The essence of logistics and its barter LBP-provider
THE ESSENCE OF LOGISTICS AND ITS BARTER LBP-PROVIDER
LA ESENCIA DE LA LOGÍSTICA Y SU PROVEEDOR DE TRUEQUE LBP

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Abstract
At the moment, the highest level of supply chain management is 5PL providers, but 6 or 7 PL providers will be needed for logistics barter, or they need to be called logistics barter providers because there must be a completely different, predominant view of the role of logistics and logistics barter in the new economy system. Logistic barter is a some kind of web (system), a spider (operator) is a LBP provider.

The theory of the proposed economy scheme on the basis of logistic barter assumes a developed infrastructure, i.e. a supersystem for supply chain management based on LBP - providers. Yes, there is a question of the “maturity” of logistics functional areas (procurement, production, distribution, transportation and information), i.e. Their ability to adopt new rules of the game in the sphere of another operator of the economy. Logistic barter will be the central unifying link, and the main operators will be the LBP-provider (Gabdullin et al., 2017).

E-commerce, e-auctions, e-sourcing, and e-markets are better integrated under the auspices of logistics barter into an e-integrator, which will be the serving element (one of the tools) of the LBP-provider. E-integrator is an integrator of information and communication technologies for supply chains of logistics barter in the form of electronic means taking into account the closing link - e-commerce and the reverse distribution of added value.

Keywords: Objectivity, Logistic barter, LBP-provider, E-integrator, indifference coefficient, indifference level.

Por el momento, el nivel más alto de gestión de la cadena de suministro son los proveedores de 5PL, pero se necesitarán 6 o 7 proveedores de PL para el trueque logístico, o deben llamarse proveedores de trueque logístico porque debe haber una visión predominantemente diferente del rol de logística y trueque logístico en el nuevo sistema económico. El trueque logístico es una especie de web (sistema), una araña (operador) es un proveedor de LBP.

La teoría del esquema económico propuesto sobre la base del trueque logístico supone una infraestructura desarrollada, es decir, un supersistema para la gestión de la cadena de suministro basada en proveedores de LBP. Sí, se trata de la "madurez" de las áreas funcionales de logística (adquisición, producción, distribución, transporte e información), es decir, su capacidad para adoptar nuevas reglas del juego en el ámbito de otro operador de la economía. El trueque logístico será el enlace unificador central, y los principales operadores serán el proveedor de LBP (Gabdullin et al., 2017).

El comercio electrónico, las subastas electrónicas, el abastecimiento electrónico y los mercados electrónicos están mejor integrados bajo los auspicios del trueque logístico en un integrador electrónico, que será el elemento de servicio (una de las herramientas) del proveedor de LBP. E-integrator es un integrador de tecnologías de información y comunicación para cadenas de suministro de trueque logístico en forma de medios electrónicos teniendo en cuenta el eslabón de cierre: comercio electrónico y distribución inversa de valor agregado.

Palabras clave: objetividad, trueque logístico, proveedor de LBP, integrador electrónico, coeficiente de indiferencia, nivel de indiferencia.
Introduction

In the existing economy, a huge role is played by those who is not involved into real production activity: stock exchanges, the debt market, banks, etc. This speculation shows its results now, when for some years now the world economy is thrown into disorder. This problem can be rectified by barter relations between producers, that is, logistic barter.

The factor for restraining the growth of the speculative component in the Russian financial market should be monetary policy through targeted actions of the Bank of Russia:

- In the foreign exchange market - a policy to mitigate the volatility of the ruble value of the bi-currency basket;

- In the credit market - a policy to regulate the process of monetary multiplication of commercial banks (based on an increase or decrease in the reserve ratio and the refinancing rate;

- In the stock market - the policy of disciplining its participants through regulations (Gabdullin et al., 2017).

But all this is impossible, because "...The market as the most effective form of management creates the best conditions for economic growth and upholds the priority importance of the freedom of economic agents. A state should provide conditions for competition and exercise control where these conditions are not available" (Bulatov, 2003). Here there is a contradiction: on the one hand, a state is a bad market manager, on the other, it must provide conditions in bad "places" of the economy. "The conclusion is one: the stock market is basically "wrong", and it is not necessary for logistics barter.

The concept of supply chain management was developed on the basis of integration of logistics business processes. Now the emphasis in the meaningful interpretation of this concept is increasingly shifting towards expanding the understanding of Supply Chain Management as a new concept of business. Supply Chain Management is a natural continuation and development of the integrated logistics concept in terms of inter-functional and inter-organizational logistics coordination (Sergeev et al., 2008; Efremova & Gabdullin, 2016). Consequently, there are no restrictions in its development, including logistics as a science. Maybe it's time to break existing ideas about the value of money, the importance of banks, and power of financiers over producers.

Logistic barter implies denial of credit-money relations between producers, therefore, the role of banks in the new system is sharply reduced, and justice is restored to which humanity has been striving for a century now, namely, the producer's advantage is achieved. Society and technology become more ready for the implementation of this concept, and the possibilities of such implementation increase every day. Under this concept, the consent of banks will not be required, because a huge layer of artificially created activity, namely, banking which appeared with the appearance of an analog (universal equivalent) of the commodity, money, will disappear into non-existence (Gabdullin et al., 2017; Oveisi et al., 2018a).

E-integration will provide an opportunity for many companies to carry out the necessary communications and conclude transactions with each other "without the equivalent of the goods", and the logistics barter will make it possible to use this information more effectively to manage the activities in its business. Instead of a two-way
relationship between a supplier and a customer, the business will increasingly be based on networks consisted from the supply chains based on LBP providers (Gabdullin et al., 2017; Rezaei & Nemati, 2017; Rocha et al., 2017).

Methods

Logistic barter (or barter logistics) is a natural commodity exchange between producers, in which one thing is exchanged to another without monetary payment, but based on globally integrated business processes (Gabdullin et al., 2017; Oveisi et al., 2018b).

Why to complicate the process of exchanging the necessary material resources and services? The payment process can be replaced by the process of information exchange. In the age of high technology and the Internet, this is real. There is a question of tax legislation and tax base, and this problem is solvable, no one cancels the laws of supply and demand, and the price will be formed due to a final buyer, i.e. a household.

The money should only be for end-users (households), and end-users would apply to banks, if necessary.

Banks will work with "households". The basic principle (law) of logistic barter is that a final enterprise will give money received for the goods from households, through the supply chain to workers of all categories and enterprises in accordance with the share of added value, i.e. nobody is going to cancel capitalism.

If you analyze the exports of the US and Russia, you can see that the US mainly exports only goods with a large added value (feature films, show business goods, branded clothes, etc.), and Russia exports low-value-added goods - raw materials. Consequently, developed economies will be in the greater benefit of the introduction of logistics barter in the economy. As expected, there should be the corresponding comprehensive developed structure of the economy and society for the introduction of logistics barter. In this situation, there will be much more to develop to all.

Recently, the focus of many transactions in the supply chain has shifted. Where supply chain managers have mostly been limited to internal tasks, they are now increasingly focusing on external links joining their organizations to other parts of a supply chain. Providers of 3PL and 4PL category, joint planning, e-supply and other developments led to the expansion of the traditional supply chain, which was made possible largely thanks to new advances in technology. Today, in unprecedented scale for the management of supply chains, efforts are aimed at creating relationships with other structures, understanding the essence of these relationships and optimizing them (Gabdullin et al., 2017; Agara, 2017). At the moment, 5PL providers are the "ceiling" of supply chain management, but 6, 7... 10 PL providers will be needed for logistics barter, they need to be called 1LBP, 2LBP... - providers (logistics barter provider) because there must be a completely different, predominant view of the role of logistics and logistics barter in the new economy. Logistic barter is a kind of web, the integrator in it is an LBP provider. Do we create a "monster"? The probability of this is, but there are laws on antimonopoly regulation in various countries around the world.

4PL-provider - a system integrator of supply chains (Gabdullin et al., 2017).
5PL-provider - a "virtual" operator using the global information technology space (Gabdullin et al., 2017).

LBP-provider is a system integrator of global business processes to the end user, which activity is based on natural exchange of goods between producers (Gabdullin et al., 2017).

We will forecast the progress of the logistics operators' activities and the possibility of a logistics barter (LBP-provider) in the future (Figure 1).

The indifference coefficient (α) is the ratio of the development level and the capabilities of a logistics operator (provider) to the reference state (requirement) of the logistics barter (Gabdullin et al., 2017).

\[
\alpha = \frac{\varphi (I)}{\psi (J)}
\]

Where \( \varphi (I) \) is the level of the total possibilities of the logistics operator (logistics) not only on possibilities to replace the monetary relations between producers by barter (this is similar to the fact that majority age, for example, comes at 18 years, and at 45 there is the same level of responsibility, but experience and skills are already different);

\( \psi (J) \) is the reference condition (requirement) of logistics barter.

![Figure 1. The indifference threshold of logistics barter (Gabdullin et al., 2017)](image)

The coefficient may be greater than one, this implies that logistic barter operators will have in their development to satisfy not only the requirements of logistic barter between producers, but also meet new challenges for supply chains. LBP-provider may exceed the capacity of the reference logistics requirement for barter, because the operator is not only engaged in the replacement of money relations, but in general works on improving the supply chain.
The level (threshold) of logistic barter indifference is the level of the requirements of logistic barter, in which the provider can replace all (remaining) monetary relations between producers by barter (Gabdullin et al., 2017).

In order for the supply chain to function effectively, organizations need to understand how the market operates, and how the behavior of buyers (households) influences its dynamics. By understanding the values of customers for the company, the final organization in the supply chain will be able to formulate clear proposals to consumers in response to their requests and thereby provide consumers with the expected value. This approach allows the supply chain to offer a differentiated approach which automatically reduces the likelihood of both excessive and inadequate customer service. This ensures consistency with the market (Sergeev et al., 2008).

The basis of pricing for logistic barter (barter logistics) is added value. The added value is the mental and physical costs of a personnel (team) of the link (enterprise) in the barter supply chain.

And where is the entrepreneurial ability? And this is the original set of mental and physical abilities.

Unlike the cost price, the added value rejects the cost of raw materials, which nature gives. Why should the price include what is given by nature? It belongs to all mankind. Tell me, is it naive, and is everything divided before us? But who could have imagined in the early 90's that everyone would have a smartphone with Internet, telephony, and a bunch of additional services?

The basis of the logistic barter science (theory) is that natural resources cannot be assessed. Education, intellect and sophistication should reject the "sharing" of pieces of land with natural resources; we should take human opportunities as the main wealth. In this theory, only supply chain management can fully appreciate the added value of each link in the chain.

It should be understood that the theory of a new economy based on logistic barter implies a developed infrastructure, i.e. supersystem of supply chain management based on LBP-providers (Gabdullin et al., 2017).

Logistics develops, and the ability to manage supply chains in the future can be completely different. In terms of vision of the future, logistics barter can also play its role in the economy. Banks will work with households.

Results

The basis for the development of logistic barter will be the elimination of the human factor in all links. This means that all functional areas of logistics should exclude the human factor due to the absolute impossibility of an objective assessment of the human "act" quality when making a decision. Are the functional areas of logistics ready for this? It is necessary to conduct an appropriate analysis.

The central link of logistics barter is information logistics. Now all advanced technologies are based on IT technologies. In the near future, the E-integrator of logistics barter will be ready to introduce logistics barter.
Purchasing logistics in terms of the approaches proposed by the authors is now at the stage of maturation. The influence of the human factor on it is not completely excluded.

As for production logistics, it is necessary to widely use advanced technologies and robots what will make it possible to exclude the human factor in the near future.

Distribution logistics, as well as supply logistics, are currently at the development stage, while there is a human factor available.

As for transport logistics, it should be borne in mind that there are already technologies for unmanned driving of various vehicles. Progress in this area is moved by the world's major companies, such as like Apple, Google, BMW, and others. Soon it will be possible to exclude the human factor here. Readiness of an integrator can be predicted using Table 1.

<table>
<thead>
<tr>
<th>Functional areas of logistics</th>
<th>The level of total capabilities of the logistics operator</th>
<th>The reference condition (requirement) of logistics barter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information logistics (central link)</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Purchasing logistics</td>
<td>0.5</td>
<td>1</td>
</tr>
<tr>
<td>Production logistics</td>
<td>0.3</td>
<td>1</td>
</tr>
<tr>
<td>Distribution logistics</td>
<td>0.5</td>
<td>1</td>
</tr>
<tr>
<td>Transportation logistics</td>
<td>0.8</td>
<td>1</td>
</tr>
</tbody>
</table>

**Conclusions**

Progress is on, and there are some weaknesses in the current economic system. For example, if the mass of money circulating in the stock markets pours into the real product market, catastrophic inflation would be inevitable. The results of studying logistic barter can correct this situation.

As a conclusion, it can be noted that the presented work was proposed not to find errors in the modern economy, but to try to find new "impetuses" for its development (Gabdullin et al., 2017).

The benefits of introducing logistics barter will be "mind blowing". Now, its receipt is being restrained for the moment because there is no perfect instrument of logistic barter, and the goods cannot yet be manufactured at the request of a consumer and delivered quickly. Therefore, money is needed as a temporary instrument for delaying the execution of a purchase. Yes, of course, this temporary tool has been used by man for a long time, but science knows no limitations, including logistic science.

The theory of logistics barter (barter logistics) does not abandon money, but ignores their application among producers. Logistics has reached and will reach such heights, when the need for a "universal equivalent of goods" between manufacturers would simply disappear. The ideal option for cancellation of money between manufacturers and the introduction of logistic barter is the theory of teleportation.
Is logistic barter (barter logistics) ready to replace monetary relations between producers? Over time, this replacement will take place. But everything has its time.

LBP-provider cannot be represented without advanced IT technologies. The astounding progress in the development of digital technology allows us to think about the possibility of creating an LBP-provider in the near future. It must be borne in mind that the LBP-provider is not a servicing element of the economy; it is the operator of another economic system itself, where there is no place for money and banks (usurers) in the relations between producers.

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References


