Using technology to reduce international fraud in the banking industry: case of Kenya's banking industry and use of chip and pin technology: 2004-2009

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Abstract:
A fraudster walks into a store with the intent of stealing merchandise or committing credit card fraud. However, the store has technology and best practices in place making it difficult and dangerous for the fraudster to carry out the crime. The thief decides to move on to an easier target and this scenario is continually playing out on a global level as more countries are converting from the old magnetic stripe technology to the more advanced chip and PIN technology. The fraudsters will find it more difficult to steal from countries where retailers have converted to the EMV standard 'chip and PIN technology' meaning they are searching elsewhere for an easy pick. The fraudsters are professionals who will continue to find ways of committing fraud despite the barriers and will naturally flow towards and through the path of least resistance. The countries that are yet to adopt the chip and PIN technology are their main targets since it is easier to commit fraud using a magnetic stripe card than with a chip and PIN card. The credit and debit card business has served the banking industry for over 20 years and has been experiencing high incidences of card fraud resulting in huge losses. The trends in card fraud show that it is migrating from countries using chip and PIN technology to those that have not yet adopted the technology. The problem of fraud has reached a point where the industry may be in jeopardy as fraudsters are improving their techniques of breaking through the security features and systems. Research shows that better security features such as EMV on ATM machines and point of sale terminals and chip and PIN cards would help in reducing the fraud cases by eliminating counterfeit fraud. A chip addresses and minimizes the risk that a credit card can be fraudulent and nearly a billion chip and PIN cards have been issued worldwide. The objectives of the study was to examine the use of chip and PIN technology in the banking sector by establishing the nature and extent of card fraud, accessing the impacts of the technology on fraud and the level of awareness in the banking industry and among the policy makers. The finding revealed that chip and PIN technology has helped to reduce card fraud in countries that have adopted the technology, however very few commercial banks in Kenya have adopted the technology. The banks sighted the high investment cost as a setback despite the numerous counterfeit cards being used on their payment systems that result to losses from chargeback's received from issuing banks. There is need to Create more awareness on the benefits of technology in minimizing fraud losses in the industry as the fraudsters are now targeting countries such as Kenya that are still using the magnetic stripe technology. In addition, the optic fibre cables that have landed in Kenya recently have exposed the country to international hackers who are highly sophisticated in using sensitive information from firms. A complete overhaul of the systems currently in use is encouraged if banks are to avoid potential losses.