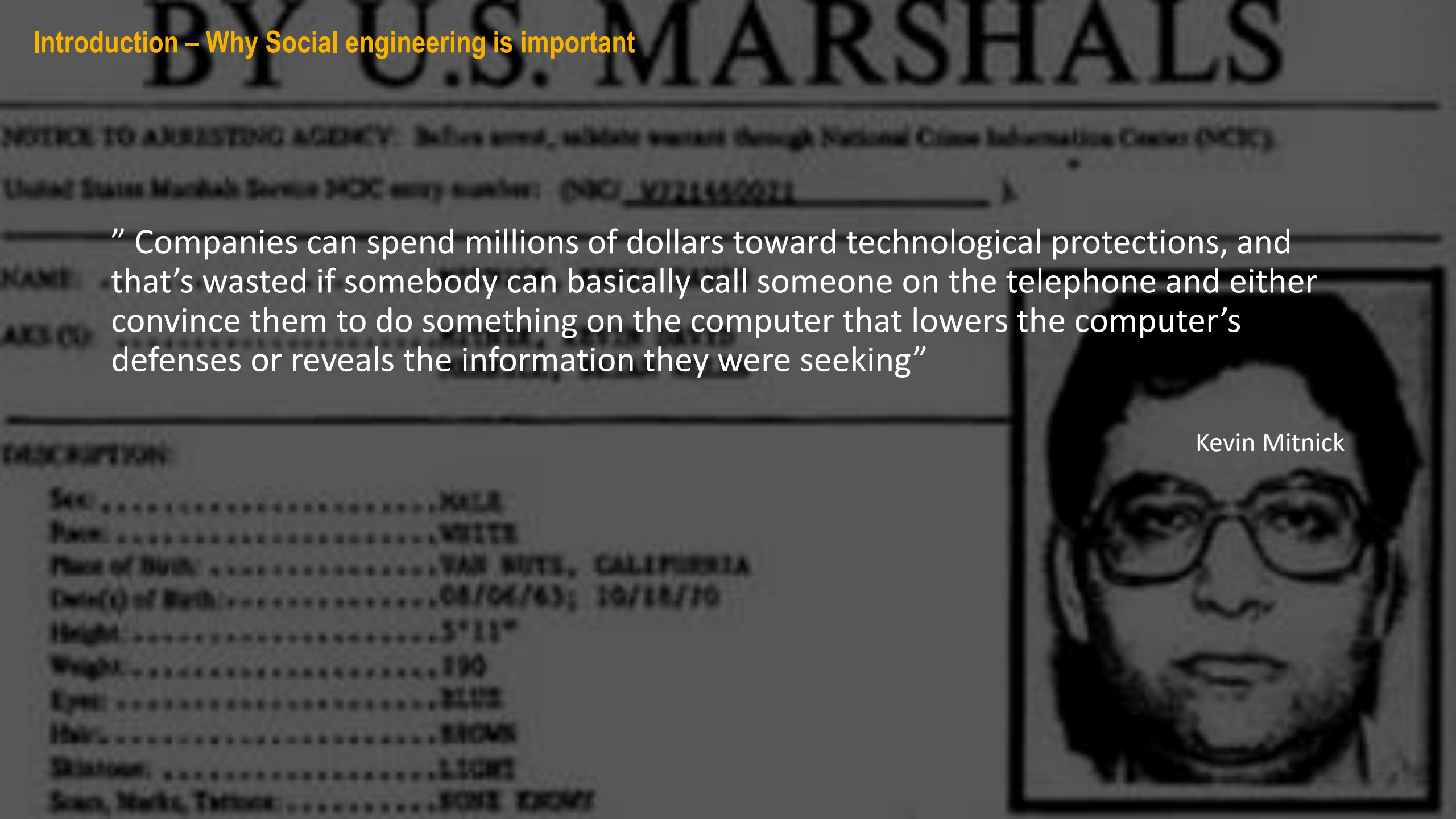
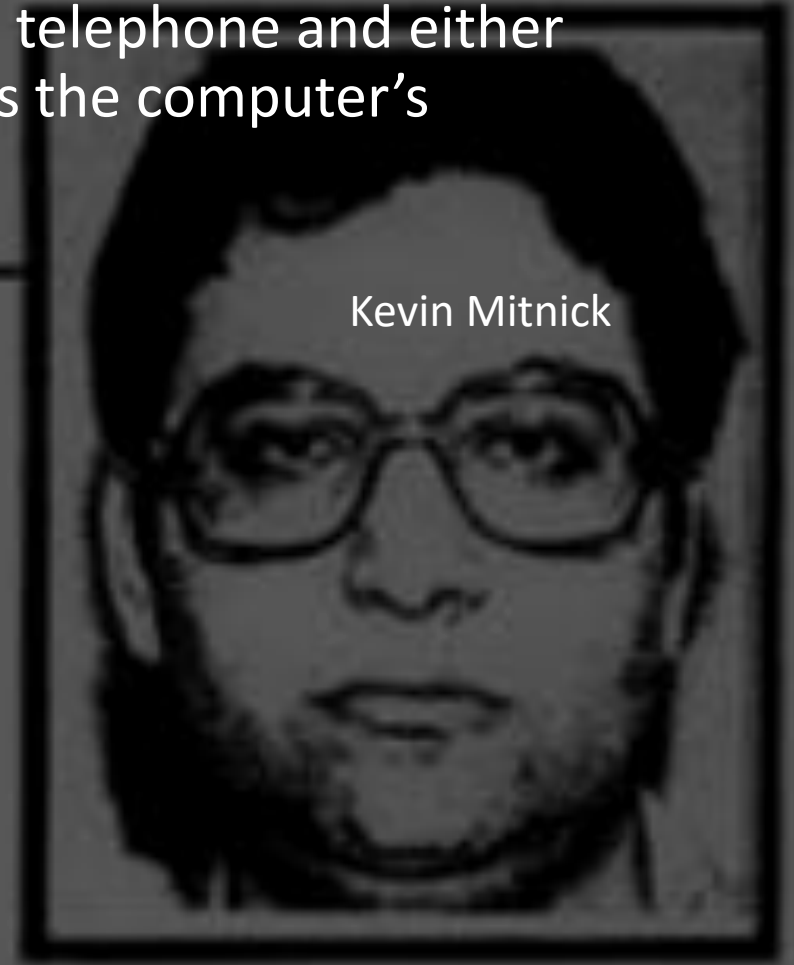


Social engineering

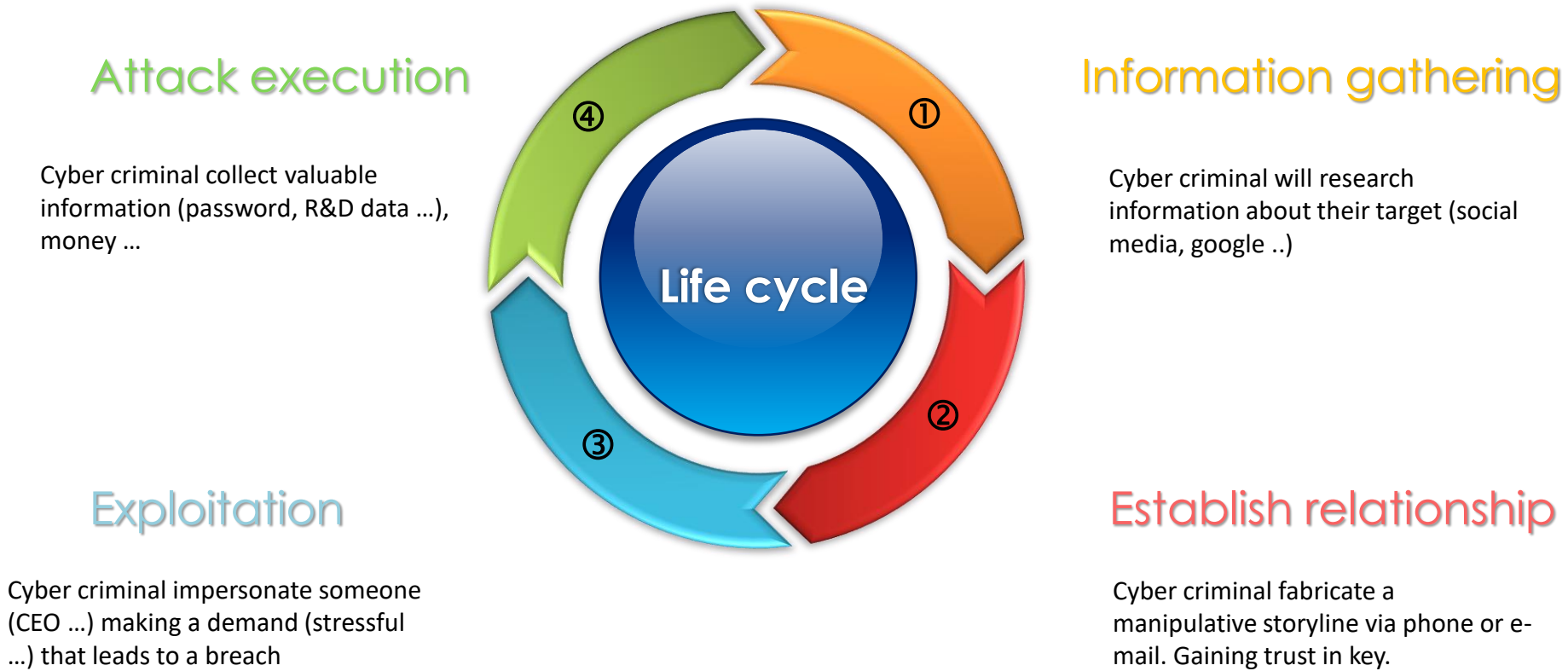
Introduction – Why Social engineering is important

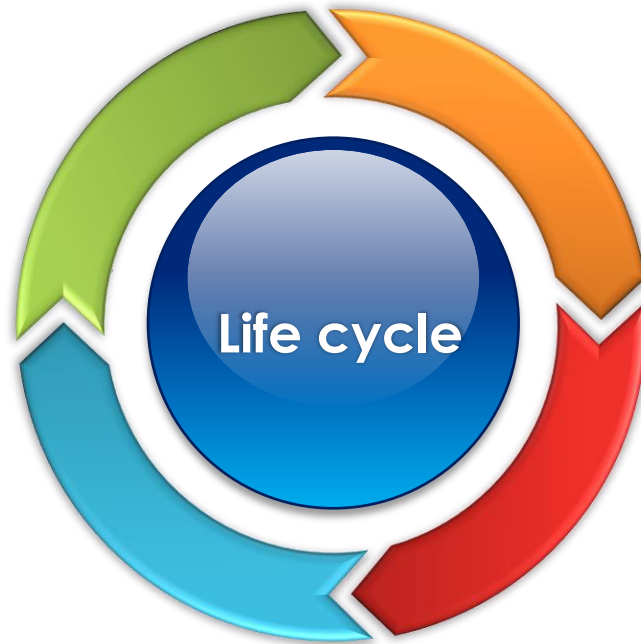
“ Companies can spend millions of dollars toward technological protections, and that’s wasted if somebody can basically call someone on the telephone and either convince them to do something on the computer that lowers the computer’s defenses or reveals the information they were seeking”

Kevin Mitnick



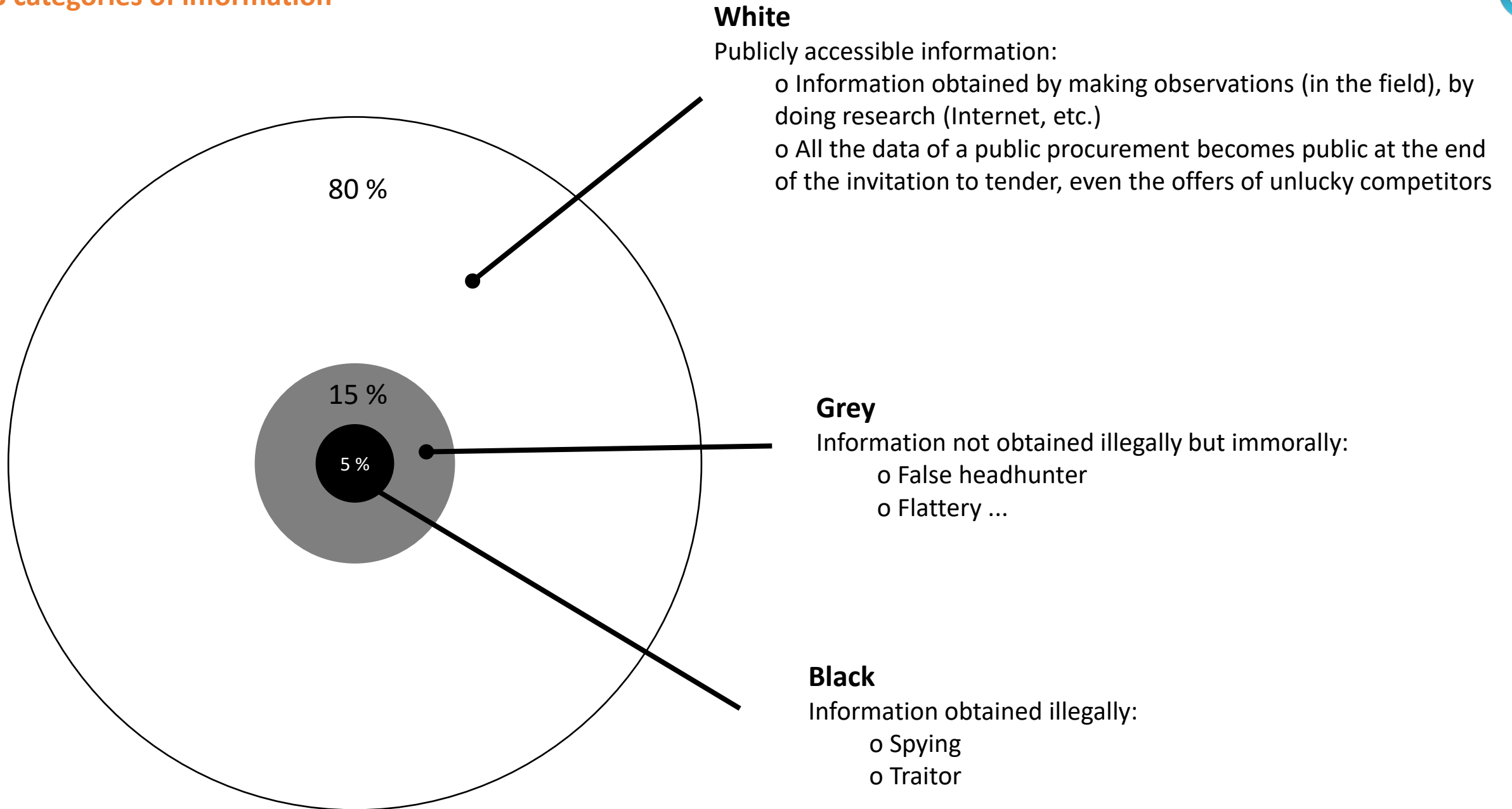
Social engineering life cycle



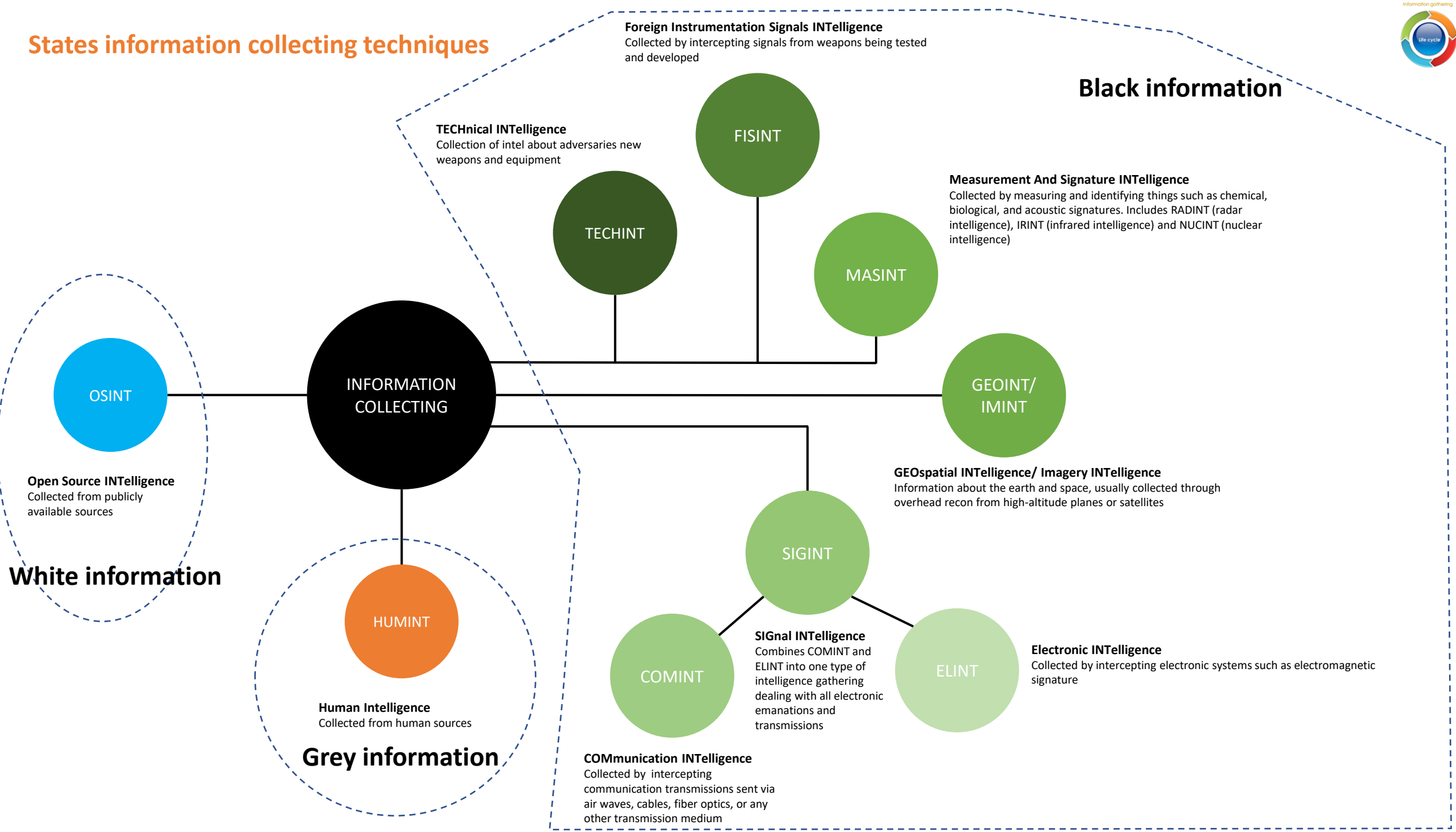


Information gathering

3 categories of information



States information collecting techniques



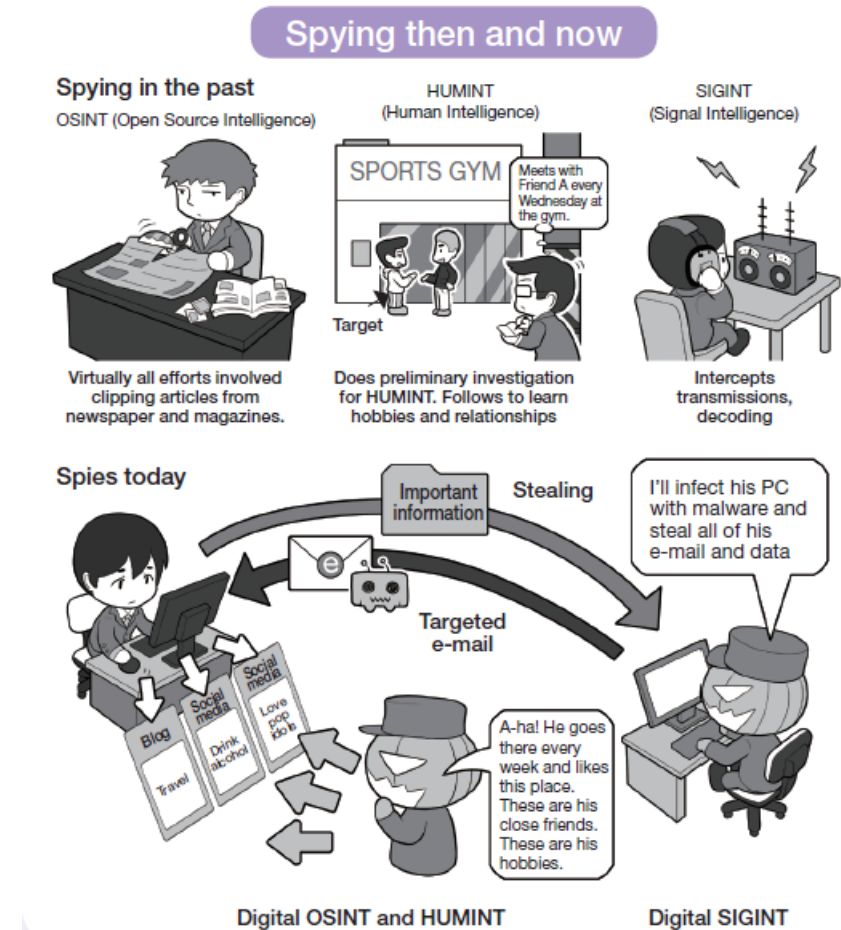
Evolution of collecting techniques

Before the Internet was developed, spies did their work using :

- SIGINT (Signal Intelligence) by intercepting or wiretapping communications.
- HUMINT (Human Intelligence) by investigating or following or questioning people
- OSINT (Open Source Intelligence) by reading publicized information such as the newspapers and magazines of the target country

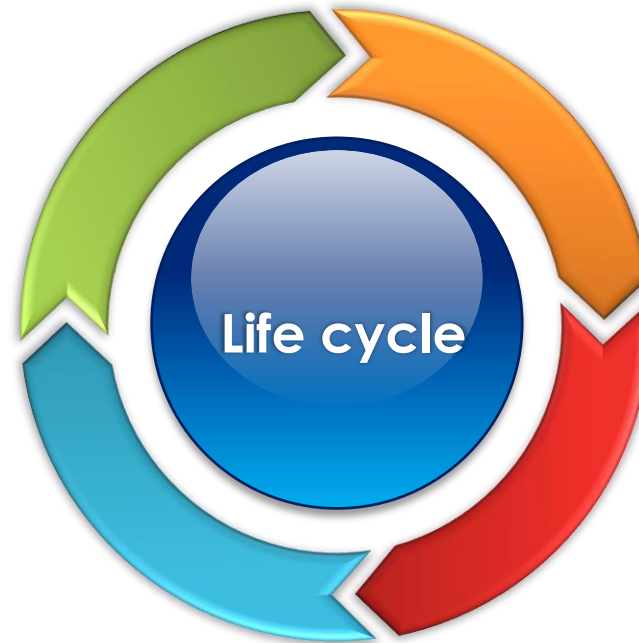
In modern society in the age of the Internet, all kinds of HUMINT can be obtained about a person's relationships just by looking at social networking service.

Moreover, SIGINT can be collected by malware that steals e-mails and files, and can also eavesdrop on smartphone calls.





EXERCICE



What do you see ?
(5')



What do you see ?

He doesn't use the official securized governmental phone



Source: Nouvel Obs article of Boris Manenti (June 24th 2015)

What do you see ?

EXIF (EXchangeable Image file Format) analysis

You could find the official Macron photography on the teams:

The screenshot shows a Teams interface. On the left, under 'Équipes', there are two teams: '(Thursday) II.2317 Cybersecurity' and '(Monday) II.2317 Cybersecurity'. The 'Général' tab is selected. The main area shows a file list under the 'Fichiers' tab. The file list has columns for 'Nom', 'Modifié', and 'Modifié par'. The file 'EMMANUEL-MACRON-PORTRAIT-OFFICIEL...' is circled in red. Below it is 'Wavestone - Formation Pentest ISEP .pdf'.

Nom	Modifié	Modifié par
Supports de cours		Jacky LEMEE
0a19 TD ISEP.pptx	19 octobre	Jean-Philippe LELIÈ...
EMMANUEL-MACRON-PORTRAIT-OFFICIEL...	Il y a environ une ...	CALE Stephane
Wavestone - Formation Pentest ISEP .pdf	12 octobre	Nouredine TAMANI

What could you learn from the EXIF with <https://exif.tools/> web site ?

(15 ')


What do you see ?

EXIF (EXchangeable Image file Format) analysis (1/2)

We learn that:

- The photograph was taken on June 24, 2017 at 19:14:08, but the clock in the office indicates 20:20.
- It was the photographer Soazig De La Moissonniere who took this shot.
- She used:
 - a Canon EOS 5D Mark IV camera (serial number “023021000682”)
 - a Canon EF 24-70mm f / 2.8L II USM lens (serial number “9615013586”)
- After being taken on 06/24/2017, the photograph was then retouched on a Macintosh with Photoshop. This phase of work with Photoshop started on 06/26/2017 at 13:02:11 to end on 06/29/2017 at 11:52:32.

metapicz
[VIEW YOUR METADATA]



[Camera](#) [Copyright](#) [Location](#) [EXIF](#) [XMP](#) [Maker Notes](#) [ICC](#)

Camera

Make	Canon
Model	Canon EOS 5D Mark IV
Exposure	1/200

Author and Copyright

Copyright	SOAZIG DE LA MOISSONNIERE
Creator	SOAZIG DE LA MOISSONNIERE

Location

GPS coordinates not found.

What do you see ?

EXIF (EXchangeable Image file Format) analysis (2/2)

By searching the serial numbers, with Google, we discovered that:

- The camera was bought on August 4, 2015 on a specialized Swedish website. At the time, the camera was supplied with a lens which has obviously been changed in the meantime because the serial number is different.



- The lens was used to take pictures of François Bayrou, Antoine Sfeir, Yannick Laude ...

At this time, the photographer used a previous generation of camera, the Canon EOS 5D Mark III (serial number "063024020772")

What do you see ?

How to know which elements were modified? (1/3)

Error level analysis

JPEG is a lossy format.

But when an image is modified, the 8x8 cells containing the modification are no longer at the same error level as the rest of the unmodified image.

Error level analysis (ELA) works by intentionally resaving the image at a known quality level, and then computing the difference between the images.

What do you see ?

How to know which elements were retouched? (2/3)

Could you identified which parts of this photography were modified with photoshop by using the Error level analysis inconsistencies ?

(10 ')

<https://29a.ch/photo-forensics/#forensic-magnifier>

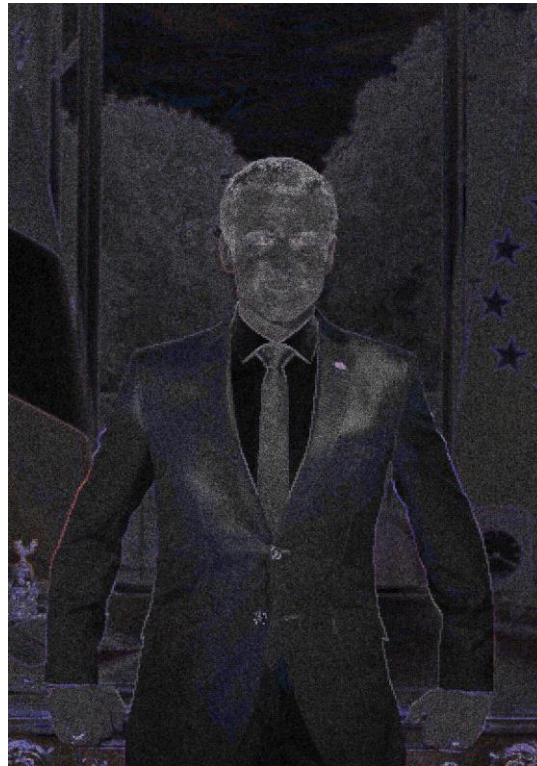


What do you see ?

How to know which elements were retouched? (3/3)

We can see that:

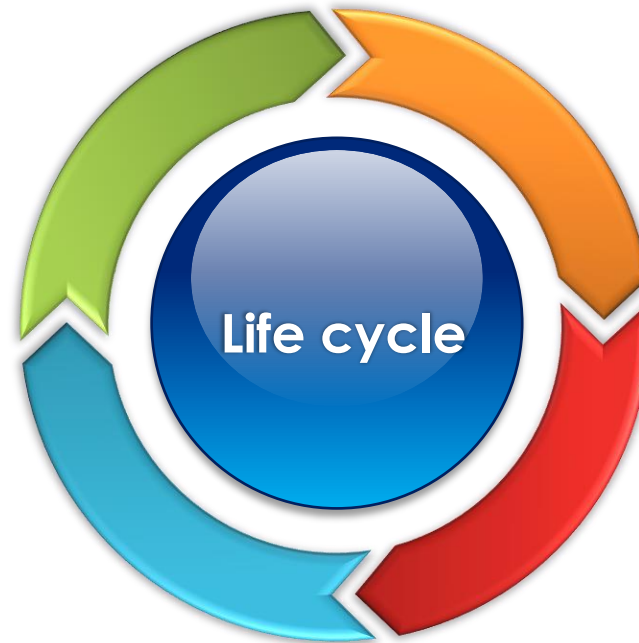
- The stars of the European flag have been modified. It can also be assumed that the blue areas of the two flags have been modified using the red noise that can be seen in the image.
- The jacket at the level of the left shoulder has higher compression and noise levels than the rest of the clothe.



Error level analysis

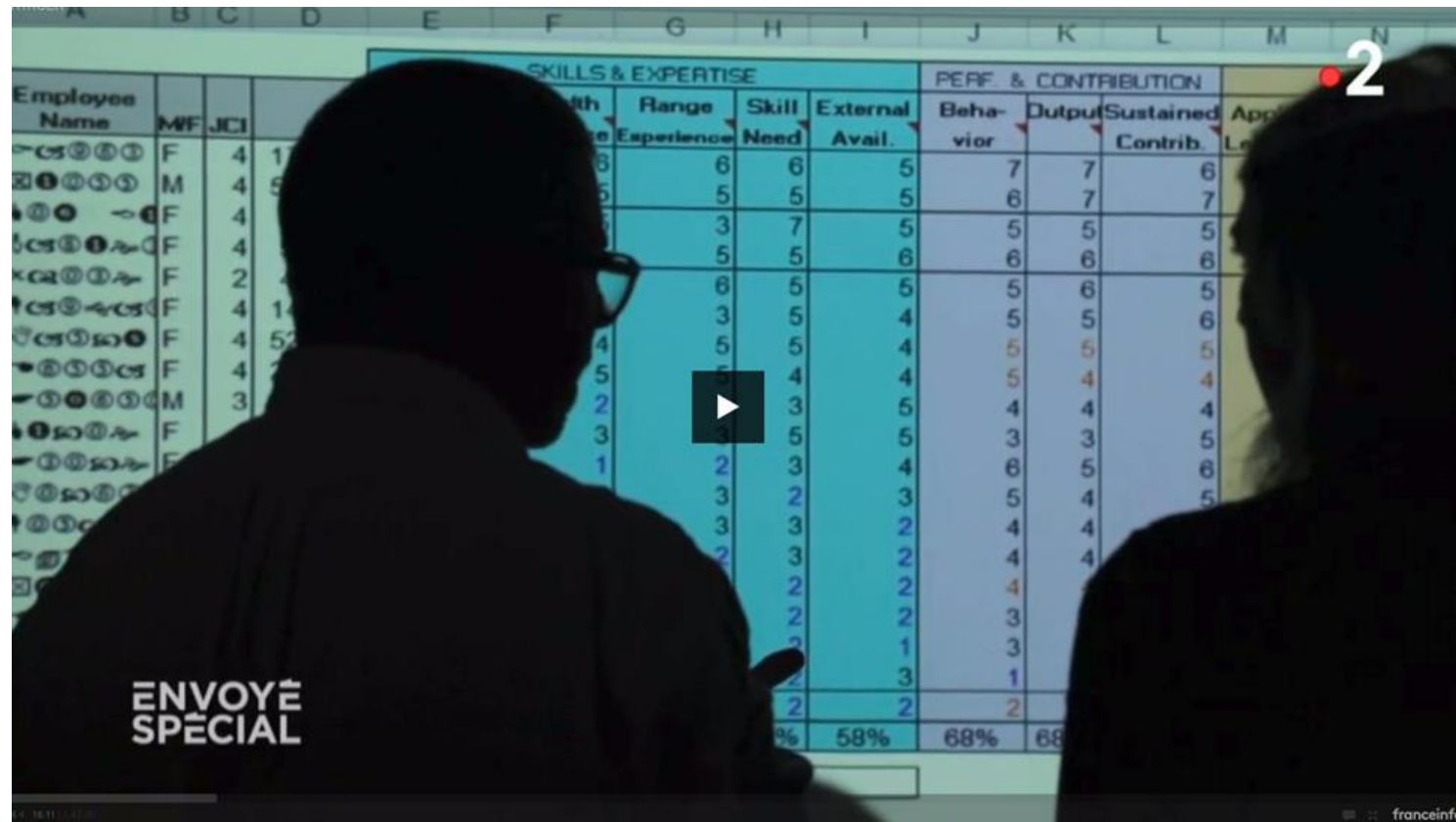


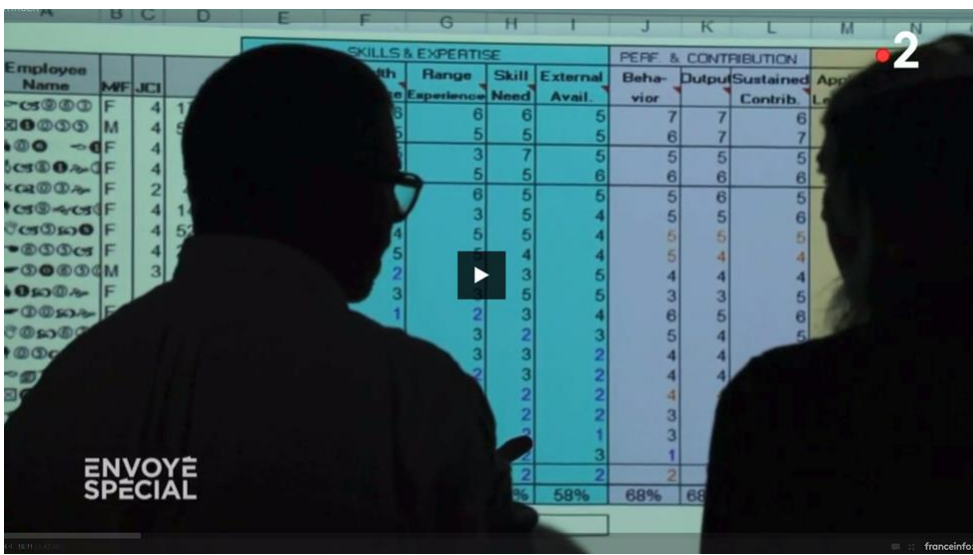
EXERCICE



In 2018, 2 million of people watched the TV show “Envoyé Spécial” on France 2, where Didier Bille, former human resources director, who worked for numerous multinational companies, revealed his methods for fired, often without any reason, thousands of employees.

Using a detailed and anonymized Excel file, M Bille explains in particular a technique which consists in poorly rating employees, sometimes irreproachable, in order to create, ex nihilo, a reason for dismissal.





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Which encryption method was used?
What are the first names?
(10 ')

Nom	Modifié	Modifié par
Supports de cours		Jacky LEMEE
0a19 TD ISEP.pptx	19 octobre	Jean-Philippe LELIÈ...
EMMANUEL-MACRON-PORTRAIT-OFFICIEL...	Il y a 5 jours	CALE Stephane
Encrypted file.pptx	Il y a environ une ...	Gamaliel MELIA
Wavestone - Formation Pentest ISEP .pdf	12 octobre	Nouredine TAMANI

Icon Font Cheat Sheet

	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z
Webdings	✓	🚲	☐	♥	📦	🏠	■	🖨	①	✈	✳	✳	!	●	⬆	👤	⌚	✕	?	👤	👤	🚲	⌚	⊖	⊖	⊖
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Wingdings 3	☞	☞	☞	☞	☞	☞	☞	☞	☞	☞	☞	☞	☞	☞	☞	☞	☞	☞	☞	☞	☞	☞	☞	☞	☞	☞

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Carol
Quinn
Liz Bu
Jaque
Odile
Marga
Nancy
Donna
Antoni
Lucie
Alice
Nicol









Carol
Quinn
Liz Bu
Jaque
Odile
Margaret
Nancy
Donna
Antonio
Lucie
Alice
Nicole

Now that you have the first names, find the last names of the colleagues of Didier Bille.



(15 ')

These are employees of a company where M Bille worked, just study his professional career on Linkdin




 Accueil
  Réseau ²¹
 Emplois
  Messagerie
  Notifica

Prêt à #ChangerDeVie ? - Vous vous sentez l'âme d'un entrepreneur? Solidaire? Engagé?



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Didier Bille · 2e


Professionnel confirmé et polyvalent des RH en France, USA, GB ... au sein de multinationales, de PME/PMI et de startups.


Paris 08, Île-de-France, France · + de 500 relations · [Coordonnées](#)


 Netflix
  Harvard Business School


Directeur des ressources humaines Europe
 Federal-Mogul Powertrain
 janv. 2003 – janv. 2006 · 3 ans 1 mois
 Europe







Directeur des ressources humaines
 Nortel Networks
 déc. 1999 – janv. 2003 · 3 ans 2 mois
 France, Irlande, Canada


Adjoint au directeur des ressources humaines
 FMC Corporation
 avr. 1997 – déc. 1999 · 2 ans 9 mois
 France

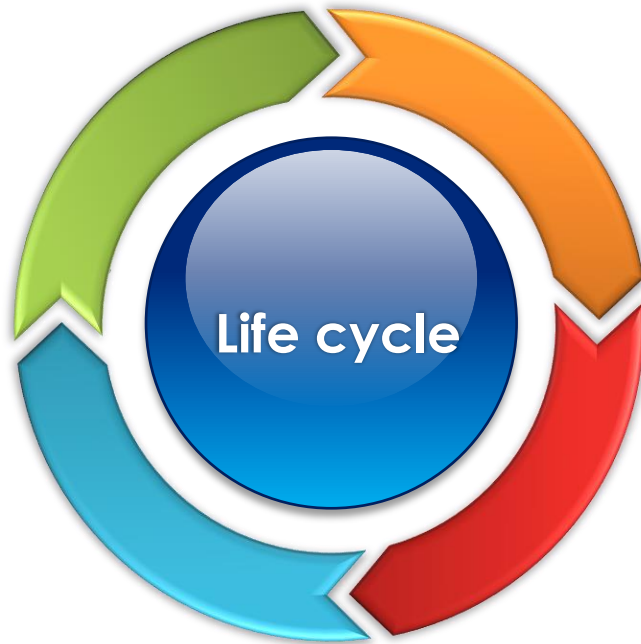

Responsable de la formation, du recrutement et du développement organisationnel
 ING
 janv. 1995 – avr. 1997 · 2 ans 4 mois
 Belgique


Officier
 Ministère de la Défense Nationale - ONU
 janv. 1990 – déc. 1992 · 3 ans
 Allemagne - Ex-Yougoslavie - Rwanda
 Officier en Allemagne / Missions ONU en ex-Yougoslavie et au Rwanda.

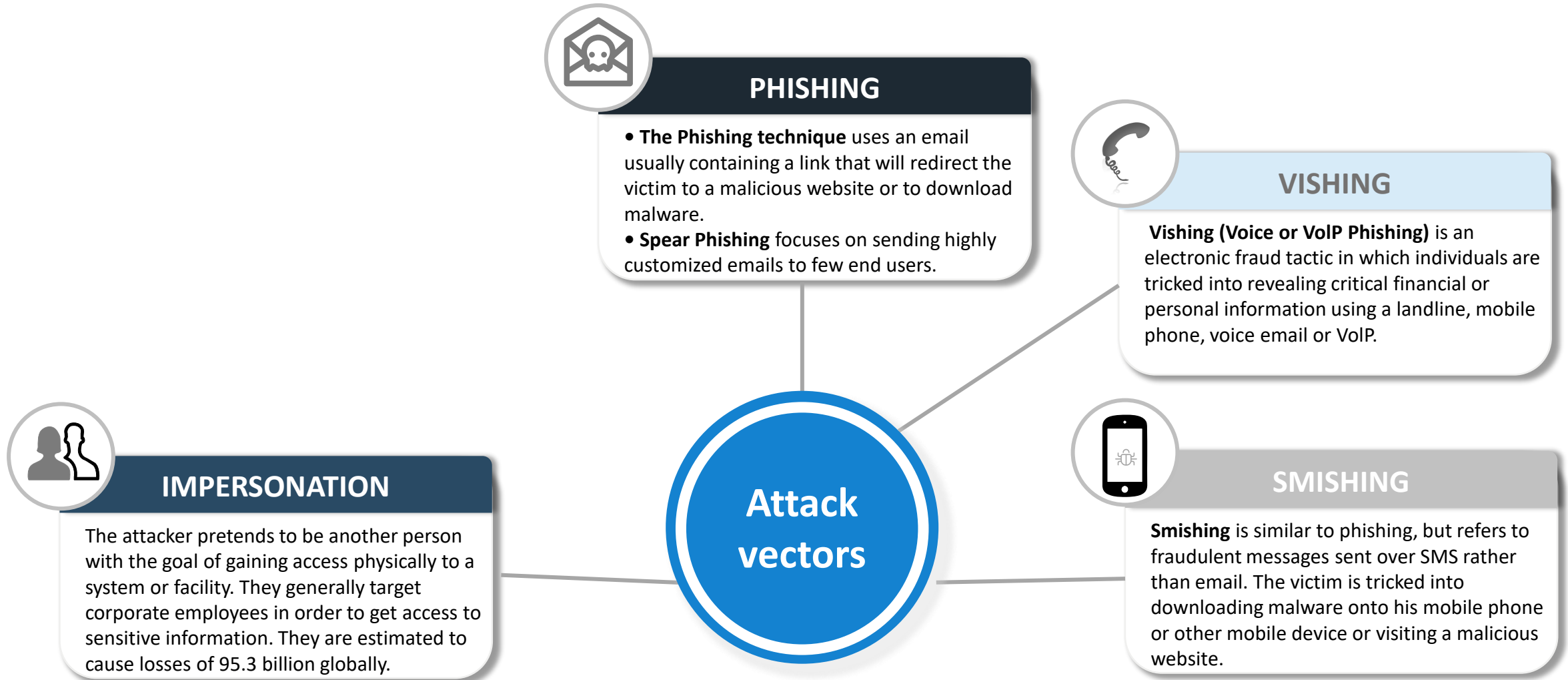
Elimination of companies

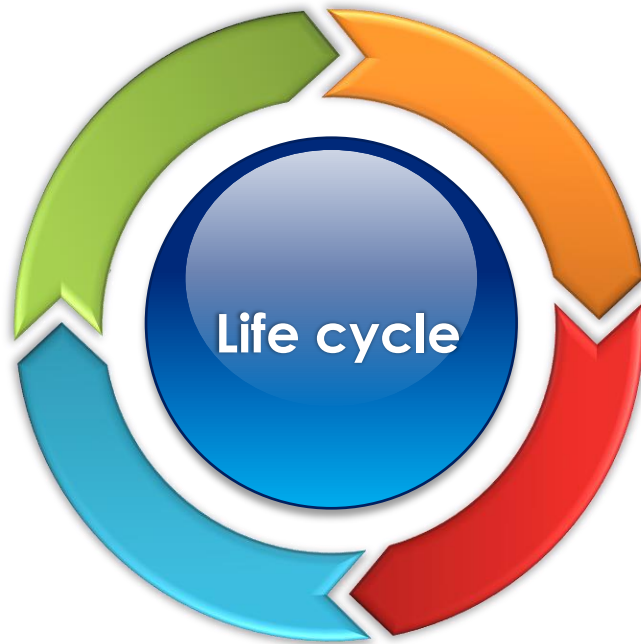
	Directeur des ressources humaines Europe Federal-Mogul Powertrain janv. 2003 – janv. 2006 · 3 ans 1 mois Europe
	Directeur des ressources humaines Nortel Networks déc. 1999 – janv. 2003 · 3 ans 2 mois France, Irlande, Canada
	Adjoint au directeur des ressources humaines FMC Corporation avr. 1997 – déc. 1999 · 2 ans 9 mois France
	Responsable de la formation, du recrutement et du développement organisationnel ING janv. 1995 – avr. 1997 · 2 ans 4 mois Belgique
	Officier Ministère de la Défense Nationale - ONU janv. 1990 – déc. 1992 · 3 ans Allemagne - Ex-Yougoslavie - Rwanda Officier en Allemagne / Missions ONU en ex-Yougoslavie et au Rwanda.

	FMC	Nortel
Carol	193	367
Quinn	62	163
Liz Bu	167	308
Iaque	0	4
Odile	7	13
Margaret	111	200
Nancy	190	432
Donna	91	268
Antoni	11	11
Lucie	28	59
Alice	134	159
Nicole	124	201



Establish relationship





Exploitation

01

RECIPROCITY

People are obliged to give back to others the form of a behaviour, gift or service that they have received first

03

SOCIAL PROOF

In situation where the right action is unclear, we decide what to do by taking cues from other people..

05

LIKING

People are easily persuaded by other people they like.



02

COMMITMENT

We as humans have a need to make our actions line up with our stated intentions or beliefs

04

AUTHORITY

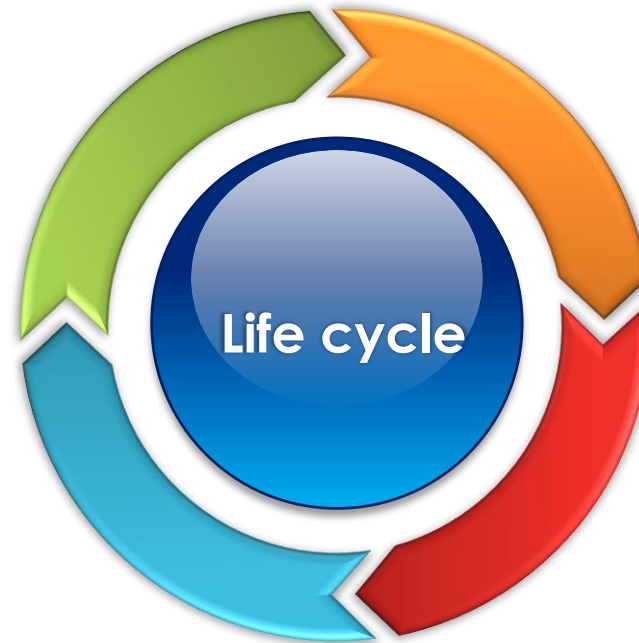
People will tend to obey authority figures, even if they are asked to perform objectionable acts.

06

SCARCITY

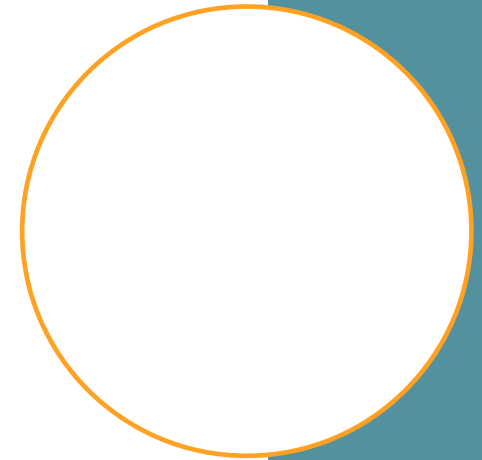
People want more of those things they could have less of in the future.

EXERCICE



With the information you gathered in the previous exercises:

- Choose a target
- Apply one or more Cialdini principles to attack this target



If you want more information about this subject:

