Retraction

Retraction: Analysis of the Interactive Application of Electronic Commerce Network Consumption Based on Computer Technology (J. Phys.: Conf. Ser. 1992 032011)

Published 9 September 2022

This article has been retracted by IOP Publishing following an allegation that raises concerns this article may have been created, manipulated, and/or sold by a commercial entity. In addition, IOP Publishing has seen no evidence that reliable peer review was conducted on this article, despite the clear standards expected of and communicated to conference organisers.

The authors of the article have been given opportunity to present evidence that they were the original and genuine creators of the work, however at the time of publication of this notice, IOP Publishing has not received any response. IOP Publishing has analysed the article and agrees there are enough indicators to cause serious doubts over the legitimacy of the work and agree this article should be retracted. The authors are encouraged to contact IOP Publishing Limited if they have any comments on this retraction.

Retraction published: 9 September 2022

Content from this work may be used under the terms of the Creative Commons Attribution 3.0 licence. Any further distribution of this work must maintain attribution to the author(s) and the title of the work, journal citation and DOI.

Published under licence by IOP Publishing Ltd
Analysis of the Interactive Application of Electronic Commerce Network Consumption Based on Computer Technology

Zengjian Huang1,*

1School of E-commerce and logistics, Suzhou Institute of Trade & Commerce, China, 215009

*Corresponding author e-mail: huangzj@szjm.edu.cn

Abstract. With the development of information technology, computer technology has become an important part of electronic network consumption. E-commerce sites make people's consumption more convenient and improve people's quality of life. This paper first explains the relationship between modern electronic technology and electronic commerce, and discusses the application of computer technology in ensuring the safety of electronic commerce network consumption, for the reference of readers.

Keywords: Computer Technology, Electronic Network, Consumption Interaction, Application Analysis

1. Introduction
E-commerce has reached a period of rapid development, providing a sales channel for cheap goods. However, there are security problems in e-commerce network, so necessary measures should be taken to ensure the security of the sale of electronic goods [1-3]. In addition, merchants can clearly understand the inventory of goods through the Internet, providing a basis for making more effective marketing plans.

2. The influence of computer technology on the development of electronic commerce

2.1. Computer technology provides a guarantee for e-commerce
All transactions of e-commerce need to be carried out on the platform of e-commerce, which will inevitably be used in computer technology and network technology [4-6]. WEB technology is the most dependent technology on e-commerce platform, which not only plays a very important role in the establishment of the platform, but also can provide all kinds of related programming languages. In addition, the network communication is instant messaging, e-commerce network consumption, provides a great convenience, convenient for buyers and sellers to communicate and discuss. In addition, the latest network security technology and e-commerce network transactions to provide an effective guarantee, the current network firewall, encryption technology and security authentication has become more and more common, these information content can ensure that the identity of both
sides of the transaction is real and effective, and do security and confidentiality. The firewall can monitor the internal and external network in real time to ensure that the information can be effectively protected and prevent information leakage. Encryption technology greatly improves the security of encryption to ensure that the network key and key transmission will not have problems.

2.2. The emergence of new technologies promotes the development of e-commerce
In recent years, due to the continuous development of computer technology, 4G communication technology has been widely used. The technology is more flexible than traditional technology and is not easily disturbed by other information. It can be seen that 4G communication technology has been widely applied, and the popularity of smart phones has broadened the original e-commerce field.

2.3. Restrictions of computer technology on e-commerce
Although the computer has a great influence on electronic commerce, it must be admitted that there are some constraints between the two. The biggest disadvantage of online consumption is the lack of shopping experience. Customers cannot truly experience every detail of shopping in the mall. Therefore, in many cases, e-commerce can only rely on price advantage to occupy the market. Therefore, subject to the current network technology has not reached a new stage, the online consumption cannot simulate the real shopping experience of shopping malls, affected by this, the current e-commerce is still unable to completely replace the real shopping in brick-and-mortar stores.

3. The relationship between modern computer technology and electronic commerce
There is no doubt that the unique advantages of computer technology have been greatly reflected in the modern e-commerce industry-commerce is a trade market with rich functions and complete materials, and its characteristics mainly lie in its virtuality. The emergence of e-commerce directly breaks the constraints of time and space transactions. On the one hand, it not only significantly reduces the cost expenditure of enterprises in the process of marketing and procurement. On the other hand, it also greatly enhanced the economic behavior of bilateral trade and multilateral trade, and played a great role in promoting regional development.

Modern e-commerce mainly refers to the user in the communication network as a condition of support under the premise of a business operation. The biggest advantage of computer technology lies in the immediacy of information. It is this kind of timely information processing that directly breaks the barriers of region and time. Coupled with the advantage injection of low cost of information network, computer technology has become an important technical support that cannot be lost in the e-commerce industry. The computer technology, network and electronic technology, as well as e-commerce marketing model of the three constitute the electronic commerce development to carry on the organic fusion of heavy elements, not only expand the application of computer technology in electronic commerce area, but also to the development of e-commerce industry provides a strong service and security, essentially promote the rapid development of modern electronic business.

4. Problems existing in e-commerce network consumption
Due to the prevalence of hackers and phishing websites on the Internet, how to protect the information security of users, users’ information is not leaked, causing unnecessary losses and trouble to network users, is a great test for the research of network security. With the development of science and technology, some criminals with ulterior motives rack their brains and try to swindle on the Internet to achieve their own goals. With more sophisticated and scientific methods and more professional technology, network users cannot be prevented. How to ensure the network system hardware and software data cannot be leaked and attack, not accidental factors damage and change, can be normal and stable operation, for e-commerce is also a great test. Because the Internet itself is in a virtual environment, the limitation of time and space is relatively small. A virus, the production of a Trojan horse, in a very short time will cause great harm to all parts of the world. The speed of transmission is often jaw-dropping, and its destructive power and spread are so widespread that many network
security experts have been left in the dust. Sometimes whenever there is a specific for a virus or Trojan antivirus software has just been studied out, this virus or Trojan, but the corresponding upgrade strategy, so that network security experts often very sigh over the speed of its evolution. Sometimes as soon as new anti-virus software comes out, new viruses appear, and users and experts often don't know what to do. Therefore, the task of network security is still very heavy and arduous nowadays, there is still a long way to go, and it is also a problem worth considering for network security experts.

5. The application of computer technology in ensuring the safety of electronic commerce network consumption

5.1. Data encryption technology
Data encryption technology is a very critical security means in the field of modern e-commerce. At present, data encryption technology can be divided into symmetric and asymmetric encryption technology. Symmetric encryption mainly refers to key encryption, while public key encryption is a kind of asymmetric encryption. Nowadays, under the background of using PKI technology, many e-commerce enterprises have created a set of perfect and perfect encryption system, which can effectively ensure the security of e-commerce in the operation stage. In the implementation phase of PKI technology, the key - generally - is split into a pair, and any of the pair can be made public as a public key using non-secret behavior, while the other key is kept as a decryption key. In this way, people can encrypt the secret information of e-commerce behavior with the public key and decrypt the encrypted information with the private key. It is not difficult to see that the public key can be widely released, while the private key is usually only used as the generated key for the customs declaration of the trading party, which finally guarantees the information security of both parties of commodity trading (Figure 1 Big Data encryption technology).

![Big Data encryption technology](image)

**Figure 1.** Big data encryption technology.

5.2. Prevention of network viruses
In nearly a decade, the development of Internet technology is got significantly improve, but the relative ways and forms of the spread of the virus also greatly strengthened, its propagation velocity and diffusion level also more and more fast, therefore, if only use single measures to guard against the virus is not enough, we must fully LAN implementation of all-round, three-dimensional virus prevention. For example, in some schools, hospitals, government departments because most use LAN, therefore, it is necessary to create a virus prevention and control software. For example, if people use E-mail to spread information transmission, it is necessary to establish a set of independent virus prevention software based on E-mail, so as to accurately determine the security problems contained in E-mail. Therefore, in the application of computer technology in the process, must use a full range of virus prevention software to assist, and regularly to the computer to carry out virus killing, so as to ensure the safety of e-commerce consumption. The current virus prevention software is different, each has advantages and disadvantages, such as: Rising, 360 security guard. Users can choose antivirus...
software according to their computer state (Figure 2 prevention of the new generation of viruses).

5.3. Identification technology

Nowadays, people in some departments still have doubts about the transaction form of e-commerce. The main reason is that both the buyer and the seller communicate mainly through the form of network communication. Therefore, they do not understand and trust each other very much and cannot judge whether the other side has a real, reliable and credible identity. At this time, it is necessary to rely on the identification technology to assist, the traditional e-commerce industry in the identification technology can mainly cover password recognition and tag recognition of these two. At the present stage, due to the technological storm caused by the "intelligent age", the smart card identification technology has become more common and achieved a more high-quality development, which also makes the identification process around become more accurate and reliable. By using the measures of identity identification technology, people can avoid malicious attacks by computer viruses or hackers to the maximum extent, so as to ensure the security of property and keep away from threats. For example, conventional acts of stealing, tampering, and impersonating users to obtain information cannot cause losses to the commodity party (Figure 3 is the fingerprint identification technology).

6. Conclusion

To sum up, the application of computer technology in e-commerce not only provides consumers with channels to buy goods, but also facilitates the management of goods by merchants. But in the electronic network platform to use data encryption technology and identity identification technology to prevent network viruses, to ensure the security of the network sales platform.

References

[1] Li Yanshan. The role of computer technology in e-commerce online consumption interaction [J]. Fortune today (China intellectual property), 2019 (07): 66.

[2] Zhang Chunxia. Research on the application of computer technology in e-commerce online consumption interaction [J]. Computer products and circulation, 2017 (10): 27 + 71.

[3] Zhang Qimei. Application of computer technology in e-commerce online consumption interaction [J]. Digital world, 2017 (07): 236.

[4] Huang pan. Application of computer technology in e-commerce online consumption interaction
[5] Pan tan. Analysis of the role of computer technology in e-commerce network consumption interaction [J]. Enterprise guide, 2014 (23): 42 + 41.

[6] Wang Dandan. Analysis of the role of computer technology in e-commerce network consumption interaction [J]. Computer CD software and application, 2014, 17 (17): 45-46.