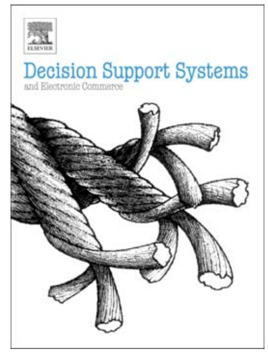

Transaction Security Investments in Online Marketplaces: An Analytical Examination of Financial Liabilities

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Transaction Security Investments in Online Marketplaces: An Analytical Examination of Financial Liabilities

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Abstract

With the proliferation of electronic web-based and mobile payment systems, the concern about ownership of liabilities for potentially fraudulent transactions has come under the spotlight. This study investigates the consequences of alternative legal regimes on online transaction security, with a specific focus on burden of proof. The two types of online transaction regulations are analyzed by comparing the profits of transacting firms (merchants) and their optimal levels of investment in security. Our findings show that in a market where investments in security are highly effective, a legal regime that imposes the burden of proof on the merchant will enable them to achieve higher profits than will a legal regime that places the onus on the customer. In addition, depending on the effectiveness of investments in online transaction security in a given market, even when firms invest less in security, firms will be more profitable under a legal regime that imposes the burden of proof on the merchant, compared with a framework that imposes it on the customer. Furthermore, our findings imply that, depending on the effectiveness of investments in online transaction security in a given market, firms could have an incentive to invest more in security and such an action could yield higher social welfare when burden of proof is imposed on firms.

Key words: information security; burden of proof; internet security breach; optimal investment in security; fraudulent online transactions; online business law