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# Cyber and Business Continuity Management

23<sup>rd</sup> August 2017

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# Case studies

## Target

### At a glance:

The theft and sale of more than 40m credit card details from Target's point-of-sale terminals cost the large retailer almost \$100m in litigation, with a similar amount spent upgrading the company's retail systems.

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**Type of attack: Malware**

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**Total immediate cost: \$60m**

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**Total slow-burn cost: more than \$219m**

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**Total gross cost: more than \$279m**

### What happened?

Between 27 November and 15 December, 2013 more than 40m credit card details and 70m pieces of personal information were stolen from Target, a major US retailer. An organised crime cyber-attack on its point-of-sale terminals resulted in stolen card details being sold on the black market, with prices varying from a median of \$18-\$35.70 per card. Similar attacks followed on a number of other major US retailers<sup>12</sup>.

## TalkTalk

### At a glance:

The theft of more than 150,000 customer details resulted in one-off costs in excess of \$52m and a 10% share price decline for one of the UK's largest telcos.

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**Type of attack: DDoS, followed by SQL injection**

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**Total immediate cost: \$52m**

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**Total slow-burn cost: more than \$44m (including estimate for lost revenue)**

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**Total gross cost: more than \$96m**

### What happened?

In October 2015, TalkTalk was the victim of a major cyber breach, leading to the theft of 156,959 customers' personal details, 15,656 bank account numbers and sort codes, and some 28,000 credit and debit cards that were obscured<sup>21</sup>. The police arrested two teenage suspects shortly after the attack<sup>22</sup>, and one 17-year-old subsequently admitted hacking offences linked to the TalkTalk data breach<sup>23</sup>.

# Costs of an incident

## Immediate costs

These are the largely unavoidable costs that include the immediate business and media impact, plus the cost of restoring the confidentiality, integrity and availability of data and systems. Immediate costs include:

- Forensic investigation costs
- Legal costs
- Customer notification costs
- Credit monitoring for customers
- Potential business interruption costs
- Public relations expenses
- Fraud costs
- Extortion costs
- Physical damage costs
- IT/business remediation costs

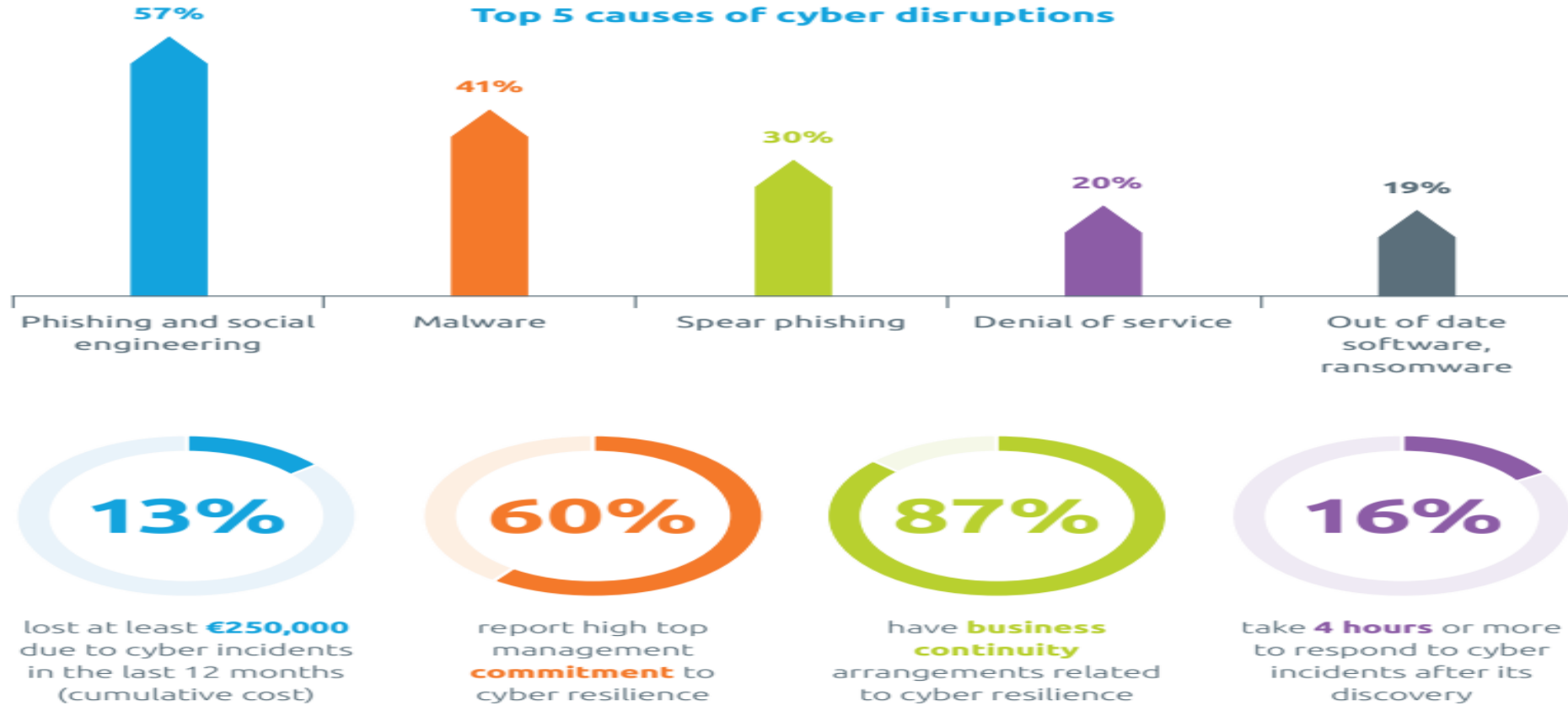
## Slow-burn costs

These vary according to the type and severity of the event, and how it is handled, but typically include the long-term business impact and costs incurred by reimbursing victims, as well as reparation and the payment of penalties for failure to meet obligations. Slow-burn costs include:

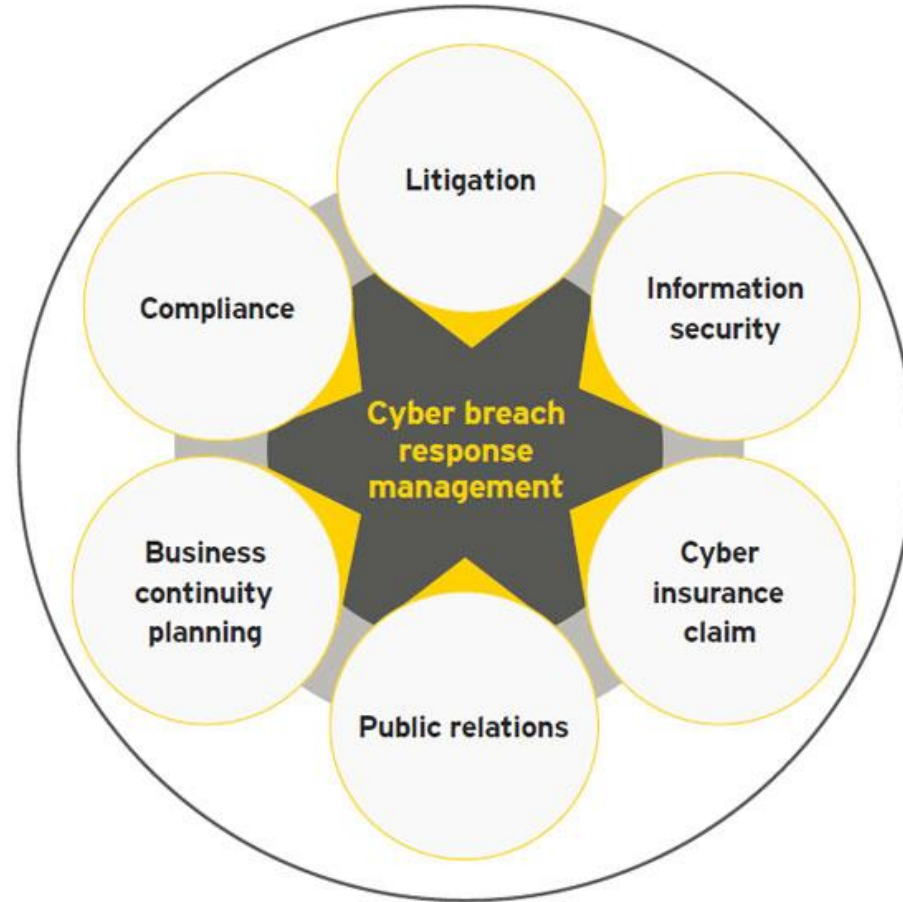
- Third-party litigation expenses
- Customer churn from reputational damage
- Regulatory fines and penalties
- Share price impact
- Loss of management focus
- Loss of competitive advantage
- Loss of revenue

Time from event discovery

# BCI Resilience Report 2017



# E&Y proposed framework



# BCM for cyber.....

Make sure everyone is aware of the threats and what they can do to help

Exercise and test – validate your approach and plans

Implement the appropriate technical and business strategies



Risk Assessment – what are the risks / likelihood / probability?  
Part of Risk Mgmt framework  
What would be the impact - BIA?

Design your response – how will you be able to recover, who needs to be involved?

# What do businesses do



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# Preparation

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- Include cyber as one of the risks reported through your risk management framework, including defined appetite and metrics
- Understand how systems interact and share data
- Assess what the impact on business would be for the different types of cyber-event
- Define how your organisation would respond – specific cyber plan or adapt crisis plans already in place?
- Identify any additional people required to assist response – e.g. legal
- Train your responders and exercise your plans
- Run staff awareness campaigns – everyone has a role to play
- Understand how your supply chain may be impacted because of cyber events
- Investigate how insurance cover may help your response



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# Response

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- IT escalate the issue before it gets out of hand
- Communications/media/PR – be honest and succinct
- Use legal and compliance people as part of the response
- Use forensics and government / law agencies
- Implement pre-defined workarounds
- Address the impact of corrupted back-ups
- Lloyd's minimum standard

# Our digital world

Lloyd's thought leadership catalogue

