

Insider threats to Cybersecurity

6th CSIR Conference

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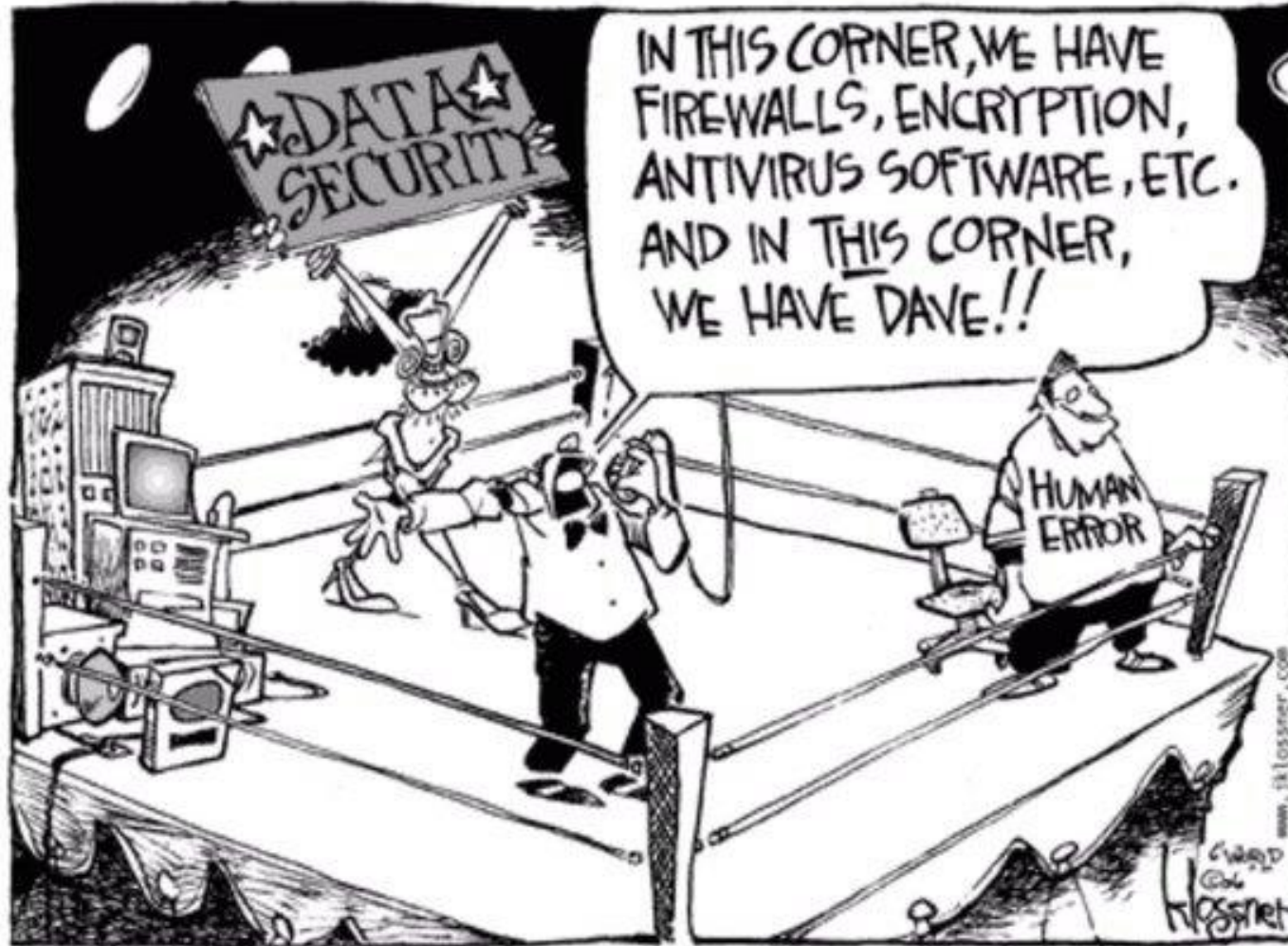
Vodacom Group

CTSO

6 October 2017



INSIDER THREATS



INSIDER THREATS | Impact



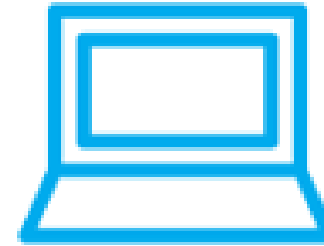
High Risk Applications
95%



Leavers, Joiners & Movers
56%



Public Data
64%



Inappropriate Internet Usag
59%



Security Bypass
x2

Are insider threats the main security threat in 2017?

INSIDER THREATS | Who is involved?

Privileged Users



Terminated Employees



Third Parties

INSIDER THREATS | The danger

According to a 2017 Insider Threat Report, 53 percent of companies estimate remediation costs of \$100,000 and more, with 12 percent estimating a cost of more than \$1 million.

**Insider threats
can go
undetected for
years**



**Hard to
distinguish
harmful actions
from regular
work**



**Easy for
employees to
cover their
actions**



**Hard to
prove guilt**



INSIDER THREATS | The cause

What makes malicious insiders conduct such crimes?

Acting on opportunity



Taking revenge for perceived



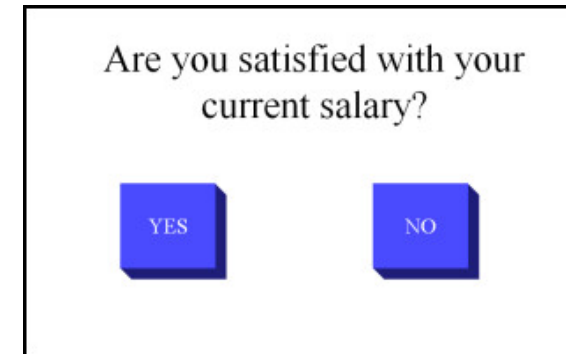
Making a statement



Doing competitor's bidding

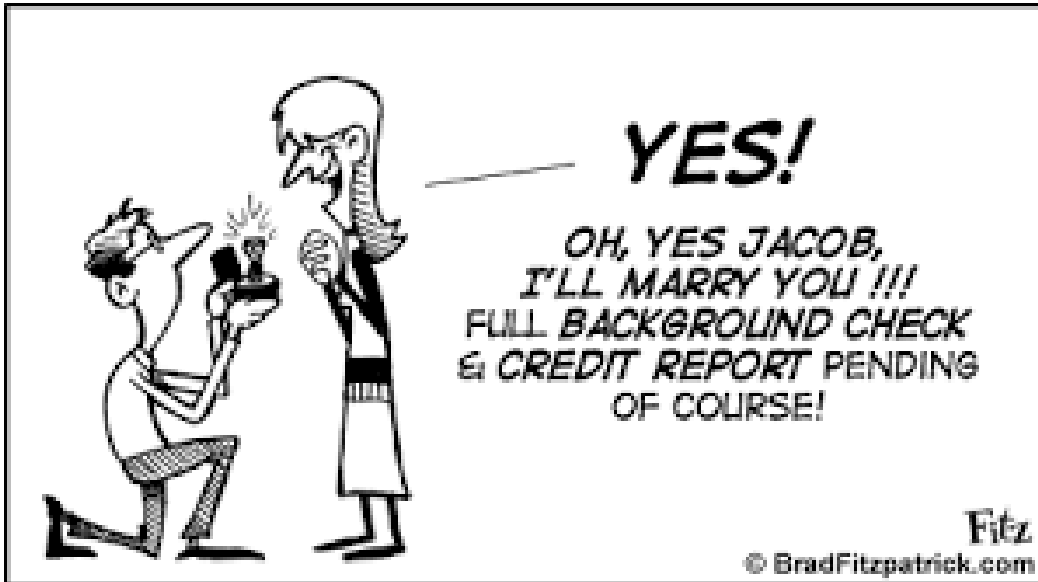


Seeing themselves as a future competition



INSIDER THREATS | Combating it!

Background Checks



General Investigations

Comprehensive Background Investigation

Background Screening Services

Truth Verification

Risk Surveys and Crime Analysis

INSIDER THREATS | Combating it!



**Watch employee
behaviour**

INSIDER THREATS | Combating it!

Conduct a privilege audit.

Start all accounts with least privilege.

Enforce the separation of privileges.

Use just in time privileges.

Make individual actions traceable.



Use the Principle Of Least Privilege

POLP

INSIDER THREATS | Combating it!

Control user



Unique complex passwords

Prohibit credential sharing

Use two-factor authentication

INSIDER THREATS | Combating it!

Use auditing to monitor access to files

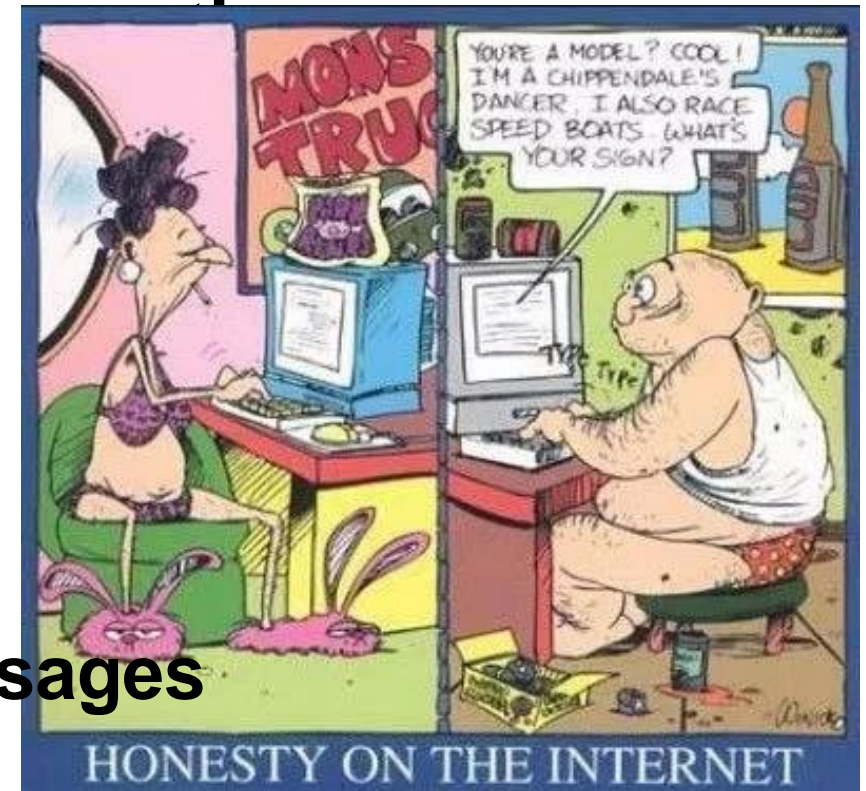
Examine cached Web files

Monitor Web access at the firewall

Monitor incoming and outgoing e-mail messages

Control what software employees can install or run

Monitor user



INSIDER THREATS | Combating it!

Obtain C-level support

Partner with key departments

Be relevant

Measure success

Incentivise awareness

Use a variety of awareness tools



**Educate
employees**

INSIDER THREATS | Conclusion

Follow a good “intake” and “exit” program

Apply and verify “privilege user access management”

Apply “strong security baselines” both inside and externally

Create a monitoring process

Verify by regular audit process

Educate and inform

Know your employees

Who are the “bad guys”?



45%
Outsiders



31.5%
Malicious
insiders

23.5%
Inadvertent
Actor



Questions?

