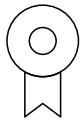
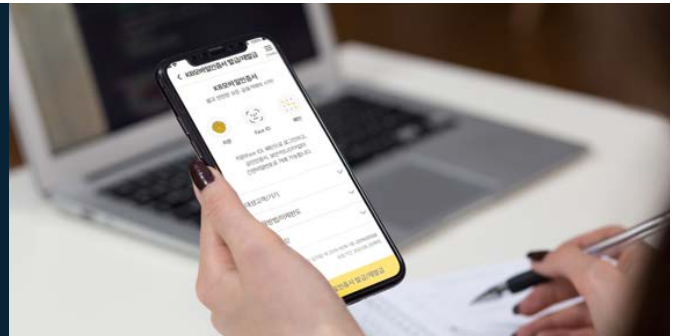




# Protecting the Mobile Banking Experience with Trustonic's Application Security

KB Kookmin Bank (KB Bank) is Korea's largest bank in terms of the number of mobile users, providing online and mobile banking services to over 10 million customers.



## The challenge: Simplifying mobile banking authentication

Traditionally, Korea has required its mobile banking users to present public certificates, typically issued by an NPKI accredited CA, for authentication purposes and to ensure the integrity of transaction records. In addition to installing

certificates, citizens are also required to renew these certificates regularly.

The process of installing and renewing public certificates can be a complex, frustrating, and time-consuming one for customers, often requiring revalidation and multiple passwords. As a result, Korea's certificate-based authentication infrastructure has limited the user experience for mobile banking apps.



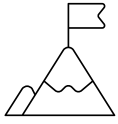
## The solution: Use Trustonic Application Security to simplify the user experience

Trustonic's Application Security solution has enabled the bank to provide faster, simpler and more secure digital banking services by removing this "friction" from the customer authentication process.

The Application Security platform safeguards mobile applications by securing sensitive code, data and processes in a highly protected environment. This environment dynamically upgrades over the course of an app's lifecycle to take advantage of the most advanced hardware and software security technologies available on smartphones. Banking, payment, acceptance and fintech app developers benefit, as they can use the Trustonic SDK to build secure next-generation experiences.

KB Bank are taking a more open-market approach by issuing their own public certificates, rather than relying on a government agency or third-party. These certificates are stored securely inside KB Bank's Star Banking app using our Application Security. It protects the certificates by isolating them inside a secure environment on the user's smartphone.

By using our Application Security to protect the digital authentication certificates, KB Bank has dramatically simplified customers' access to banking services, and enabled customers to authenticate higher value transfers in-app, without the need for cumbersome security tokens or unified user authentication.



## The Outcome: increased adoption rates

KB Bank's Star banking app has 4.5m active users, and adoption among KB Bank customers continues to grow rapidly because of the simpler authentication experience and the ability to authenticate higher value transfers.

Prior to this, public certificates had to be renewed regularly by the app user. Now that the new KB Mobile Certificates have the advanced in-app protection provided

by Trustonic, they no longer need to be renewed unless revoked by the customer or unused for one year. This significantly simplifies and enhances the user experience.

Furthermore, high-value in-app payments are now possible because of this advanced protection. KB Bank customers can transfer up to 2 million won (approx. \$1,700 US) using their account password, and up to 50 million won (approx. \$41,000 US) with a password and six-digit PIN. Amounts between 50 million won and 500 million won (approx. \$413,000 US) can be verified by entering their password and PIN before receiving an additional authentication code via an automated phone call.



KBBank

### Mr. Han,

Senior Executive Vice Chairman, Kookmin Bank

"In Korea, users need to install authentication certificates to use mobile banking services. This can be a complex and time-consuming process that often requires revalidation and multiple passwords. With our long-standing partner Trustonic, we are able to vastly improve the in-app user experience and allow our users to authorize much higher value transactions. Some security solutions make you choose between security, user experience and performance, but with Trustonic's Application Security there is no compromise."



**KB Bank has vastly improved the user experience by making its app more seamless and secure with Trustonic's unique combination of hardware and software in-app protection.**

This example shows how advanced security can enrich apps for end users, and explains why Trustonic's Application Security is being adopted across payments, banking, fintech and mPOS to protect financial services.

For more information about Trustonic's Application Security, visit: [www.trustonic.com](http://www.trustonic.com) or email [info@trustonic.com](mailto:info@trustonic.com)

**TRUSTONIC**

[info@trustonic.com](mailto:info@trustonic.com)  
[trustonic.com](http://trustonic.com)

200 Cambridge Science Park,  
Milton Road, Cambridge, CB4 0GZ. UK

Registered in England with  
Company Number 07890730