Name:
SIMProtect – Educating the public on risks and the prevention of mobile number porting scams

Project Description and Impact

Cyber-criminals target Australians’ mobile phones because businesses (e.g. online banking, superannuation funds) commonly use SMS messages for two-factor authentication of their customers’ identity. Unauthorised mobile phone porting attacks enable cyber-criminals to impersonate their victims and gain control over their online accounts to steal their money, reset their passwords, apply for credit in their victim’s name, etc because the criminal receives the two-factor authentication SMS code rather than the victim. Unfortunately, most consumers are not aware of this risk. Mobile phones were by far the most prevalent delivery technique among the 20,000 identity theft incidents reported in 2020 according to the Australian Competition and Consumer Commission.

The SIMProtect Project combines research on cyber security, financial risk, psychology, and consumer education with a strong community engagement component. Since its launch in May 2021, SIMProtect has improved social welfare and individual wellbeing for 18,000 Australians by raising awareness and better protecting consumers from the risks of fraudulent mobile number porting and identity theft. Using innovative web-based and social media technology, the project delivered an educational website and an educational online game, promoted via an animated advertisement to its target audiences of university students and seniors through social media.

Website: https://www.simprotect.org.au/
Educational Game: https://phoneportinggame.web.app/
Educational Video: https://www.simprotect.org.au/

Specifically, the project educates Australian consumers about the following areas:
1. The nature and risks of mobile number porting scams;
2. Warning signs of identity theft and how to protect yourself;
3. Practical steps to minimise risk of identity theft and financial crimes; and
4. If consumers do fall victim, how to recover quickly by limiting the time and money lost in the fallout.

In a collaborative and cross-disciplinary effort, the project implemented Macquarie Business School’s vision to take a progressive approach to research and education to drive beneficial change and sustainable outcomes in the world. Main project partners were the funding bodies: the Ecstra Foundation (https://www.ecstra.org.au), the Optus Macquarie University Cyber Security Hub and Macquarie Business School. Additional research partners included the Australian Seniors Computer Clubs Association, students from Macquarie University, the NSW Cyber Security Network, and telecommunication providers. Feedback from focus groups with over 100 students and seniors informed the design and content of the deliverables, and online
feedback continues to drive their improvement. The project strengthened the higher education sector’s relationship with Australian seniors by disseminating its findings at the Australian Seniors’ Computer Club Association National Conference.

The project has also been featured in the media, including ABC News, ABC Radio Sydney’s Breakfast Show, The Lighthouse and The Australian Cyber Security Magazine. Awareness raised through this project has also contributed to a major policy change, the ‘Telecommunications Mobile Number Pre-Porting Additional Identity Verification Industry Standard’ (https://www.acma.gov.au/port-customers-phone-number), making fraudulent mobile number porting more difficult for cyber-criminals. However, the problem persists and raising ongoing awareness among consumers is of major importance.

Since the launch of the social media campaign in June 2021, SIMProtect has already generated over 300,000 page reaches on Facebook, while the Simprotect website has attracted more than 1,000 visitors per week since its launch.

The project has also been presented at the Australian Cyber Conference, the 2020 Australian Technology Conference for Seniors. The website, educational game and video has also been used by industry and government organisations, e.g. in educational training sessions by Claims Central Consolidated, a global claims solutions business that provides services, technology and data insights to manage claims.

The project was also chosen as the Macquarie University Entry for the 2021 AFR Higher Education Awards in the category ‘Community Engagement’ and was the Runner-Up for the ‘CYBER SECURITY OUTREACH PROGRAM OF THE YEAR’ category of the Australian Information Security Association (AISA) 2021 Awards.