



HM Government

Cloud

The Importance of Security



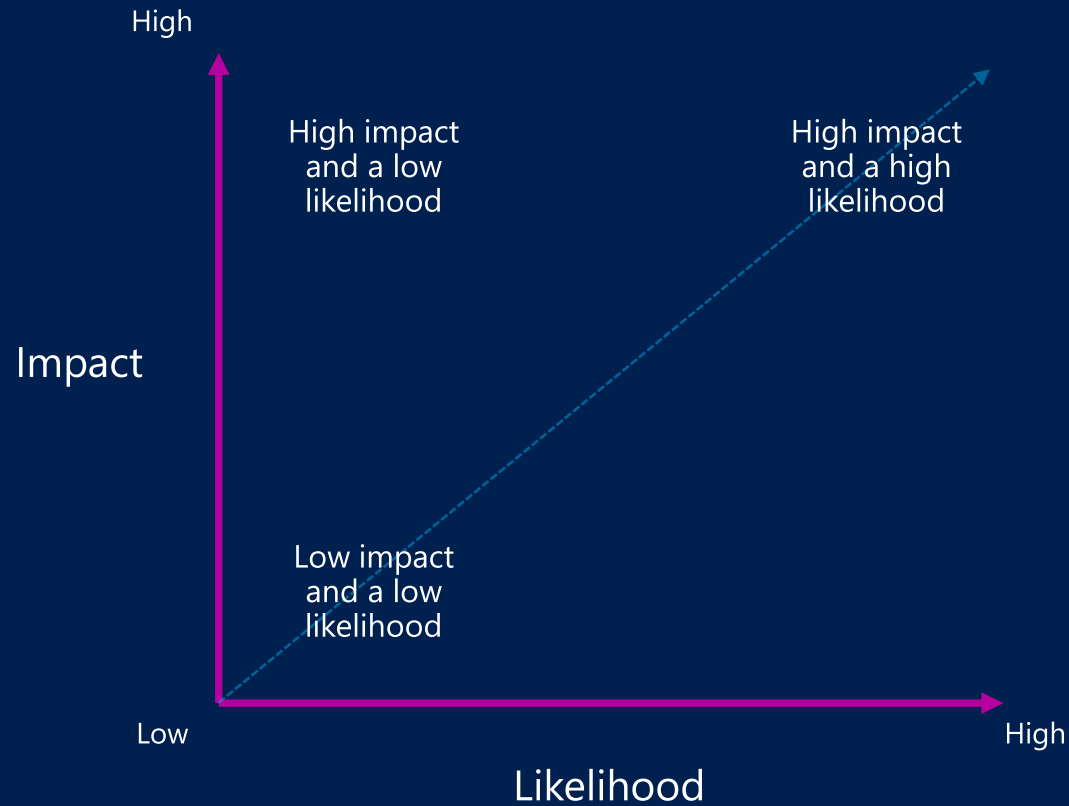
HM Government

The UK Government view on Cyber

"It is vitally important that we protect the UK's interests in cyber space. The internet provides enormous benefits and opportunities for the UK's industries, government and public but as our reliance on it grows, so do the risks and threats we face online.

These threats and opportunities are likely to increase significantly over the next five to ten years, as our dependency on cyber space deepens.

Our national security, as well as our economic prosperity, will depend on our ability to protect ourselves in cyber space."



Tier 3

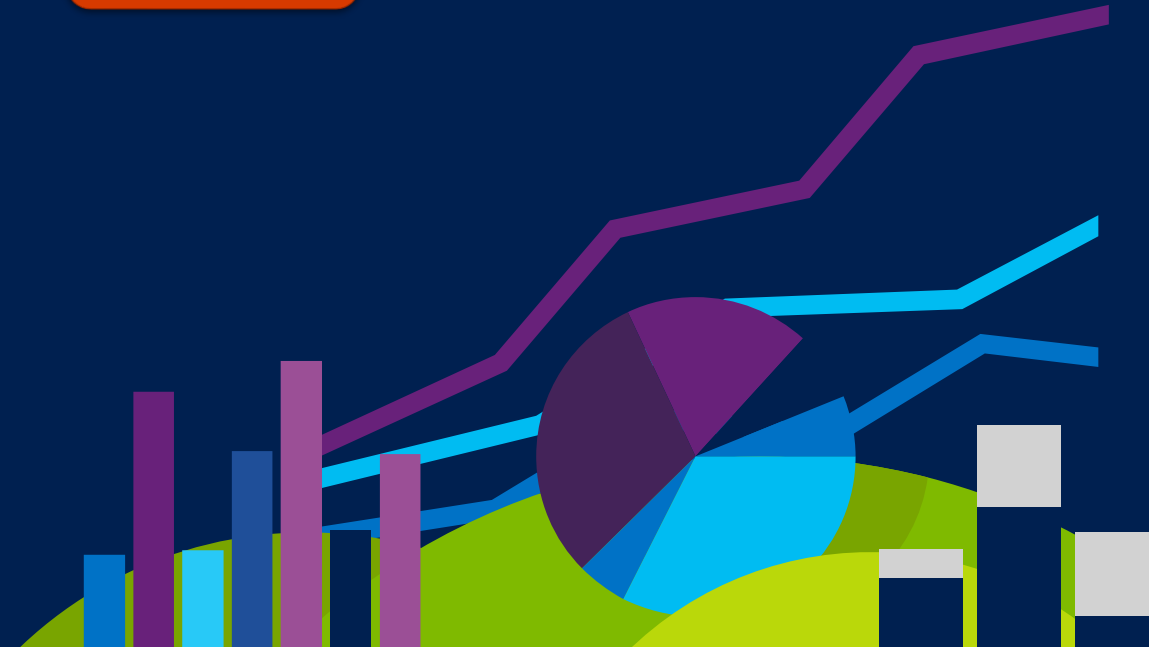
- Low impact or highly unlikely

Tier 2

- Less likely or lower impact
- Requires action

Tier 1

- Highly likely with high impact
- Highest priority in next 5 years





National Security Risk Assessment (NSRA)

Tier 3

- Large scale conventional military attack (not including CBNR weapons) on the UK
- Significant increase in the number of terrorists, criminals, illegal immigrants or illicit goods entering the UK
- ...

Tier 2

- Chemical, Biological, radiological or nuclear attack on the UK by another state
- Insurgency or civil war overseas which created an environment terrorists can exploit to threaten UK
- A significant increase in organised crime
- Severe disruption to information received, transmitted or collected by satellites

Tier 1

- Hostile attacks on UK cyber space
- International Military crisis
- International terrorism
- A major accident or natural disaster



HM Government

Information Security Breaches in the UK

90%

Had a breach

69%

External attack

£3.14m

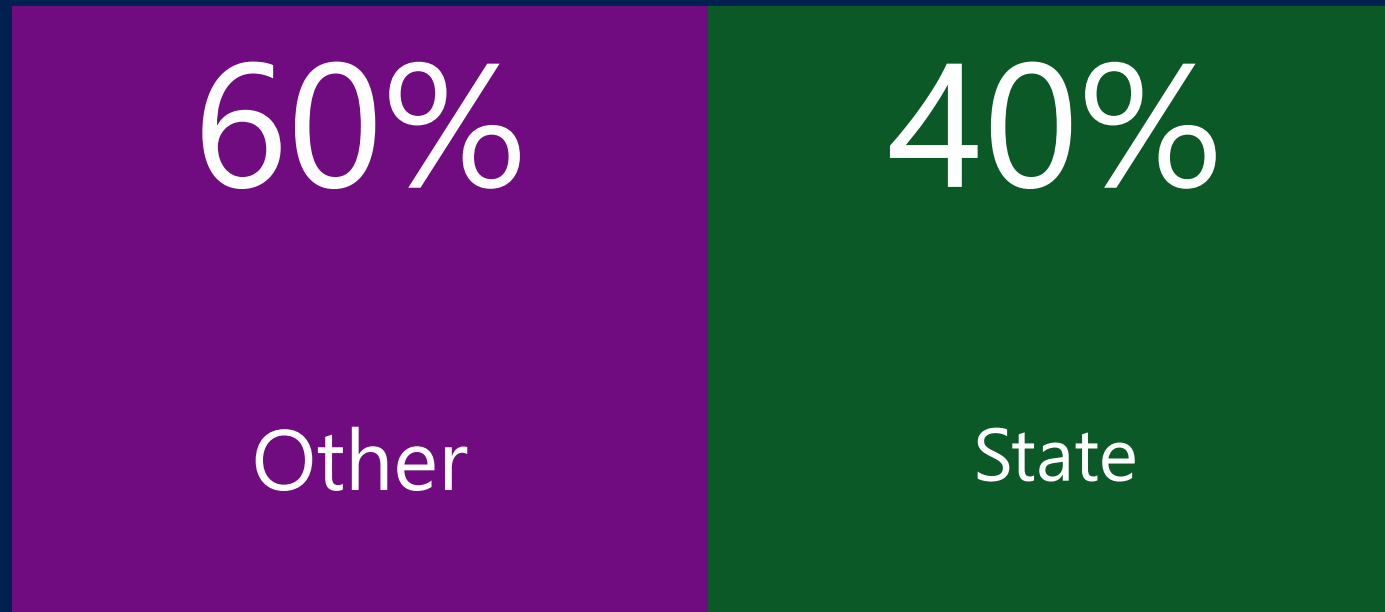
Cost

100
10101010
1011100010
10101010

100
10101010
1011100010
10101010

100
101000

Threat Actors



100
10101010
1011100010
10101010

100
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Large Scale Technology Trends

Mobile



By **2016**,
smartphones and
tablets placed power in
the pockets of **a billion**
global consumers

The world's **mobile
worker** population
reached

1.3 billion over **37%**
of the total workforce in **2015**



Social



Millennials
will make up
75% of
the **American**
workforce by **2025**

65%
of companies
are deploying at
least one **social**
software tool.



Cloud



Over **80%**
of **new apps** will
be distributed or
deployed on
clouds in **2012**.

70%
of organizations
are either using or
investigating **cloud**
computing solutions



Big Data

Digital content grew to
2.7ZB in 2012, up **48%**
from 2011, rocketing
toward **8ZB** in 2015.



80%
growth of unstructured
data is predicted over
the **next five years**.

Complex Challenges need new approaches

Cyber terrorism & hacktivism

\$1 Trillion

Global cost of computer crime



Exponential growth in mobile files stolen from widespread

77 Million user accounts stolen

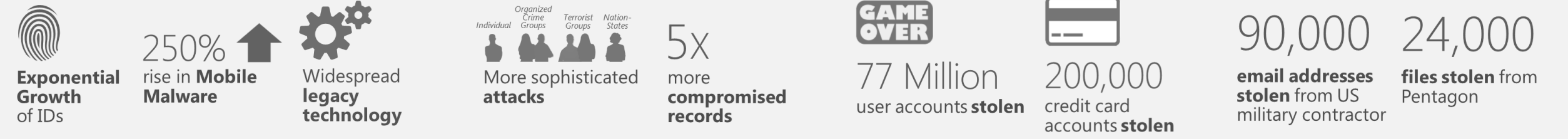
200,000 credit card accounts stolen

90,000 email addresses stolen from US military contractor

24,000 files stolen from Pentagon

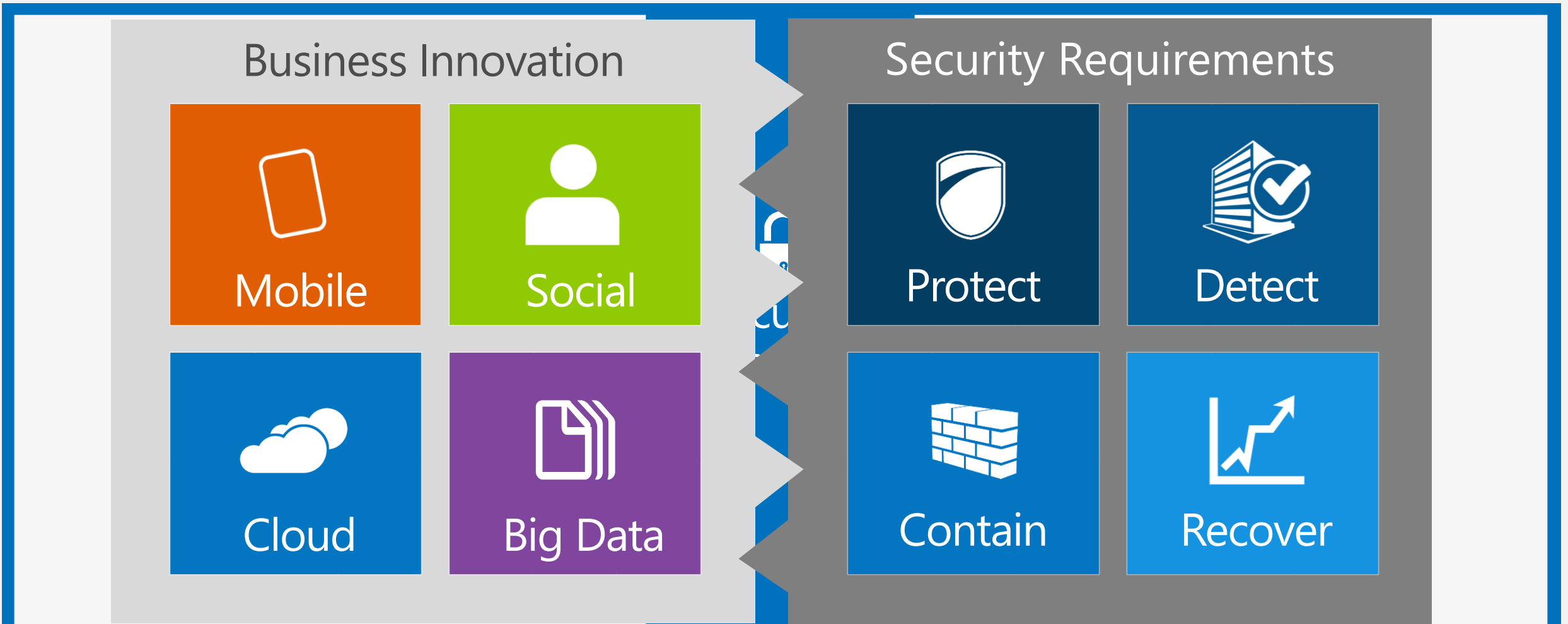
Malicious software, user accounts, targeted attacks

Perpetrated by legacy technology, cyber terrorism & hacktivism





Strongly Typed Technology



Working to Make the Ecosystem Secure



Massive global
telemetry

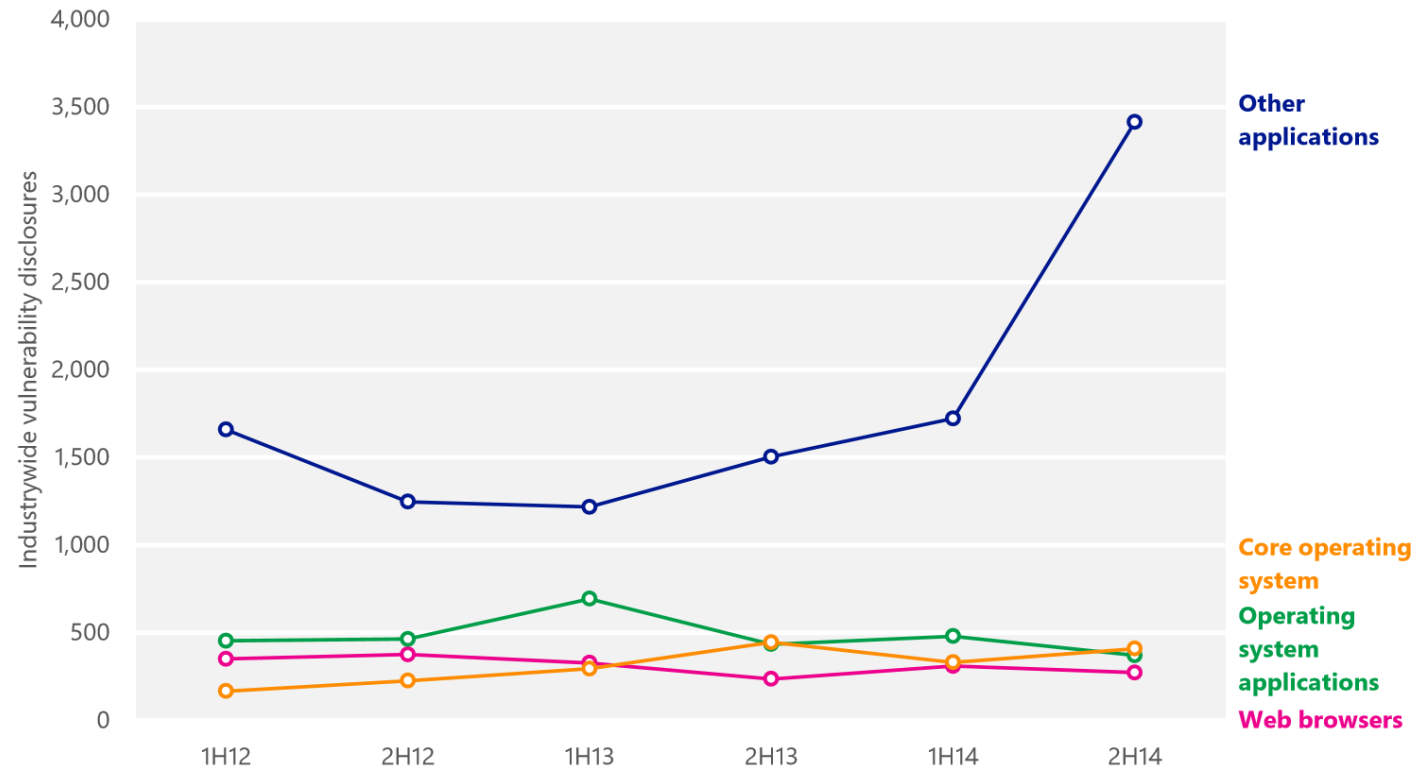


Secure
development
practices



Industry
leadership

OS, browser and application vulnerabilities globally



1.
No assistance in
offensive efforts

2.
Collaborative
and proactive
defence

3.
Collaborative
remediation after
attacks

4.
Software patches
available to all

5.
Coordinated
disclosure
practices for
vulnerabilities

6.
Support for
intergovernmental
defence efforts

