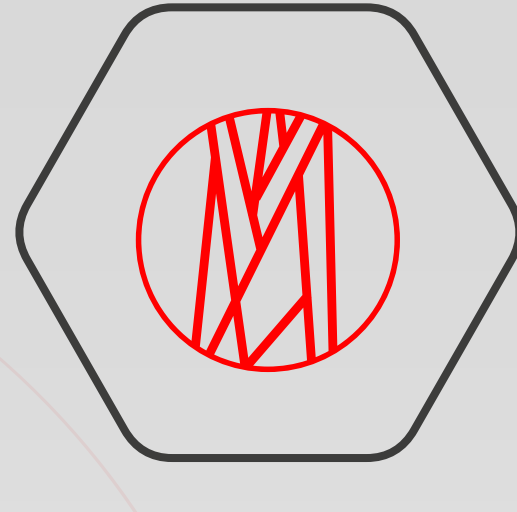


## HOW TO SOLVE THE STRONG CUSTOMER AUTHENTICATION REQUIREMENT WITHIN PSD2?

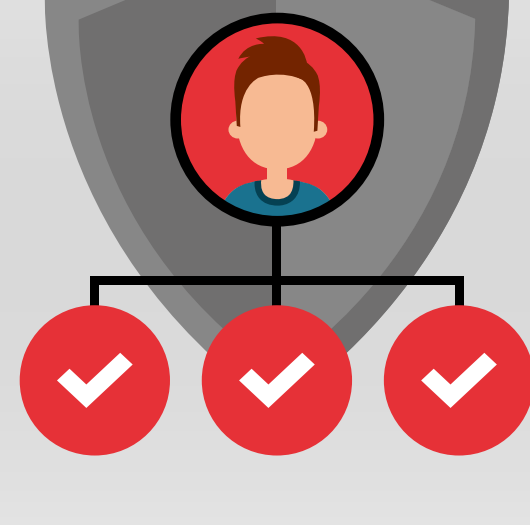


### VEINID



The **Second Payment Services Directive (PSD)**, or PSD2 as it is commonly known, was implemented in January 2018. It aims to bring the original Payment Services Directive from 2007 **up to date** with the digitalisation and innovation agenda that is now widespread throughout the payment services industry.

PSD2 is a force for **good for consumers** by improving security and hoping to **address the fast growing problem** of banking and payment fraud.



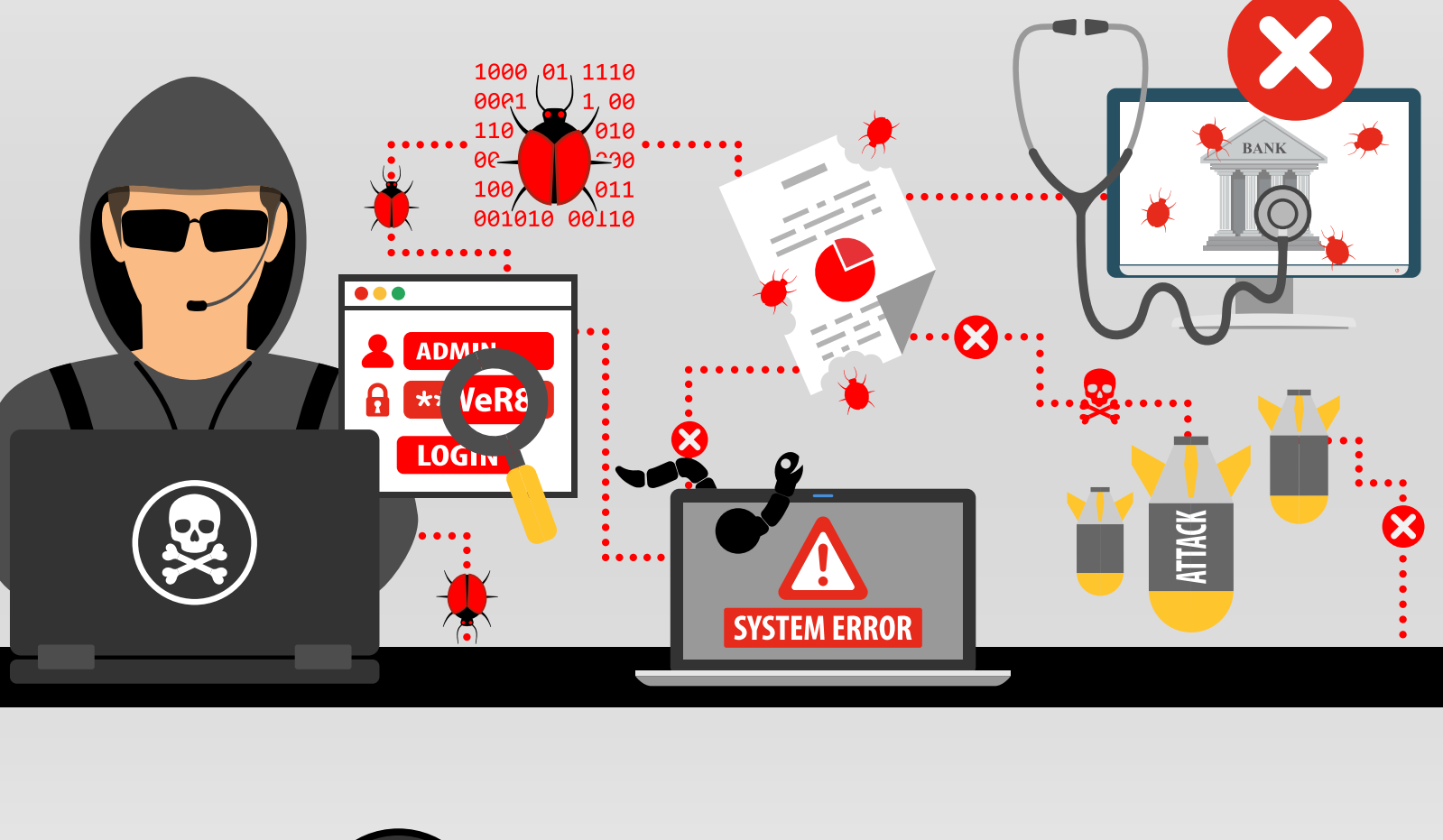
PSD2 defines customer authentication as “the **validation of the identification** of a person based on two or more elements categorized as **knowledge, possession and inheritance** that are independent.”

### What does that mean practically?

- **Knowledge** = something you know. A passcode or PIN, for example.
- **Possession** = something you have. A SIM card or a cashpoint card.
- **Inherence** = something you are. Biometric information, such as a finger scan



**Just one** of these elements **on its own isn't very secure**. For instance, something you know such as a **login passcode could be stolen** and **used by someone else**.



**“For ultimate protection, you really need all three layers.** That means biometric technology is going to **become increasingly important.**”

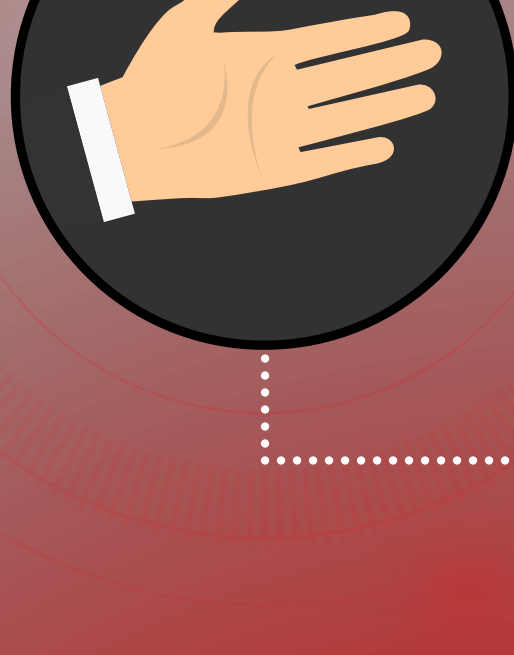
Ravi Ahluwalia,  
Deputy General Manager,  
Information Systems Group.

The role of **biometrics in banking is expected to grow** dramatically with Goode Intelligence predicting that by the end of 2020, **1.9bn bank customers around the world** will be using biometrics.



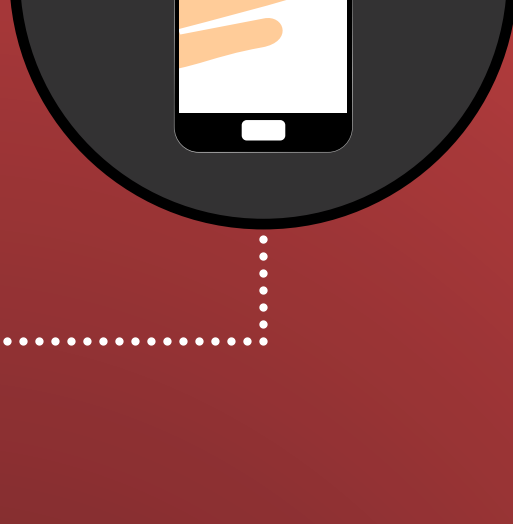
The **next generation of VeinID** takes things to a whole new level. Allowing finger vein data to be captured using a digital camera, **the ability for consumers to use privacy compliant biometrics in everyday transactions** without any special devices or tokens being issued by a bank, will become a reality.

**See how it works below.**

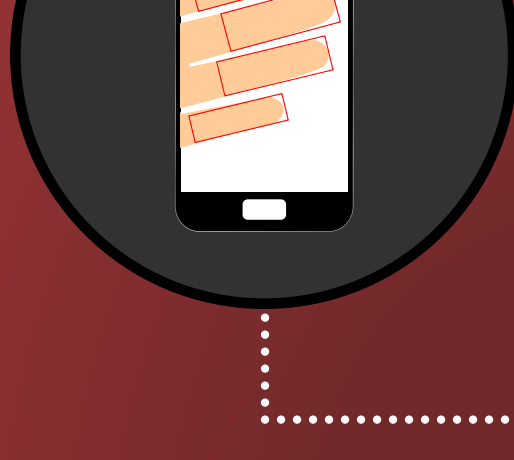


**Step 1**  
User presents their fingers.

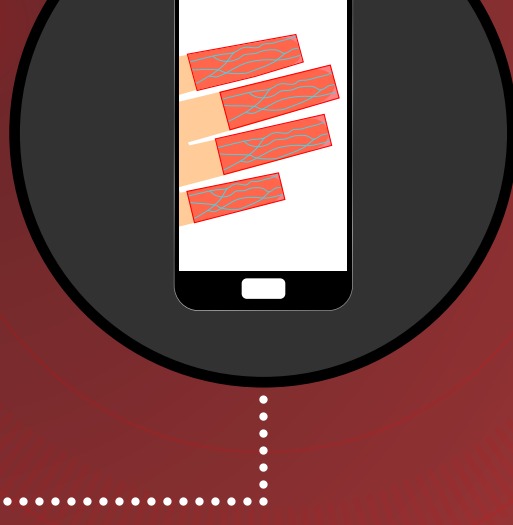
**Step 2**  
Device captures the image.



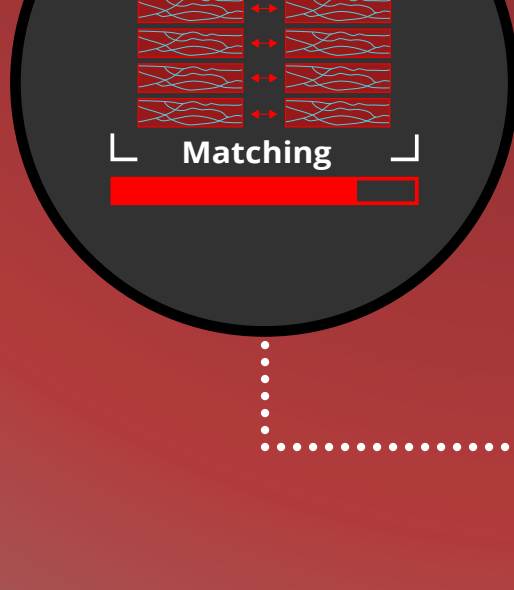
**Step 3**  
Finger regions segmented.



**Step 4**  
Finger Vein patterns extracted.



**Step 5**  
Multiple finger matching.



**Step 6**  
Customer authenticated.



With legislation now calling for **more rigorous security**, it's increasingly likely that more companies will **extend their offering to include biometrics like Hitachi's VeinID**.

To make the most of the opportunities in this digital business era, contact us at **Banking.Solutions@hitachi-eu.com**