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METHODOLOGY FOR DETERMINING THE ECONOMIC EFFICIENCY OF IMPLEMENTING THE INNOVATIVE MODEL

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Abstract

Using the traditional method, calculations were carried out to determine the effect achieved as a result of implementing unified innovative technological processes for freight loading stations. It should be especially noted that the degree of distribution of the result or damage received between the parties between the railway transport and the client is important. These distribution levels indicate the need to use a method for determining economic efficiency based on the use of differentiated tariffs.

Keywords: Innovation, innovative activity, economic efficiency, investment, integration, innovative technological process, differentiated tariff.

Introduction

INNOVATSION MODELNI JORIY ETISHNING IQTISODIY SAMARADORLIGINI ANIQLASH USLUBIYATI

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Annotatsnya:
An’anaviy usuldan foydalanib, tovarlarni ortish stantsiyalari uchun yagona innovatsion texnologik jarayonlarni amalga oshirish natijasida erishilgan samarani aniqlash bo‘yicha hisob-kitoblar amalga oshirildi. Shuni alohida ta’kidlash lozimki, tomonlar o‘rtasida olingan natijani yoki zararni temir yo‘l transporti va mijoz o‘rtasida taqsimlash darajasi muhim hisoblanadi. Mazkur taqsimlash darajalari differentsiyalangan tariflardan foydalanish asosida iqtisodiy samarani aniqlash uslubidan foydalanish zaruratini ko‘rsatadi.

Kalit so‘zlar: innovatsya, innovatsion faoliyat, iqtisodiy samaradorlik, investitsiya, integratsiya, nnovatsion texnologik jarayon, differentsiyalashgan tarif.

Research on the development of innovation activity railway transport in the system is proposed to determine the economic efficiency in the implementation of scientific and practical recommendations removable identified the following areas:

– efficiency in transportation of goods and passengers in the first direction and ko'rsatiluvchi evaluated with the result of the quality of the service, that is, the delivery of goods interval 3.3-proposed mechanism of development of innovative activity of railway transport in picture quotes Guaranteed "transport-forwarding to organize the provision of services" approach to reduce a certain amount according to the load chart is provided to passengers while 90-95 80-85% percent complete and on schedule;

– the second direction is selected in the quality of transport efficiency in the organization of activities of the group senders use the shipping and return shipping costs from the buyer of economic activity considered as a comparison to the results that the results achieved in this direction, “the developments in the economic efficiency of the introduction of the parties”, that was doing;

– the third direction in transport efficiency through the effective organization of activities were assessed with the results of the solution of social problems.

That particular it should be noted that, in railway transport, the improvement of efficiency of innovation activity indicators and determine the direction of the above-mentioned three natjasida achieved is to rely on own particular criteria. The main purpose of the introduction of innovative technological processes transpotida single railway is to get the economic benefits and will consider the following cases separately:

– railway transport (S_{tr}) and the client (C_{client}) positive results;
– railway transport enterprise and the customer, in effect equal;
– railway transport enterprises for positive results in the client in the negative;
– railway transport enterprises in negative results, while positive client;
– railway transport enterprise and the client, the result is negative.

The results of the survey, according to the plot of the goods in accordance with the plan of 10 units is sent 24 hours after wagon, before the implementation of the process of technological innovation unique, an average of 20 hours stop the movement of the composition stand in the station of the organization of activity in the 5-person 3 load shows up and technical preparations. Download in single technological innovation process the goods after the introduction of the stop time of the action of the structure to stand 16 hours, 2 people and consists of 2 technical

preparations load up. As a result, achieves to save time 4 hours compared to railway transport, namely $4\ hours * wagon\ 10 = 40\ wagon - hours$. One wagon-if you save hours of 10 thousand dollars for 4 hours you will save 40 thousand dollars on technology, the number of working days in a year that the total result is equal to 8 million caught the 200-day look.

By agreement of the parties, unique considering the process of technological innovation, at the expense of the tariff differentsiyalashgan goods manufacturer directory with save the necessity of controlling the distribution of funds will arise. Differentsiyalashgan rate by the following formula aniqlandi:

$$T_{dif} = \frac{(S_{tr} - S_{client}) * K_{does\ not\ show} * K_{tjbd}}{n * K_{o'k} * R_{the\ number\ of}}$$

here:

S_{tr} – railway transport with the economic results of the enterprises, sum;

$S_{customer}$ – economic effect of the customer, sum;

$K_{does\ not\ show}$ – differentsiyalashgan factor that determine the amount of effect that does not participate in the formation of tariff (0,5-1,0) → 0.7;

K_{tjbd} – koeffisiyenti to complete the technological level (0,5-1,0) → 0.8;

n – the number of wagons yuklanayotgan;

$K_{o'k}$ – change to the station wagons arrived at the station and sending the walking distance between to add to a factor (for each 0.1 of the next 1000 *miles* ha) → 1.05;

$R_{the\ number\ of}$ – working days in a year on technology.

Differentsiyalashgan tariff are defined as follows:

$$T_{dif} = \frac{8\ 000\ 000 * 0.7 * 0.8}{10 * 1.05 * 200} = \frac{4\ 480\ 000}{2\ 100} = 2\ sum\ 133{,}3.$$

According to the results of calculations, the sum is asking 133.3 2 to reduce the tariff. Proceeding from the relations of the participants to determine the factor to be taken on each of worthwhile.

According to the results survey has formed the following conclusions: some the turning point in passenger wagon, depending on the characteristics of the load to connect lokomotivi to stop the drastic reduction allows to increase the effectiveness of their work at the expense of. Goods wagon passenger train at the same time allows to reduce the delivery time of the connection to refrejerator 2 borobarga.

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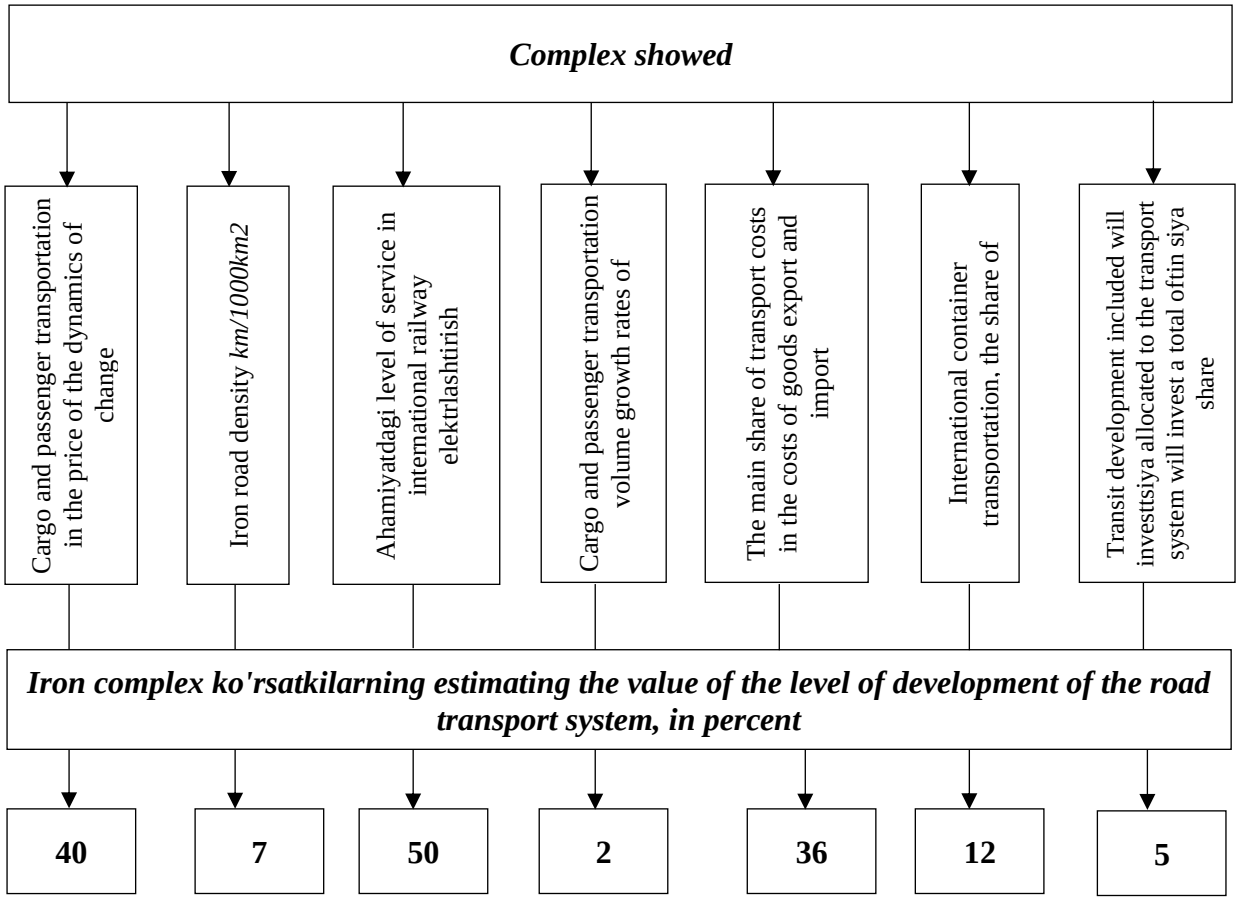
In determining the level of development of railway transport system research complex seven indicators were selected and every one of them rated current norms and values (1-see picture).

Previous chapter 2.3-paragraph quotes on the level of development of railway transport system in the method are defined as follows:

$$Iron_{riv} = \frac{20 * 0.15}{40} + \frac{0.25 * 7}{15} + \frac{0.2 * 45}{80} + \frac{0.25 * 12}{20} + \frac{0.3 * 2}{6} + \frac{0.2 * 10}{36} + \frac{0.25 * 5}{33}$$

$$= 0.075 + 0.113 + 0.112 + 0.15 + 0.1 + 0.05 + 0.037 = 0.637$$



1-picture. Estimating the level of development of railway transport system complex indicators[1]

Opinion in innovative development of railway transport, the proposed model allows to achieve the following results:

– investment portfolio increased from 24 percent to 36 percent, the share of innovation;

[1] Developed by the author based on the studied sources.

– ishare the portfolio of work from 1.6 to scientific research in nvestitsiya 0,9 increased;

– from cargo and passenger transportation will improve 30-35 percent to 40 percent of change in the price of;

– the growth rates of the volume of cargo and passenger transportation will change to 2 percent from 3 percent;

– the main export and import of goods in the costs of transport costs , the share is reduced to 35 percent from 40 percent.

Quotes Dissertatsiyada innovative development of railway transport as a result of the introduction of quotes and proposals and recommendations on the model 2.3-valuation in quotes on again when the paragraph style from the level of development of the railway network 0,637 0,716 ha, i.e. allows to increase to 12-13 percent.

$$Iron_{riv} = \frac{36 * 0.3}{50} + \frac{0.2 * 1.6}{3} + \frac{0.15 * 20}{35} + \frac{0.2 * 10}{30} + \frac{0.3 * 3}{6} + \frac{0.2 * 10}{36} + \frac{0.25 * 5}{33}$$
$$= 0.216 + 0.106 + 0.086 + 0.066 + 0.15 + 0.055 + 0.037$$
$$= 0.716$$

Today 60 tons of goods in transit 1 km. 8,12 usd for the cost of the average distance transportation by rail is required for 1 km of railway transport spent for transit transportation of textile products annual total costs are defined as follows:

$$TX_{ty} = \frac{Q}{60} * 8.12 = \frac{494284}{60} * 8.12 = 66.893\ thousand\ usd.$$

thus,

$TX_{,ty}$ – 1 km for the total annual costs of railway transport;

Q – am in railway transportation in the year 2023 international shipping (textile) size (thousand tons 494,284);[2]

8,12 – 60 tons of goods (textile) 1 km distance to railway transportation average costs.

Another important issue is the need to conduct research on this area in the country today, which poses some of the costs of transport costs in the value of the product imported products 35-40% of the transport of products to the world market as well as spent for the production of the costs from 30% has been increased. A decrease of regulatory costs, allows us to significantly reduce transport costs.

[2] www.stat.uz

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According to the calculations above, the railway thousand usd 66,893 costs were reduced as a result of tariff differentsiyalashgan this indicator, 1 km there is a possibility of saving approximately 23 thousand us dollars for the wages of railway transport.

$$TX_{ty} == \frac{494284}{60} * 5.34 = 43.991\ thousand\ usd.$$

In the second chapter of the research work according to the analysis of total salary costs, the costs of rail transport to the composition of incoming 28,8%. is 50-52 percent in the european union, this figure is equal to. Also, the depreciation of uzbekistan for railway transport costs by 20 percent in the european union, and this figure 6-7 percent. These negative circumstances, negative effects on the competitiveness of the country in the international transportation of railway transport shows. The indicators associated with this activity to be brought to the norms of the value given above, to a certain extent allows you to reduce the transportation costs associated with the activities.

The research was conducted within the framework of the proposed methodological approaches and practical recommendations on the development of innovative activities of railway transport system, improve the competitiveness of railway transport, transport services to users, industry-focused enterprise to reduce the costs of transport. Proposed research innovative models of economic efficiency in the use of removable directions brought railway transport system (2-see picture below):

– innovation – increasing interaction between types of transport and transportation activities which benefits from raqobatdosh serves to increase;

– integration-the transportation of goods and transportation activities in the organization of the synergistic effect increases the effect of the level of risk associated with ensures reduction;

– Single information system activity increases the level of coordination and mutual cooperation;

– interests – that increases the interest of the members;

– the initiative provides for the use of additional opportunities.

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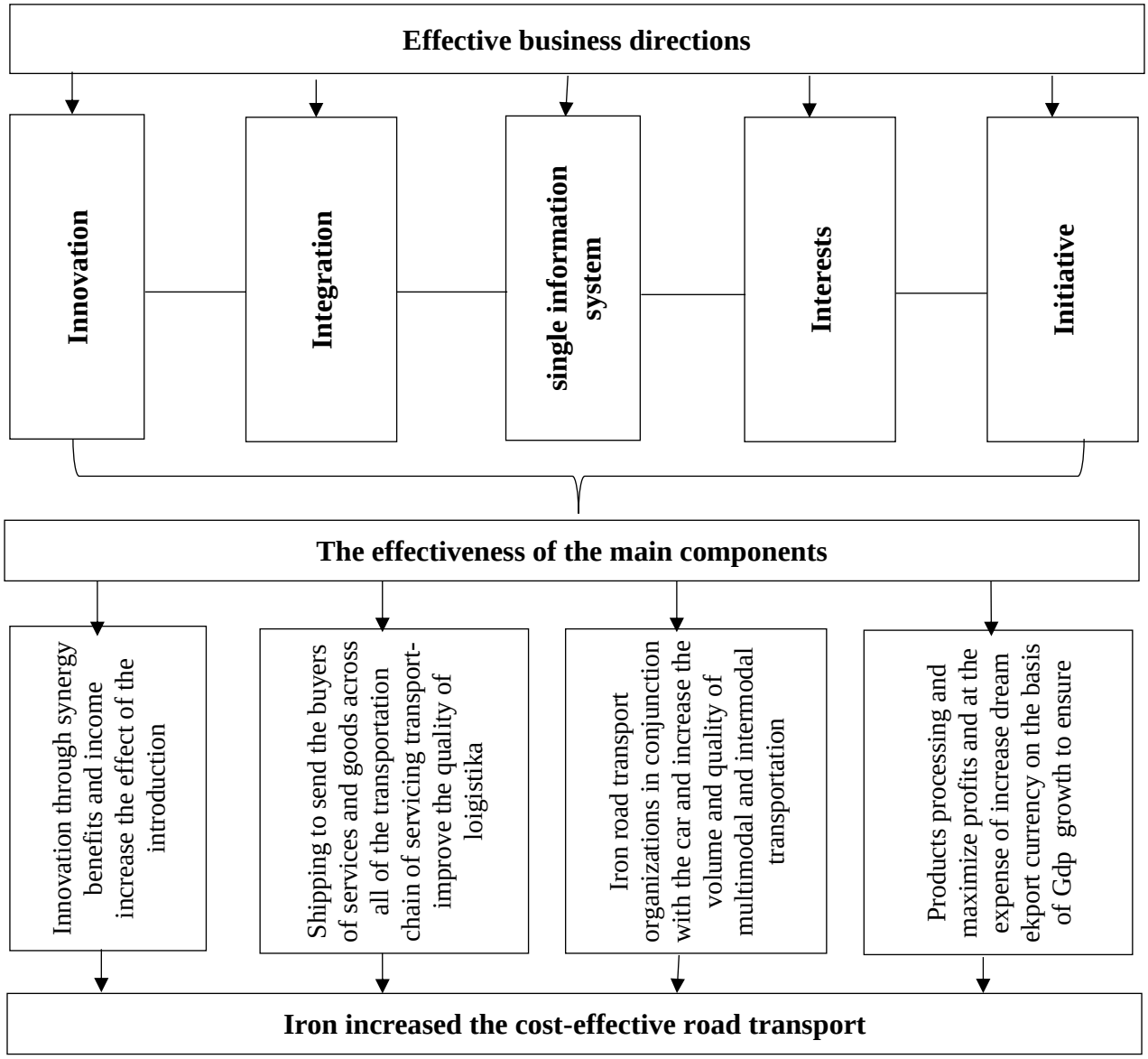

2-picture. The efficacy of the innovative model of the system railway transport directions[3]

The introduction of the innovative model of the system railway transport material costs and spending on wages at the expense of the company as a result of different management efficiency, reduce costs factor is significantly increased. Also, related to the organization of the transportation process that will allow you to reduce time and increase efficiency of the implementation and funds.

Calculations indicate as “Uzbekistan railways” joint-stock company to the

[3] Author's development.

activities of the innovative model of the rail system when it is applied to certain reserves and logistics costs 2-2.Both will be able to reflect the real deals decreased by 5 percent extra. This in conjunction with the reduction of transport costs, the quality of customer services of railway transport improvements and the economic efficiency of the system is achieved.

FOYDALANILGAN ADABIYOTLAR RO‘YHATI

1. Tviss B. Урравлениие научно-техническими инновациями. / Перевод с английского. - М.: Економика, 1989.- 183 с.
2. Lapii V.N. Социальныйе аспекты управления нововведениями. - Таллин, 1981. – 120 с.
3. Fatxutdinov R.A. Инновационный менеджмент. Учебник, 4-йе изд. –СРб.: Ритер, 2003. – 400 с.
4. Medynskiy, V.G. Инновационный менеджмент: учебник / В. МедынскиЙ. – М.: ИНФРА – М., 2008. – 295с.
5. Barsheva, A.V. Инновационный менеджмент: учебнойе пособийе / под ред. А.В. Барышево Й. – М.: Дашков и К, 2007. – 384с.
6. http://www.statistics.uz
7. http://www.railway.uz
8. https://uzrailpass.uz/