RUHR-UNIVERSITÄT BOCHUM

“You still use the password after all”
Exploring FIDO2 Security Keys in a Small Company

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WEB AUTHENTICATION VIA PASSWORDS

Username + Password
PHISHING OF PASSWORDS

Username + Password

Phishing

Identity Theft

Attacker
FIDO2 → REPLACING PASSWORDS

Webserver

FIDO2 Authenticator

Phishing
FIDO2 “PASSWORDLESS” SETUP

Authenticator

User Presence / Verification

Client

Relying Party
Study Environment

- Software company
- Life sciences sector

Participants

- 8 employees
- Sales, developers, managers

Implementation

- Optional FIDO2 login
Study Protocol

Workshop → 4 Weeks → Interview
SECURITY AND PURPOSE

“It’s more secure because no password needs to be transmitted, the key is used [...] to sign in.” – P6

“It is okay [to use the key] for stuff like online banking [...] not for Facebook or email” – P6
ADOPTION BARRIERS

“Well, if I forget or loose it, I couldn’t get into my account” – P3

“I just entered the password because I am used to it.” – P7
AUTHENTICATION TIMINGS

- Security key
- Browser auto-fill
- Manual logins

Time (s)
CONTACT

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