

An Evaluation Study of User Authentication in the Malaysian FinTech Industry With uAuth Security Analytics Framework

ABSTRACT

The increased cyberattack frequency and ferocity have alerted the fintech industry in detecting existential security threats and risks. Various authentication mechanisms have been deployed to countermeasure cyberattacks; whether these deployed solutions fulfil the security and technical standards has not been significantly investigated. This article proposed an uAuth security analytics framework to evaluate the deployed user authentication mechanisms. Subsequently, the technical evaluation study covered ten major commercial banks in Malaysia, whereas 120 respondents aged 18 to 25 participated in the user awareness study. The result found that mobile banking enforces more robust user authentication mechanisms than internet banking in Malaysia. As 80% of the Malaysia fintech systems only ranked as Level 3 of the uAuth security analytics framework, the authors urge Malaysia fintech industry to enhance their authentication factor, login and transaction verification methods, password policy, as well as readiness for quantum-safe security technologies.