Construction Basis of C2C E-commerce Credit Evaluation Index

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ABSTRACT

C2C e-commerce rapidly develops, which is an important economic pillar. With the deepening of the network life, more and more people join the C2C e-commerce transactions. However, the credit problem of C2C e-commerce has serious hidden security problems. So, the paper analyzes the present situation of C2C e-commerce credit problem and points out the existing problems. Scientifically, systematically, validity, feasibility and comparability are taken as principles to establish the first level indicators that including commodity property, business services, and logistics services and to establish the secondary indicators that reasonable price, timely delivery and so on. Using AHP, the weight of each level indicator can be calculated. C2C e-commerce evaluation model is established. Then the model is improved on transaction amount and evaluation time, so it can provide a theoretical basis for C2C e-commerce credit evaluation system.

KEYWORDS

AHP, C2C e-Commerce, Credit Evaluation, The Improved Model

INTRODUCTION

With the improvement of life informatization level, e-commerce has become an important part of national economy. Especially for young people, “Taobao” is the main way of shopping (Schilling et al., 2016). However, under the background of rising prosperity, credit crisis has great hidden security problems (Kang et al., 2016). In the process of C2C e-commerce transactions, consumers can’t see the material object, or even ensure the quality of the goods. The index of judging the quality of goods is business creditworthiness and the former customers’ evaluation. However, due to the lack of legal norms, there are huge false information that cheats customers in the current e-commerce market, such as the exaggeration of the commodity quality, even fake commodities and so on (Sang et al., 2017; Acampora et al., 2016). So the trust between sellers and buyers is weak, and the volume of e-commerce transaction is affected.

In the transactions among strangers, credit is important, the credit status of sellers can be evaluated by a third-party certification or be permitted by law (Weng et al., 2016; Francesch, 2015). E-commerce transaction is an online transaction based on stranger’s transaction, and credit system is an effective method to improve this kind of trade (Kwon et al., 2017). This is because the first step of online shopping is browsing goods, the second step is checking the credit records of sellers. So, the historical records will directly impact on consumers’ purchase behavior (Chang & Chen, 2014).

Although the present big websites design the evaluation system, the system is relatively simple, and the security is not strong. There are some phenomena such as false transactions and credit hype. So, the construction of C2C e-commerce credit evaluation system is necessary. So, in this paper, scientifically, rationality and behavior principle are taken as the principles and the relevant evaluation index is established to standardize the C2C e-commerce market and achieve good faith transactions.

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THE PRESENT SITUATION OF C2C E-COMMERCE CREDIT EVALUATION

According to incomplete statistics, in the process of e-commerce transaction, the most important problems attracting consumers are the delivery service and the quality of the goods. The problem that attracts the most attention is that the consistency between the actual goods and introduced goods is weak. The second problem is that goods delivery service cannot meet the requirements of consumers. And there is credit problem that can’t be ignored in C2C e-commerce.

The e-Commerce Credit Status

The Goods Quality

Usually, in the process of C2C e-commerce, advertising information of products from sellers is the main way for buyers to get product information. In promotional information, sellers take the low price as the attractive point, and as much as possible describe advantages of goods even exaggerate the advantages of the goods. Therefore, the buyers cannot truly distinguish the quality of the goods, and credit problem will seriously affect the buyer’s passion for C2C electronic shopping.

After-Sales Service

C2C e-commerce refers to transactions between individual and individual. Sellers can’t issue formal invoice of sold goods, so there are some problems such as after-sales service, return of goods and complaints for merchants. With the vigorous development of e-commerce, there are various disputes in e-commerce. Supervisors of each C2C e-commerce websites is insufficient, so the inspection of sellers cannot be well supervised. It is difficult to implement the after-sales service (Yan & Yuan, 2012).

The Fraud Problem

If buyers choose goods, they usually choose the sellers with high credibility. But the quality level of sellers is different. The illegal sellers take advantage of credit publicity to increase their credibility. They even provide false information and accept payment, but they cheat the buyers by not offering the goods. These behaviors seriously disrupt the stability of the e-commerce market.

From the perspective of trust mechanism and economic theory, online credit evaluation and feedback mechanism, the evaluation of the third-party trust company and credit card guarantee are three kinds of effective mechanisms. The researchers find effective credit mechanism should be mandatory, such as legal constraints, flexibility and adjustment of market (Arvanitou et al., 2017).

The Present Situation and Characteristics of Evaluation Model

Traditional markets transactions have been real and legal constraints. But e-commerce lacks this constraint, especially C2C trading patterns (Rouibah et al., 2016).

The Present Situation of e-Commerce Evaluation Model

Before the deal, sellers deal is credit record. However, the present credit evaluation process is simple (as shown in Figure 1), the credit evaluation model is single.

The Cumulative Credit Model

Cumulative credit model is relatively common in C2C e-commerce credit evaluation model. Its theory is that the credibility of sellers is simply accumulated. The mathematical representation is

\[ B_N = B_{N-1} + b_N, \quad b_N \in \{-1, 0, 1\} \quad (1) \]