

29 January 2022

Mrs. Josephine Teo
Minister in charge of Smart Nation Office

Dear Minister

Digital Signature

I submit this suggestion to implement a Digital Signature platform to “sign” an online form. It will improve productivity in Singapore with a wider adoption of the digital process.

I hope that you can get the Smart Nation Office to consider it. I will be happy to provide any further explanation that may be necessary.

1. Current Process

At present, I have to go through the following steps to submit an application to a service provider (e.g. bank, insurance company, utility company, government agency, etc.)

- I am asked to download a manual form (in PDF) from their website.
- I have to print out the form and enter the data manually
- I complete the paper form and sign it.
- I scan the completed form and upload it to the service provider at their website or send it to them by email.
- The service provider has to employ people to enter the data from the scanned form into their server.

The service provider uses this process because they need a signature for the application.

I am aware that some service providers have already converted their manual forms to online forms, which the public can access after entering their website using SingPass.

However, this online submission is not available with many service providers – as it takes a lot of development work to integrate their website with SingPass.

2. Proposed Solution

I wish to suggest that the Smart Nation Office implement a Digital Signature platform for the public to “sign” an online form with a service provider.

This platform works as follows:

- The public registers for a digital signature by providing the NRIC and a 6 digit PIN at the existing SingPass platform.
- The service provider can apply to be linked to the Digital Signature platform
- The service provider converts their application forms to be an online form. The public can enter the required data on the online form and use a link to proceed to the Digital Signature platform to “sign” the online form with their NRIC and PIN. The platform returns the Name, NRIC, timestamp and unique ID to the service provider.

It is relatively easy for the service provider to convert their existing manual forms to the online form that is linked to the Digital Signature platform.

It is easy for the public to complete and “sign” an online form using this new process. It reduces the work for the public.

This new process also improves productivity for the service provider as they get the data needed immediately from the online form (instead of employing people to enter the data from the scanned manual forms).

We can also allow a business entity to create a digital signature with their entity number and a PIN to “sign” applications for their business entity.

The Digital Signature platform will operate separately from SingPass, as it has to handle a large volume of requests to “sign” online forms.

3. Scope of Digital Signature

I will describe briefly the scope of the digital signature.

It can be used to “sign” an online form. It can be used to “sign” online applications as a first level proof of identity. This level of security is similar to a signature on a manual form.

I do not expect the digital signature to be used for transactions that have large legal or financial impact. For these transactions, I expect the current practice to continue, i.e. the signature to be witnessed by a lawyer.

4. Distribution of Public Goods

At present, the practice is for some public goods, e.g. masks distributed by Temasek Foundation, to be distributed at vending machines to the public by entering the NRIC number alone.

This is risky, as the NRIC is easily obtainable by a thief and can be used to retrieve the public goods fraudulently.

Under the new process, the vending machine can require the person to enter both the NRIC and the PIN as proof of identity.

After the NRIC is made secure with a PIN, it will be possible to allow the NRIC to be used freely to identify a person, as the identity theft can be protected by the need to provide a PIN for the NRIC.

There is no need to continue the current practice that the NRIC should be kept as a private data.

A handwritten signature in black ink, appearing to read 'Tan Kin Lian', written in a cursive style.

Tan Kin Lian

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