

Internet banking is dead!

Long live Internet banking

or

How diverging forces combine to pull apart a hopefully secure on-line business

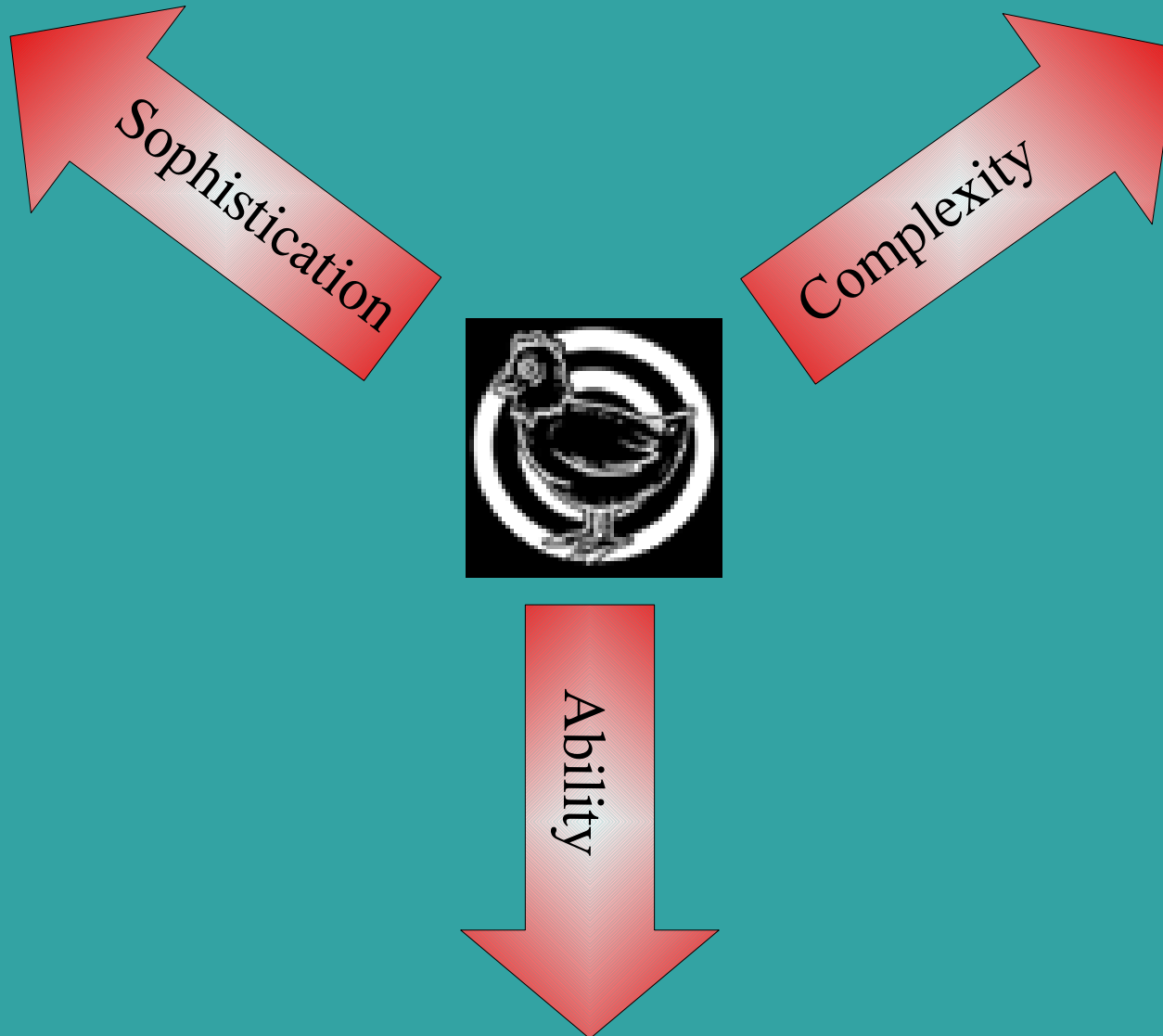
Dr Tim Redhead

DotSec Pty Ltd

www.dotsec.com

Brief introductions

- DotSec – Information security specialists
- Application security
 - Make it or break it
- Legal, financial, utilities and government
- Despite the title
 - Broader trends lead to concerns



Force 1 - Sophistication of attack


- Ah, the good old days...
- The reality now
 - Established services-oriented industry
- Customizable, software packages and kits
 - Why buy when you can rent?
- Specific targets and flexible clients
 - Mother knows best... about targeted attacks!



What is your bidding?

```

----__abcd-xyz789__--
Content-Disposition: form-data; name="Module"
IEInjector
----__abcd-xyz789__--
Content-Disposition: form-data; name="do"
get_urls
  
```



```

f access.imb.com.au/personal
f online.mecu.com.au/daib/logon/cu3140/logon.asp
f secure.ampbanking.com/au/Logon
p anz.com/IBAU/BANKAWAYTRAN
f ebank.adcu.com.au/mvp352/Login.asp
p banking.postbank.de/app/ueberweisung.prep.do h
p banking.postbank.de/app/legitimation.exec.do h
p banking.postbank.de/app/login.do h
  
```

What have we seen

- Social-engineering attacks
 - Phishing for plug-ins from my virtual wall
- Scripting attacks
 - But its OK, its [whatever] site
- HTML injection attacks
 - Undetectable and SSL-immune
- I'll have the works!



Force 2 - Complexity of services

- Common client platform requirements
 - Javascript, ActiveX, even Flash!
- Service complexity
 - “Rich access-control matrix”
 - “Dynamic user roles”
- Current discussions
 - Shameless marketing FUD?
 - Our experience

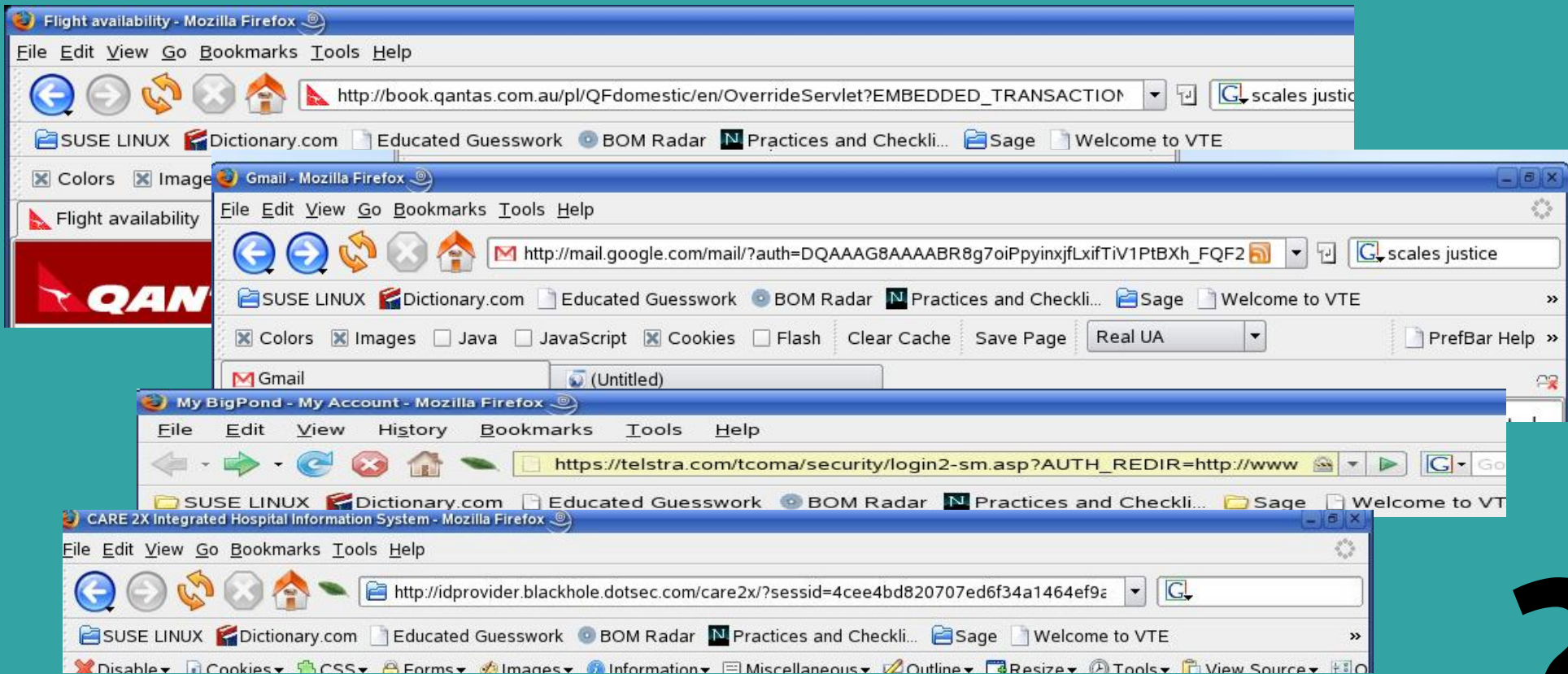


Force 3 - (In)Ability of users

- How many studies do we need?
 - Ask and ye shall receive (1996) UQ
 - Why can't Johnny encrypt? PGP usability study (1999)
 - Failure to Recognize Fake Internet Popup Warning Msgs (2008)
- What are we asking them to do?
 - Identify, refuse, patch, alert, disable...
- Its not going to happen!



And just for example...



So, what does the future hold?

- Is the sky really going to fall down?
- Only two options
 - Pack up and go home
 - Continue as is
- But what about the customers?
 - Will they accept liability tricks?
 - Where will they seek shelter?



And that's the opportunity!

- Defer the apocalypse! Third option found!
- The sky won't fall
 - But chunks of the framework will
 - No slackening. No more-of-the-same
- Opportunity for the proactive and prepared
 - And avoid hoping for silver bullets
 - Business modelling, SSDLC, holistic approach
- Answers are there to be found

