

Welcome to the first of our monthly AP4L bulletins! AP4L has reached the halfway mark now in the three year process, and with some exciting developments already under our belts, and many more to come, we wanted to share our progress with you.

Each month we will be sharing with you some of our outputs, developments and latest news from a different area of the project. This month, I am going to give you an overview of AP4L, and next month, we will share more on our Public Involvement in Privacy (PIP) Panel, which is proving to be a pivotal part of AP4L.

So, what is the AP4L project all about? Well, sometimes, life "just happens". Be it divorce, being diagnosed with a serious illness, leaving the armed forces, or deciding to come out as gay or transitioning gender, these moments in time can be very emotional, distressing and people do not typically have the "bandwidth" to stop and consider their online safety and privacy during these difficult life transitions.

In the case of a relationship breakdown for instance, a couple may have a shared online identity, which needs to be separated without compromising each person's privacy. With a serious illness, perhaps the person has cancer and needs a family member to take over their financial affairs while they have treatment, this exposes the individual to potential online harm if the person they trust doesn't have their best interests at heart. When coming out, perhaps an individual wants to come out to trusted friends, but they aren't ready for their grandparents to know, so this all has to be navigated online.

In order to address such issues, the AP4L Project is committed to the following objectives, concentrating on the aforementioned life transitions:

- 1. Develop scientific & theoretical foundations to understand challenges
- 2. Design and evaluate 3 core innovations (Risk Playgrounds, Transition Guardians, Security Bubbles) to address these challenges
- 3. Work with <u>REPHRAIN</u> to develop these innovations into "citizen-ready" tools

With a 30 strong team of computer scientists, psychologists, legal experts and criminologists working across 6 UK universities on this project, we have made great strides already with the first two commitments above. Academics from University of Strathclyde, Surrey, Edinburgh and Edge Hill have been working on the first workstream - to develop a holistic understanding of online privacy and vulnerability during life transitions, working with people and institutions. So far this includes surveys on 400 participants and workshops across the life transitions, which has yielded extremely interesting insights that we will delve into in a future blog post.

All the results of this work are then fed into the second workstream, led by University of Surrey, which is developing the three main technological responses. For each innovation novel privacy-preserving algorithms are being developed, as well as protocols, machine learning models and other research prototypes. The three developments are:

 Risk Playground - Inspired by the "<u>Adventure Playground</u>" concept which deliberately includes risky elements to promote a better understanding of risk among children. Risk Playgrounds will enable citizens to interactively explore vulnerabilities in immersive settings



to build an understanding of risks and develop robust responses. Scenarios will be developed via user studies, and prototypes to be co-created with stakeholders.

- 2. Transition Guardians these are designed to provide real-time protection to users during life transitions, with warnings against common frauds or scams and trigger warnings or blocking content. These should strike a balance between hampering online experience through overprotection and creating risk through underprotection. The Transition Guardians will also be customisable for individual users and life transitions.
- 3. Security Bubbles Inspired by COVID support bubbles, these are designed to bring together users who can help each other (or need to work together) during a life transition, whilst providing additional guarantees to safeguard everyone involved.

These tools will then be evaluated by the third workstream, led by QMUL, University of Cambridge and Strathclyde, who will work with project partners, policy makers and the wider community to deploy AP4L solutions in the online lives of citizens navigating life transitions. In other words, making the tools developed by AP4L "citizen-ready".

Our next blog post will talk about a key methodological innovation that we have introduced, and is informing every aspect of our project --- the Public Involvement in Privacy (PIP) Panel. Borrowing from healthcare, where <u>Patient and Public Involvement</u> is recognised as a "best practice" approach, the PIP panel applies this concept to learn from and actively co-design our research with citizens who have lived experience of life transitions and faced security/privacy challenges as a result. Learn more in next month's blog post!