



ORIGINAL RESEARCH PAPER

Commerce

INFORMATION SECURITY IN BUSINESS TO BUSINESS E-COMMERCE IN VIETNAM

KEY WORDS: e-commerce, business-to-business, information security, Vietnam

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ABSTRACT Information security in e-commerce is one of the updated system to ensure the development of e-commerce activities, entire the whole economy. Information security in the business-to-business (B2B) model is important because of sharing B2B transactions dominate e-commerce transactions around the world. Ensuring information security in B2B e-commerce needs to be studied in a comprehensive perspective: between the buyer and the seller, from technical expertise to management, and from the government management level to the business management level. The paper presents the theory of information security in B2B e-commerce, the state of information security in B2B e-commerce and information security solutions for the development of B2B e-commerce in Vietnam in the near future.

INTRODUCTION

In Vietnam, contrary to the impressive growth of B2C e-commerce and e-commerce trends on mobile platforms, B2B trading has been quiet in the last few years. The B2B e-commerce exchanges are now operated in moderation, some large exchanges are no longer able to operate.

There are many reasons for the B2B e-commerce transactions have not reached out the expected growth rate in Vietnam, mainly due to lack of safety information in transaction.

Information security system is used along with the commercial nature in B2B e-commerce for the protection of information and information systems to avoid being accessed, use, disclosure, discontinuity, and modification or vandalism to ensure the integrity, confidentiality and usability of information in e-commerce transactions in businesses. Information security in B2B e-commerce is related to the security of information in each participating business (the seller, the buyer) and information security in the transmission of the data in businesses. The main applications of information security system in B2B e-commerce are computer security and computer network security.

DATA AND RESEARCH METHODS

This research was carried out to propose solutions with scientific basis for ensuring information safety to promote B2B e-commerce in Vietnam in the coming time. The research method and procedure are described in Figure 1.

The primary and secondary data used in this study were collected and processed by qualitative research. Primary data was collected by group discussion with experts in the field of information security in e-commerce in Vietnam for the purpose of developing a theoretical model to ensure information security in B2B e-commerce and learn the status of ensuring information security in businesses with B2B e-commerce activities according to the theoretical model has been identified above. Secondary data is the source of data obtained through documents, books, newspapers, magazines, etc. related to information security in B2B e-commerce in Vietnam and processed by qualitative research method. Throughout this data source, we got a more general and clear view on the status of information security in B2B e-commerce in Vietnam in recent years. However, these proposed scientific solutions ensure information security to promote B2B e-commerce, currently in Vietnam.

RESULTS AND DISCUSSION

Based on the research and synthesis of theory related to the characteristics of B2B e-commerce model, information security, goals and requirements of information security in e-commerce, together with the findings on the importance of ensuring information security in B2B e-commerce, a model of information security system in B2B e-commerce has been introduced in Figure 2.

The main focus of the model is ensuring internal information security and information security in transactions of businesses participating in B2B transactions. The security standards in Information security systems (also the goals that the system directs to) are confidentiality, integrity, and availability.

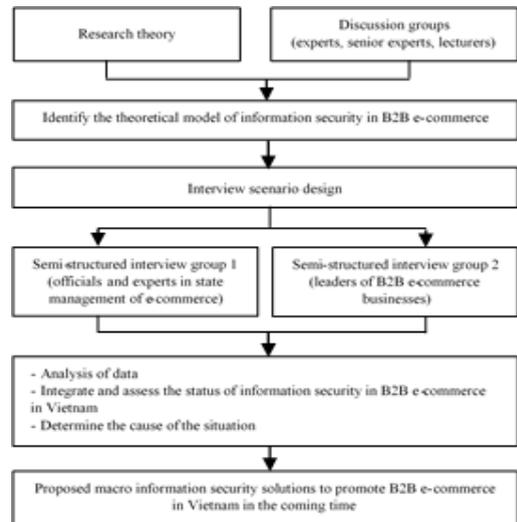


Figure 1: Research models.

Sources: Synthesized authors and recommendation

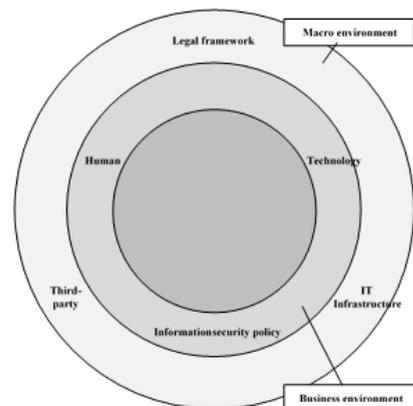


Figure 2: Information security model for the development of B2B e-commerce.

Sources: Synthesized authors and recommendations

Although Vietnam's legal framework on e-commerce has been basically completed, it is a new field, the technology has developed rapidly, so many e-commerce issues have arisen. The law is not comprehensive enough.

In addition, the information and communication infrastructure are growing rapidly in Vietnam in recent years, beside the rapid development of the Internet in Vietnam, security system is not developed as well. The implementation of regulations related to the data and digital content safety are inconsistent in businesses.

Therefore, the Vietnamese Government should improve the legal provisions on electronic contracting and supplement the regulations on the protection of personal information, clearly defining the obligations that e-commerce businesses must fulfill. Existing regulations on the responsibility of owners of e-commerce transaction exchanges for information of the seller.

In addition, Vietnam needs to develop standards for the exchange of data messages in B2B e-commerce, building trusted systems for e-commerce transactions and dispute settlement mechanisms, as well as promoting product market and information security services in Vietnam.

B2B e-commerce businesses in Vietnam needs to focus on technology solutions which ensure the information security, especially the synchronization of technology infrastructure, standards related to data security, and digital content, and also limiting the scope of self-regulatory status of business because it interferes in B2B e-commerce transactions.

CONCLUSIONS

Information security in the e-commerce B2B model is the broad issue. Information security issues for the development of B2B e-commerce in Vietnam in the current period should be studied and solved both from the buyer and the seller, from technical expertise to professional expertise, and from the state management level to the business management level. This research has initially achieved results in the direction, introducing a theoretical model of information security for B2B e-commerce transactions in Vietnam, analyzing and evaluating the status of information security in B2B e-commerce transactions in Vietnam in the recent time, proposed solutions to ensure information security to develop e-commerce B2B Vietnam in the near future. This study also needs further research related to B2B security model testing, e-commerce information management standardization study, and studying solutions for state management, business management of e-commerce activities.

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