

UGM MIPA Students Create Crime Detection Tool for ATM


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MAKASSAR- Ever had your credit card or ATM card balances taken out by others without your knowledge? Or ever felt harmed in a robbery done through an ATM? You don't have to worry anymore. Currently, there is a solution to the problem.

Not long ago, an ATM (Automatic Teller Machine) early warning system security tools have been designed. This tool is made by five students of the UGM Faculty of Mathematics and Natural Sciences, which is then presented in the National Student Science Week activity (PIMNAS) XXIV in Makassar. The 3.5 million rupiah tool was considered powerful enough to prevent ATM burglary, either through an ATM skimmer (machine that steals card identity) through the destruction of the ATM. This tool is able to send short messages to the police or the banks and the sound of an alarm will be heard if there is any attempt of crime at an ATM.

Christian Antonia (21), one of the students who created the tool, said the tool that measures 10x10 cm and inserted in the ATM machine is equipped with a proximity and infrared sensors. The proximity sensor can notify if there is a change of position of an ATM machine in case of theft. Meanwhile, the infrared sensors can detect if there is any machine that can steal card identity. "Let alone there are damages, even if the machine's position changes only by 1 cm, it will let an alarm out and sends a message to the officers," said the student of Department of Computer Science and Electronics.

So far, the security at an ATM only relies on CCTV and conventional anti- skimmer. Both are considered by Christian unable to detect and prevent crime. However, the new tool is not easy to get tested or applied at any ATM. Christian found out about this when he tried to test this tool at an ATM. They must go through a cumbersome bureaucracy and the bank still undervalues the findings of these students. "It may be considered as the findings of Indonesian who is still a student, so, it is



considered unreliable," he said. According to Christian, the initial making process of the tool is driven by the rampant cases of ATM machine thefts and unauthorized withdrawal of customer's money through the skimmer. For four months, Christian along with four colleagues managed to create the tool that up until now has not been given any trade name. He hopes this finding will be utilized by the bank to maintain the security of clients' money and prevent crime at ATM. "(It is aimed) to prevent anyone who wishes to steal customer data, withdrawing money that does not belong to her/him," he said.

Dedi Yaniharto, one of the judges in PIMNAS activity, acknowledges the quality of students' findings and research increases each year. According to the judge, the students have successfully taken advantage of advances in technology. "We observe it from the presentation and the writing method. In addition to the capabilities, it is also supported with adequate lab facilities," said the BPPT researcher.

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