

New world

New skills

# Teaching Guide: Cyber Security Case Study

Business Case Study Challenges



# Teaching Guide

## Overview

Through the use of a fictional case study, this lesson is designed to enable students to explore the nature of the various cyber threats being faced by businesses today and approaches available to combat these. Using what they have learnt about cyber security and the fictional client, students will pitch what they think the client's top cyber risks are and which PwC cyber teams are best suited to remedy these. At the end of the session students will reflect on the skills and knowledge they have developed and their potential next steps.

## Purpose

This session will provide students with an insight into the rapidly growing field of cyber security. The distinct tasks performed by each cyber team within PwC aims to serve as an exemplar for the various roles available within this industry. In addition, as these resources have been produced with the PwC Professional Framework in mind, students will develop key employability skills sought after by various organisations.

## Objectives

By the end of the session, students will be able to:

- Understand the various cyber security threats faced by businesses and approaches available to combat these.
- Work within a team to deliver a pitch to a fictional client.

## Preparation / Materials Needed

- Pens and paper
- Download the session PowerPoint
- Activity Pack - print 1 per group



## Lesson structure

### Getting started (5 mins)

- Introduction to the fictional client and tier cyber security

### Case Study Challenge (50 mins)

- Research, plan and practise the pitch
- Deliver the pitch outlining the key cyber security risks and which PwC teams are best suited to address them

### Wrap up & reflection (5 mins)

- Reflection on the lesson
- Time for questions

## Key Vocabulary

- **Cyber security:** The application of technologies, processes and controls to protect systems, networks, programs, devices and data from cyber attacks.
- **Cyber attack/incident:** An attack, via cyberspace, targeting an enterprise's use of cyberspace for the purpose of disrupting, disabling, destroying, or maliciously controlling a computing environment/infrastructure; or destroying the integrity of the data or stealing controlled information.
- **Vulnerability:** In a cyber security context, this is a weakness in an information system that could be exploited by a threat to conduct a cyber attack.
- **Threat:** In a cyber security context, this is an event or condition that might exploit a vulnerability to breach the security of an information system in order to conduct a cyber attack.
- **Asset:** An item of property owned by a person or company (these could be physical assets or information they hold).

# Teacher Guide

*This guide includes a suggested script (in pink) and outline for the session. However, please feel free to tailor and adapt this accordingly when delivering.*

## Getting Started (5 mins)

*(Slide 2) Good morning/afternoon everyone. My name is \_\_\_\_\_. Thank you for having me in your class today. In this session we're going to learn about cyber security through the use of a fictional case study. You'll first assess the current state of their cybersecurity and towards the end of the lesson pitch your findings and recommendations to them.*

Share the objectives of the session on the screen

*(Slide 3) So let's first learn a little bit more about the client.*

Run through the 'Chatter' company overview (slide 4)

*(Slide 5) Chatter have recently experienced a minor cybersecurity incident and are looking for specialist insight into how to improve their information security. In teams, you have to prepare a 3 minute pitch for Chatter that outlines the cyber risks they face and which of the PwC Cyber Teams is best suited to address these.*

Get the class to organise themselves into groups of 6 (alternatively, divide the class into pre-selected groups).

*(Slide 6) Within your teams, you should assign roles to ensure you work effectively and meet the requirements of the challenge.*

- **Team Leader** - To facilitate the discussion and make sure everyone is involved
- **Scribe** - To take notes of the discussions and complete any relevant information within the activity pack
- **Time Keeper** - To ensure you complete the task in time

*Once you have agreed the team roles, agree upon 'three golden rules' to ensure you work well together and produce the best work possible.*

## Case Study Challenge (50 mins)

### Research (10 minutes)

*(Slide 8) Using the activity pack, conduct some research into the cyber security incidents experienced by Chatter and other companies, the relevant Government regulation, and the different cyber security teams within PwC. Think about how best to approach this task as a team, could each team member conduct some research of their own?*

### Deciding upon recommendations (10 minutes)

*(Slide 9) Now that you have conducted some background research, within pages 10-11 of the activity pack, note down Chatter's physical and informational assets, and the nature/relevance of the attacks experienced by other companies. Using these notes, decide then as a team the two main areas of cybersecurity that Chatter should improve, and the PwC Cyber team that is best equipped to implement these improvements. Think about how you will make sure team member's opinion is heard and how you will manage any differences in opinion.*

### Practice your pitch (10 minutes)

*(Slide 10) It is time now to prepare a pitch to be provided to Chatter which outlines your cyber security recommendations and which PwC Cyber team you would use to action these. Page 12 of the activity pack outlines all of the content required as part of these pitches. Everyone within the team has to speak! Think about how you will divide the pitch between members of your team and ensure it is professional and persuasive.*

### **Deliver your pitch (20 minutes)**

*(Slide 11) Time's up for planning! It's time to listen to each of your pitches.*

Each group will now deliver their pitch to “the client” (i.e. you!). Be prepared to ask one question and deliver feedback to the group on their presentation.

All groups should be ready to answer questions on their pitch. Each group has **3 minutes**.

### **Wrap up and Reflection (5 minutes)**

Time for students to reflect on what they have learnt from this session and what employability skills they have developed (use slide 13 and 14 as a reference or discussion starter).

Ask students to share a key learning with a partner. If time allows, ask for volunteers to share with the wider group.

Disclaimer: This content is for general information purposes only, and should not be used as a substitute for consultation with professional advisors. Information available here is not to be relied upon as professional advice or for the rendering of professional services.

Certain links in this Site connect to other Web Sites maintained by third parties over whom PricewaterhouseCoopers LLP has no control. PricewaterhouseCoopers LLP makes no representations as to the accuracy or any other aspect of information contained in other Web Sites. © 2023 PricewaterhouseCoopers LLP. All rights reserved. 'PwC' refers to the UK member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see [www.pwc.com/structure](http://www.pwc.com/structure) for further details.