

Muhammad bin Ibrahim: Malaysia's "My Ringgit" mobile app and the use of ink staining technology for ATMs

Keynote address by Mr Muhammad bin Ibrahim, Deputy Governor of the Central Bank of Malaysia (Bank Negara Malaysia), at the Launching of "My Ringgit" Mobile Application and Ink-Stain Technology, Kuala Lumpur, 11 May 2015.

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I wish to welcome you to this event, first to launch a mobile app My Ringgit which aims to provide members of public with a tool to obtain information on the security features of our currency; and second to launch an ink staining technology as an innovative solution or approach against any attacks on our ATMs.

Malaysia has one the lowest counterfeit rates in the world. Indeed, if compared to developed economies. Malaysia's counterfeit rate is 2 per million pieces compared to development economies which range between 48 to 100 pieces to a million. Our counterfeit rate is only a fraction of the rate experienced by these countries. Most counterfeits found in circulation in Malaysia were of low quality produced using colour printers without any security features. Empirically no counterfeit notes have ever passed through the sophisticated cash processing machines used by Bank Negara or financial institutions. This is because there is a spectrum of advanced security features embedded in our currency.

Nevertheless, from time to time we keep hearing cases that the general public inadvertently receive counterfeit notes in the course of doing business. In most cases, counterfeit notes managed to pass through because the victims were too busy and casual to check their currency notes properly. This is indeed unfortunate and certainly avoidable if we are a bit more vigilant and aware of some security features found in our currency.

Our currency notes are designed to protect against any forms of counterfeiting from the most basic to the most sophisticated. However, even the best security features and technology that are available will not help unless members of the public are adequately educated on the basic security characteristics of our currency notes.

The security features in our currency notes utilise the latest technology and have stood the test of time. For example, "Intaglio" or raised printing effect, one of the most well-known security element found in almost every currency in the world, have never been featured on any counterfeits generated by colour printers. If only the general public is aware and able to identify of this particular security feature, they should be able to detect ninety nine percent of counterfeits in Malaysia and the world over.

Intaglio by no means is the only security feature. There are many more watermark, electrotpe numeral, see-through register mark, windowed colour shifting security threads with texts, hologram stripe, gold patch, to name a few, are among the basic security features that we should know on our currency notes. All this features can be easily be verified or authenticated using the "FLTC" method, that is to Feel, Look, Tilt and Check without using sophisticated devices.

Indeed, it will take only a few seconds to authenticate our currency notes. For example, to apply the simplest "Look" technique, what is needed is only for us to hold the currency notes against a light. This will allow us to verify simultaneously at least four important security features in all of our currency notes; the 3D Agong's watermark, bright electrotpe numeral, perfectly register see-through mark or windowed colour shifting security threads with texts.

This technique is the easiest and the simplest manner as no special gadget is required. Coupled with a few other techniques contained in the My Ringgit apps we can make a firm conclusion on the authenticity of the currency notes.

Similarly, our new coins are also sufficiently protected by unique security features. In the course of designing the coins, the Bank had engaged with various stakeholders to ensure that the new coins are not only practical but sufficiently protected as well. Each coin denomination is unique in term of size and security features to ensure no fake coins can pass through the coin authentication machines.

As part of our financial education effort, Bank Negara today is launching a mobile application called My Ringgit. This application enables the general public to learn about the most practical and easiest techniques to authenticate our currencies and learn in greater detail the security features found in our currency notes. There are numerous security features but fortunately, we need to know only a few major ones to enable us to tell the difference between genuine and counterfeit notes. It would be in our interest to download and use this application so that we are able to differentiate a genuine and a counterfeit note. In the process, we will get to know and appreciate better our unique characteristics of the design and security features of our currencies.

The My Ringgit application also contains useful information on the locations of the coin deposit machines of participating institutions throughout Malaysia. Users of this app will also receive a "Push Notification" message from time to time on news relevant to our currency like issuance of a new commemorative coin.

Protecting our currency against being forged is critical but protecting it against being stolen is also as important. In the last few years, our ATMs have been the frequent target of criminals that has impacted the general public perception on the security of the banking industry's ATMs. Many defective and preventive measures have been taken by financial institutions to protect the safety of ATMs such as relocating the ATMs to a safer location, strengthening the ATM security panel, installing bollards or even replacing obsolete ATMs. We are appreciative of the police who have played a significant role in improving the ATMs' security. Bank Negara and financial institutions will always stand ready to assist the police in ensuring the security of our ATMs.

We are very pleased to note collaboration by all parties in particular the financial industry has brought positive result with the declined number of ATM robberies being reported last year compared to 2013. I am also very pleased to note the industry continues to collaborate to enhance ATMs' security.

Today, marks another significant milestone in our payment system progression with the launching of an ink staining technology for our ATMs. ATMs fitted with this technology are protected by a security device containing a special ink that will smear the currency note. When there is an attempt to temper the protected ATM, the security device will be triggered to release the ink, staining the currency notes on all corners. This ink is indelible and can be traceable to a particular financial institution that dispensed the currency notes; thus it can assist the police more effectively in their course of investigation. More importantly stained currency notes will lose their legal tender. Stained currency notes are valueless to the criminals but the owner of the currency notes (the financial institutions) can exchange the currency notes with the Central Bank. These stained currency notes cannot be brought back to circulation as they are not a legal tender anymore.

To make the initiative effective and our ATMs safe, members of the public also have a civic duty to play. They must be vigilant when receiving stained currency notes, which most likely are stolen currency notes. Under section 24(1) read together with section 25 of the Central Bank of Malaysia Act 1958 (Part III of this Act is still in force), such defaced or stained currency notes are no longer legal tender and therefore should be rejected by members of the public. Bank Negara has issued a clear guideline on how financial institutions and the general public should treat and handle ink stained currency notes. Read together with the Panel Code (S411) it is an offence to dishonestly receive or retain any stolen property with knowledge or reasons to believe that it is a stolen. Therefore, it is an offence to retain or hold dye-stained currency notes which mostly are involved in a robbery. To help the public, in

identifying stained banknotes, we shall conduct awareness program to educate the public on this matter.

It is with great pleasure that I launch the My Ringgit apps and the use of the ink staining technology for our ATMS.

See also: [Frequently Asked Questions](#).