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## **MODELING THE IMPACT OF E-COMMERCE ON THE INTERNATIONAL DIVISION OF LABOR**

On the verge of this, just as electric trade doesn't stop increasing, its impact on congestion and wages will be the result of a difficult set of interacting forces. It is assumed that electrical trading activities will directly or implicitly create newer labor zones, but also lead to their decline. The newest labor zones will be earned, for example, in the field of informative products and services, recreation, software provision and numerical goods. The indirect formation of zone workers will be carried out due to the result of increased demand and productivity. Labor zones will be lost if electric commerce replaces the traditional way of doing business. According to the preliminary information, more possibly mentioned labor zones are in the sector of individual trade, postal branches and travel agencies. But the results will in no way become the same for the purpose of different states, geographic areas, spheres or high-class companies.

The distribution of work in the e-commerce transaction system is considered a significant research problem. But there is a particular discrepancy among contemporary major experimental modification is also reality, something that leads to biased outcomes. The target of this note is considered to be the detection of the impact of transaction performance on the development of work distribution in the concept of transactions of electrical commerce and the relationship among the outcomes and other parameters.

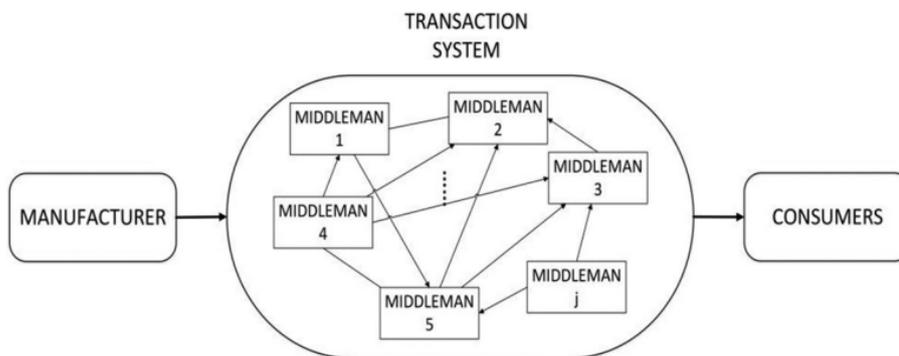
This document proposes a definition of the performance of a transaction based on transactional services and introduces a form of a special production order of an intermediary according to transactional services.

## Conclusions

The results of the study demonstrate that the effectiveness of transactions is of no small importance in changing the degree of distribution of work of arbitrators. The level of financial qualifications, the cost of products and services according to transactions and other related conditions also have a great influence on the distribution of the arbitrators' work.

In the past years, with the most extensive use of informative technologies, e-commerce has become to play the most important role in the international financial concept, and over time has become the latest condition for the financial growth of many countries. In our time period, there are a large number of different modifications of electric commerce, and the proper textures of the transaction concept are also varied. In addition to manufacturers and buyers, in these modifications of e-commerce, third-party transaction platforms, logistics service providers and payment intermediaries are also significant.

They provide a service of monetary relations for the purpose of trading in products, I also call them intermediaries. E-commerce transaction concepts are formalized by a variety of arbitrators (Figure 1).



**Figure 1. The structure of transaction systems**

Middlemen could be divided into two types. The first type of middlemen does not have the ownership of commodities. They provide transaction services and earn a profit by selling the services to others, such as e-commerce platforms providing information services, logistics companies providing logistics services, banks and other payment companies providing payment services and so on. The second type of middlemen have the ownership of commodities and earn a profit by selling the commodities to others.

They organize the transaction themselves and use the information services, logistics services and payment services provided by the first type of middlemen to finish the transaction.

In this post, we explore the issue of making and trading transactional offerings of an intermediary with stable resources. Let's say that there is only one type of trade in products in the bargaining. The product offer is not limited in any way. With the goal of completing a transaction, 4 types of transactional services are needed: enterprise of transactional industries, informative works, logistics services and payment services. The sizes of demand for the above services in a transaction are similar, i.e. the correspondence is 1: 1: 1: 1.

The representative selects for the purpose of providing from 1 to 4 types of transactional services. In the Case If a representative wants to sell products in the property of an intermediary according to the distribution, someone is obliged to provide a service according to the company of transactions, no trading activity is allowed. The number of products traded by an intermediary depends only on the number of services according to the company of transactions produced by the intermediary. But informative service, logistics service is also a payment service admissible for trade. If a representative sells product, someone is obliged to ensure that the number of informative services, logistics services and payment services is in no way less than one with services according to the transaction company. In a similar way, in the event that one or another of the 3 types of services shown is more provided by the arbiter, less than the company's transaction service, someone is obliged to purchase the appropriate type of service in order to satisfy the conditions. On the contrary, in the event that one or another - or with 3 types of services, shown more, produced by the arbiter, exceeds the company's transaction service, someone is able to realize the surplus.

We consider a transaction system with 100 middlemen. Every middleman has to decide how much resource should be distributed to four kinds of services. The prices of commodities, information services, logistics services and payment services are determined by the relationships between supplies and demands of the services in the system. The higher the supply is, the lower the price is. The higher the demand is, the higher the price is. The price functions of commodity are as follows:

$$P_g = g_g - h_g N_t$$

The price functions of transaction services are as follows:

$$P_i = g_i - h_i (i_{ts} - i_{td}), i = x, y, z$$

where  $N_t$  is the total quantity of commodities sold in the system,  $i_{ts}$  ( $i = x, y, z$ ) is the total supply of service  $i$  in the system and  $i_{td}$  ( $i = x, y, z$ ) is the total demand of service  $i$  in the system.

To simplify the model, we think that the price functions of information services, logistics services and payment services are the same. The gradients of transaction services price functions and commodity price function are the same, i.e.:

$$g_x = g_y = g_z$$

$$h_x = h_y = h_z = h_w$$

The rules of simulation: If the total supply  $i_{ts}$  ( $i = x, y, z$ ) of service  $i$  is less than the total demand  $i_{td}$  ( $i = x, y, z$ ), then every demander can get  $i_{ts} i_{md} / i_{td}$ , where  $i_{md}$  ( $i = x, y, z$ ) is the demand of the middleman. If the total supply  $i_{ts}$  ( $i = x, y, z$ ) of service  $i$  is more than the total demand  $i_{td}$  ( $i = x, y, z$ ), then every supplier can sell  $i_{td} i_{ms} / i_{ts}$ , where  $i_{ms}$  ( $i = x, y, z$ ) is the supply of the middleman. The quantity of commodities sold by a middleman is determined by the minimum service. When every circulation ends, every middleman decreases a constant quantity of resource used to produce the service with the minimum profit and use the resource to produce the service with the maximum price. The promotion of transaction efficiency is the dynamic of middlemen's specialized production evolution. And other parameters of the model have different effects on the evolution. We use the uncorrected sample standard deviation of the resource used to produce four kinds of services to measure the levels of division of labor. A higher sample standard deviation means a higher level of division of labor.

In this note, in accordance with the features of the transactional concept, we expose the theory of the number of key services and recommend the latest definition of transaction performance. Based on this, we have formed a form of regulation for the special manufacture of intermediary services for transactional services. The presence of the given we take into account the impact of the general demand and the prescription of services on the market in value, what creates the most real form. We model intermediary rulings in order to investigate the impact of transaction performance on the distribution of intermediaries' work as well as the impact of the skill level of the economy, the value gradient and the comparative equilibrium value in the bottom line.

The results show that with an increase in the performance of transactions, the degree of distribution of work first increases, then decreases, and ultimately is able to rise again. The increase in transaction performance reduces the cost of purchasing transactional services, which enables intermediaries to invest more resources in order to make the service more profitable. But with the subsequent increase in transaction performance, the need to purchase an offer in the bargaining for arbitrators is eliminated. The service they create for the females is likely to cater to their needs. In a similar way, the distribution of work is reduced. If the efficiency of transactions reaches the highest significance, the lowest equilibrium value of the product or the largest vector of value has every chance of forcing the arbitrators to start the production of special provisions again, since this can help them acquire more income.

This study provides a theoretical basis for the development of the concept of e-commerce transactions. Going forward, the degree of work sharing in the concept of e-commerce will begin to change. E-commerce intermediaries will explore diversified manufacturing modifications in combination with bazaar furnishings. In the upcoming modification of electric commerce, the equilibrium of qualifications will also become diversification.

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