What does the future hold? Threat Horizon 2011

Adrian Davis

Head leadership and Standards Group

Research and Services Team

Information Security Forum

Agenda

- Introduction

- The challenge

- The process

- The threats in 2011

- Beyond 2011

- What do I do now?

The Information Security Forum

Risk Management Tools

An unrivalled portfolio of automated risk management tools, which allow Members to:

- Measure the strength of their information security arrangements
- Benchmark their security arrangements against those of other Member organisations
- Determine the extent to which they comply with leading international standards for information security
- Perform comprehensive information risk analysis
- Calculate return on security investment (RoSI)

Solutions

A comprehe...

- Exe...
- ...
- ...
- ...e guides
- ...eports
- ...ked methodologies

Knowledge Exchange

Members benefit from glob... participation in:

- Work groups / ... issues in info...
- Regional ...
- Onlin...
- MY... ...e extranet
- ... ...on common areas

ISF Annual World Congress

The leading international conference for information security professionals. Key features include:

- Exclusive to ISF Members
- Two places fully funded out of Membership
- Access to latest thinking in information security
- High profile keynote speakers
- Presentations from Members
- Opportunity for Members to sponsor

And much more besides!

Our challenge....

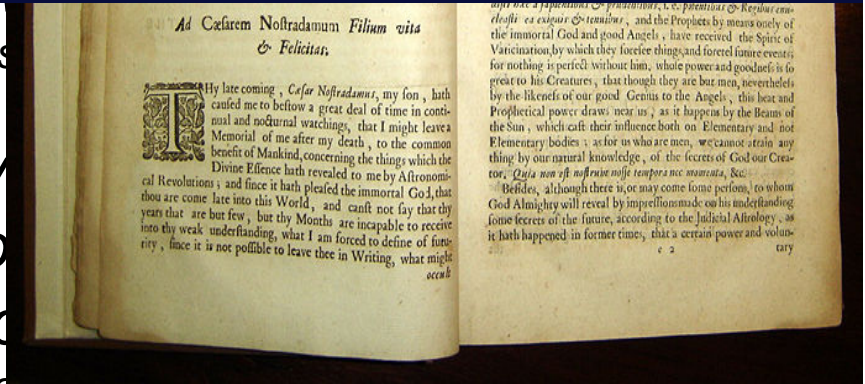

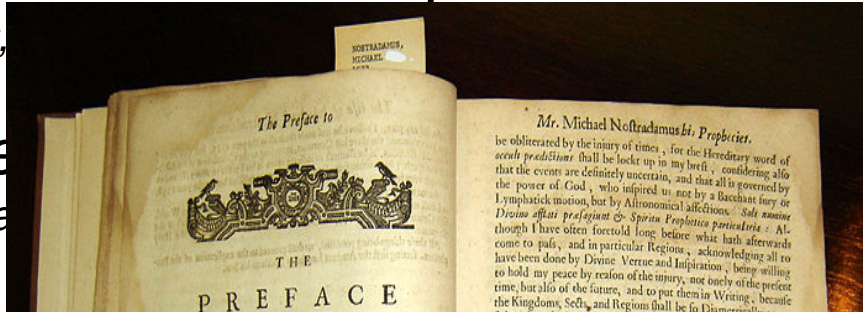How do we make sure we don't cry wolf?

Is to predict the future…

machines are impossible"

...dent,

...rke

...cha

Increasingly, information technology is playing a pivotal role in all our lives, both at work and at home
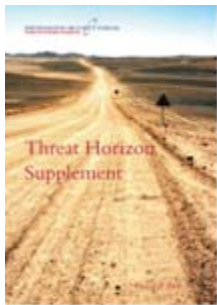
...ness

...any

...co

...f no

internal memo 1878

What is the threat horizon?
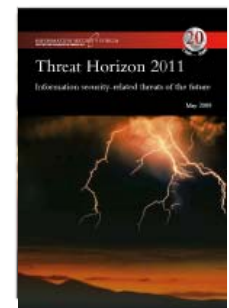
A report that...

- identifies new and changing threats that are likely to impact information security over the next 24 months
- is written for both information security **and** business audiences
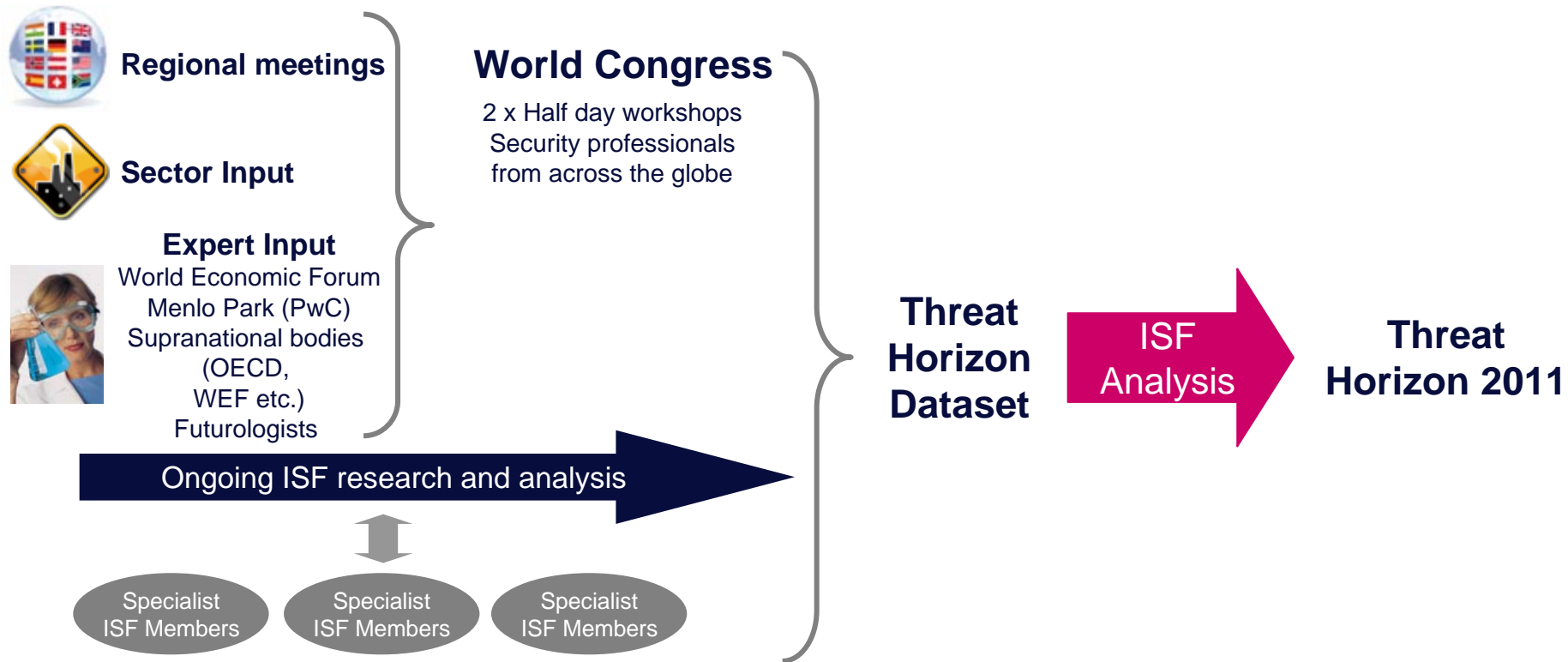- informs information security strategy.

2006   2008   2011

Threat horizon methodology

Consider the world of the future and how this may give rise to information security threats

POLITICAL

LEGAL

ECONOMIC

SOCIO-CULTURAL

TECHNICAL

The process…

Regional meetings

Sector Input

Expert Input
World Economic Forum
Menlo Park (PwC)
Supranational bodies
(OECD,
WEF etc.)
Futurologists

World Congress

2 x Half day workshops
Security professionals
from across the globe

**Threat
Horizon
Dataset**

ISF
Analysis

**Threat
Horizon 2011**

Ongoing ISF research and analysis

Specialist
ISF Members

Specialist
ISF Members

Specialist
ISF Members

2006 predictions for 2008

Political

Terrorism | Energy

Instability

Economic

E-economy | Extreme Weather

Organised crime

2008

Socio-cultural

Gen Y | Remote Working

Home vs. work

Legal

Compliance | Record Mgt

Discovery

Technical

Device convergence | Digital convergence

New products

2008 for 2010… What changed?

Political

Terrorism

Lack of trust

Cyber-terrorism

Legal

Intellectual property

ID theft

Electronic evidence

2010

Economic

Emerging economies

Complex ownership

Organised crime

Technical

Web 2.0

Process control

Solar flares

Socio-cultural

Corporate loyalty

Demo-graphics

Terrorism and organised crime are the only two threats to stay on the list
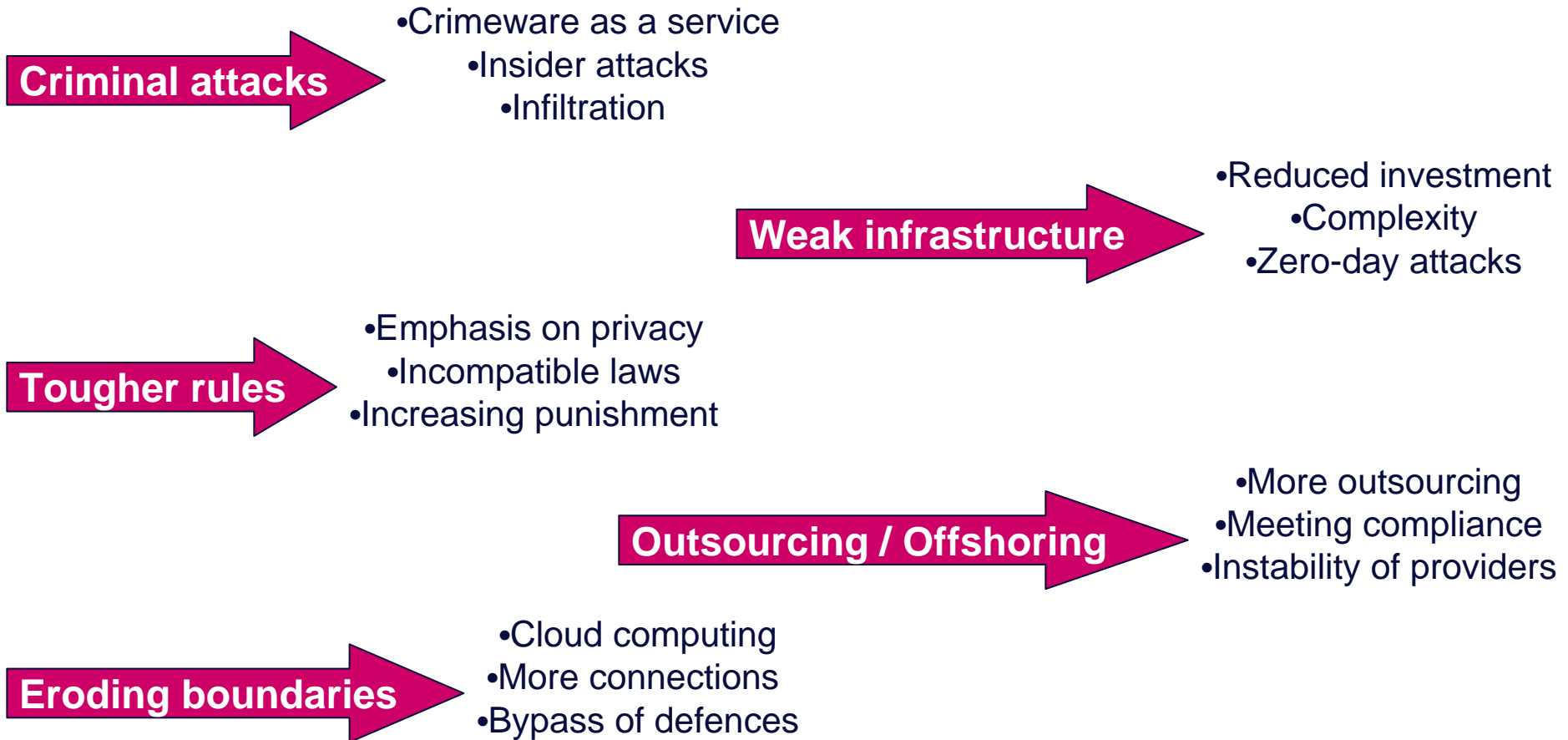
What will world look like in 2011?

Information security threats for 2011....

Criminal attacks
Weaknesses in infrastructure
Tougher regulatory legislation
Pressures on offshoring / outsourcing
Eroding network boundaries

Mobile malware
Vulnerabilities of Web 2.0
Incidents of espionage
Insecure coding and development practices
Changing cultures

Top five threats in detail

Criminal attacks →
- Crimeware as a service
- Insider attacks
- Infiltration

Weak infrastructure →
- Reduced investment
- Complexity
- Zero-day attacks

Tougher rules →
- Emphasis on privacy
- Incompatible laws
- Increasing punishment

Outsourcing / Offshoring →
- More outsourcing
- Meeting compliance
- Instability of providers

Eroding boundaries →
- Cloud computing
- More connections
- Bypass of defences

Beyond 2011..

Beyond the horizon

Biometrics

Embedded chips

Quantum computing

SPIT

Nano technology

AI

New computing interfaces

Everyone connected to everything

What do I do now?

Re-assess the risks to your organisation and its information

- Inside and outside…

Change your thinking about threats

- Don't rely on trends or historical data

Revise your information security arrangements

- Question 'security as usual'

Focus on the basics

- That includes people, not just technology!

Prepare for the future

- Be ready to support initiatives such as cloud computing

Information Security Forum
adrian.davis@securityforum.org
www.securityforum.org
http://www.linkedin.com/in/adriandaviscitp