

From “usable security” to “security by design” – focus on secure routines

The goal of usable security research should be to create security solutions that are effective, efficient and acceptable for the intended users. Quite often, however, the focus has shifted on “educating” the intended users to enable them to use security mechanisms that are not usable. This “fix the user” approach – encouraged by leading security standards and certifications – means billions are being spent every year on security awareness, education and training. But there is little evidence that it is effective in “improving” user behaviour in the way that security experts wish for. Basic knowledge from human factors, education and behavioural sciences research explains why this approach is doomed to fail. I will argue that we need to shift our focus on designing solutions that support secure routines, and provide some examples.