fill in table 8 and find the estimated profit for the company until 2022.

Table 7

Forecast of the cost of services sold		
Period	Revenue from the provision of services, tenge	Forecast
1-quarter of 2018	871182	-
2-quarter of 2018	1088978	1016379
3-quarter of 2018	1088978	1161576
4-quarter of 2018	1306772	2335963
Year 2019	4612140	3681171
Year 2020	5124600	5124600
Year 2021	5637060	5637060
Year 2022	6149520	6149520

Source: compiled by the authors

Table 8

Dynamics of sales profitability from the installation “ELISIT-80TX-5FC” for forecast periods

The name of the indicator, unit of measurement	Years			
	2019	2020	2021	2022
Number of welded joints, pcs	180	200	220	240
Revenue from the provision of services, tenge	8100000	9000000	9900000	10800000
Cost of services, tenge	4612140	5124600	5637060	6149520
Profit, tenge	3487860	3875400	4262940	4650480
Net profit, tenge	2790280	3100320	3410352	3720384

Source: compiled by the authors

The effectiveness of the project can be determined by calculating the net present value of the project, the profitability index and the payback period of the project.

The discount rate is taken from the calculation of the forecast value of inflation for 2018 - 8% and adjusted for the risk of shortfall in income due to non-approval of the increase in tariffs. The risk adjustment is 5%, so the discount rate is 13%.

$$PV = \frac{7650000}{(1+0,13)^1} + \frac{8100000}{(1+0,13)^2} + \frac{9000000}{(1+0,13)^3} = 19350850 \text{ tenge}$$

$$NPV = 1935080 - 4580000 = 14770850 \text{ tenge}$$

The net present value of the project will be 14770850 tenge, i.e. $NPV > 0$, which means that the project can be considered profitable and accepted.

Control over investments is carried out by quantitative calculation of the return on invest-

ment. The results of the profitability index of investment calculation:

$$PI = \frac{14770850}{4580000} = 3,2$$

The index of profitability of investments was 3.2, i.e. $PI > 1$, which means that such investment of money is profitable and acceptable, in accordance with the chosen discount rate.

The simple payback period of the project is 8 months, which means that the implementation of this project will pay off in the third quarter of 2018. A simple payback period is a widely used indicator for assessing whether initial investments will be repaid during the life cycle of an investment project.

Conclusions and prospects for further research. The payback period, taking into account discounting, is the period from the initial moment to the “payback time, including discounting.” The payback time with discounting is the earliest time in the billing period, after which the net present value of the investment becomes, and in the future remains non-negative. The dis-



counted payback period of the project is 10 months.

Thus, the simple payback period for new services of the enterprise will be 8 months. Discounted payback period is 10 months. The project of introducing new services at the enterprise is effective, since $NPV = 14770850 \text{ тенге} > 0$, $PI = 3.2 > 1$, the payback period of the project is small, which means it is an economically profitable investment of money that will bring profit. The implementation of this project will increase the investment attractiveness of the object of study.

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Стаття надійшла
до редакції : 01.03.2019 р.

Стаття прийнята
до друку: 26.06.2019 р.

Бібліографічний опис для цитування :

Madiyarova E. S. Innovations as the main lever of a business entity in increasing investment attractiveness / E. S. Madiyarova, L. I. Sorokina, G. T. Kunafina, G. I. Islyam // Часопис економічних реформ. – 2019. – № 2 (34). – С. 35–43.

