CENTRE FOR RESEARCH AND EVIDENCE ON SECURITY THREATS

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Centre for Research and Evidence on Security Threats

Security Dialogues

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Background

The Security Dialogues workshop presents a response to the reality of organisational security for people who can deal with complexity. Within organisations protective security is both a social and political activity where often the only mature approach is to negotiate an optimal compromise.

In the real-world there's often a short fall between an organisation's mandated, formal security processes and what actually happens: projects have to finish, systems have to run, and the business has to move forward. The social practice (Reckwitz, 2002) of security flourishes in the compromises and gaps between the processes that seek to shepherd the activities and outputs of security enactment. It's here that we see an opportunity to improve security dialogues, risk communication, and security culture.

We carried out six scoping interviews, from which we discovered that poor interactions between cyber security practitioners and developers often result in a lack of trust on both sides. Software developers were particularly wary of revealing innovative solutions to security practitioners for fear of being criticised, which one interviewee referred to as 'shooting the baby'. Developers felt that security practitioners were judging them and that the security process was simply another hurdle to overcome. Our aim has been to move the dialogue between security practitioners and developers from non compliance, through adherence and towards concordance.

Concordance

Collaboration between Developers and Security with a mutual understanding and agreement about security, risk and technology.

Adherence

Developers taking note of, and acting on the advice of Security

Non Compliant

Developers should follow Security advice and if they do not, it is their responsibility

Workshop

We designed a three day workshop to enable security practitioners to build effective relationships with software developers and manage security dialogues more productively. Through the course of the workshop we aim to help security practitioners develop into security facilitators.

The workshop incorporates research from healthcare, as well as social marketing theories of exchange and influence (Ashenden & Lawrence, 2013). We applied techniques for designing interventions that would encourage behaviour change as well as questioning, conflict resolution and negotiation skills developed from counselling. We aimed to give participants a broad base of tools and techniques to try, and we then refined and adjusted the initial selection over time.

The project uses action research – an applied research methodology that aims to analyse and achieve practical change in a particular environment, such as an organisation. It uses an iterative process to address an organisational issue, with the research output having implications beyond the immediate project. In this way, participating employees become part of the research process and their views and organisational knowledge contribute to the final solution. In turn, the researchers share their expertise based on previous research and academic experience.

Having completed four workshops with 26 participants in total, we are now re-focusing the workshops to meet the needs of software developers.

Outcomes

By using a participative approach, the workshops have generated a rich set of data, some of which is being used to re-focus the workshops for software developers. The positive evaluation ratings we received demonstrated that participants found the workshops challenging and useful and, more importantly, that they'd encourage others to attend. We learned that when a security process works well, it's often because the security practitioner has good soft skills.

Final comment from a security practitioner:

'[We] play a greater role in interfacing between an unsatisfactory mandated process and the operational business than I realised'
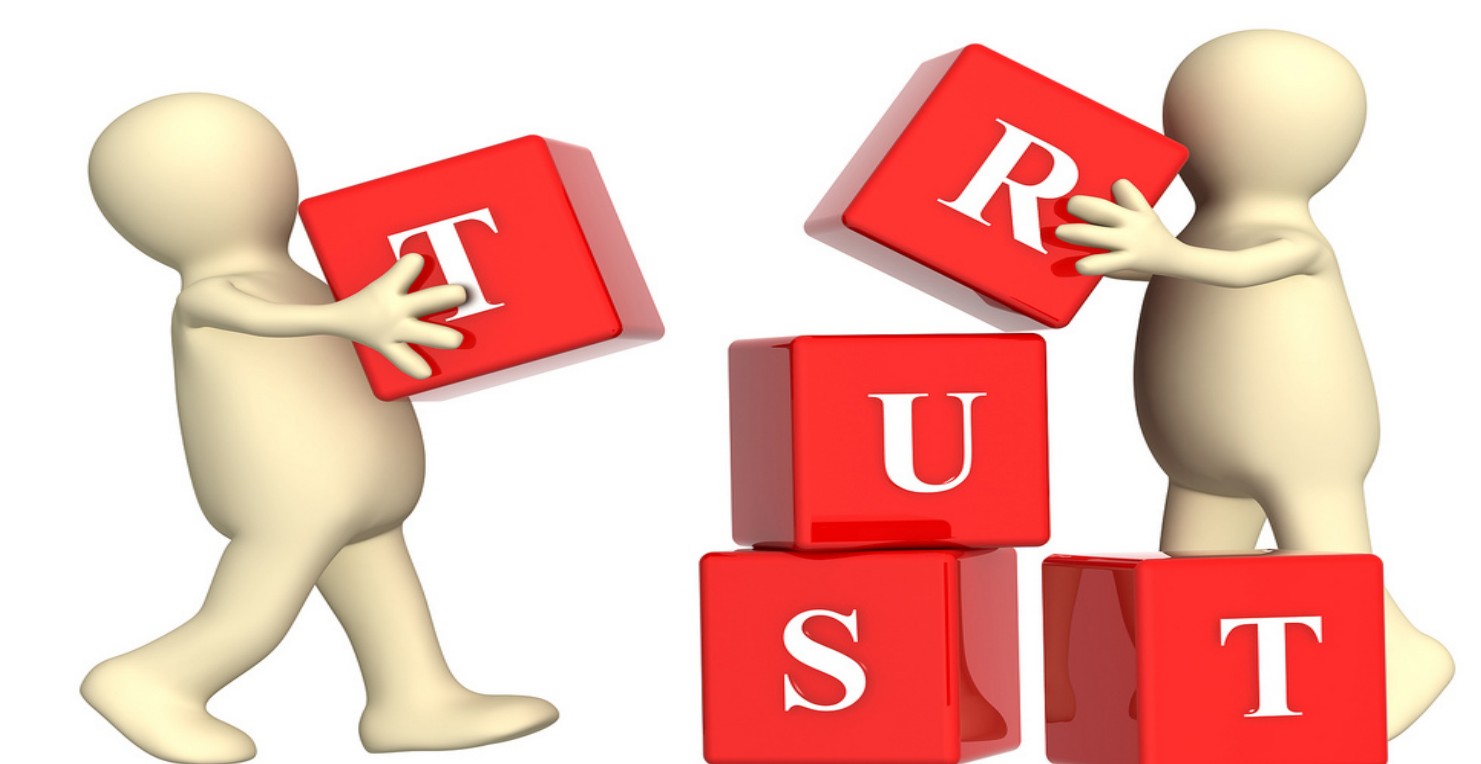
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