PROGRAMA DE ESPECIALIZACIÓN EN CIBERDEFENSA Y CIBERSEGURIDAD ESTRATÉGICA
(PECCE)

GESTIÓN DE SEGURIDAD DE LA INFORMACIÓN

Ing. Miguel Toffoletti

AGENDA

1. Introducción
2. Sistemas de Gestión de la Seguridad de la información
3. SGSI basado en ISO 27001
4. Análisis de riesgos basados en objetivos de negocios
5. Concienciación de usuarios en Seguridad de la Información

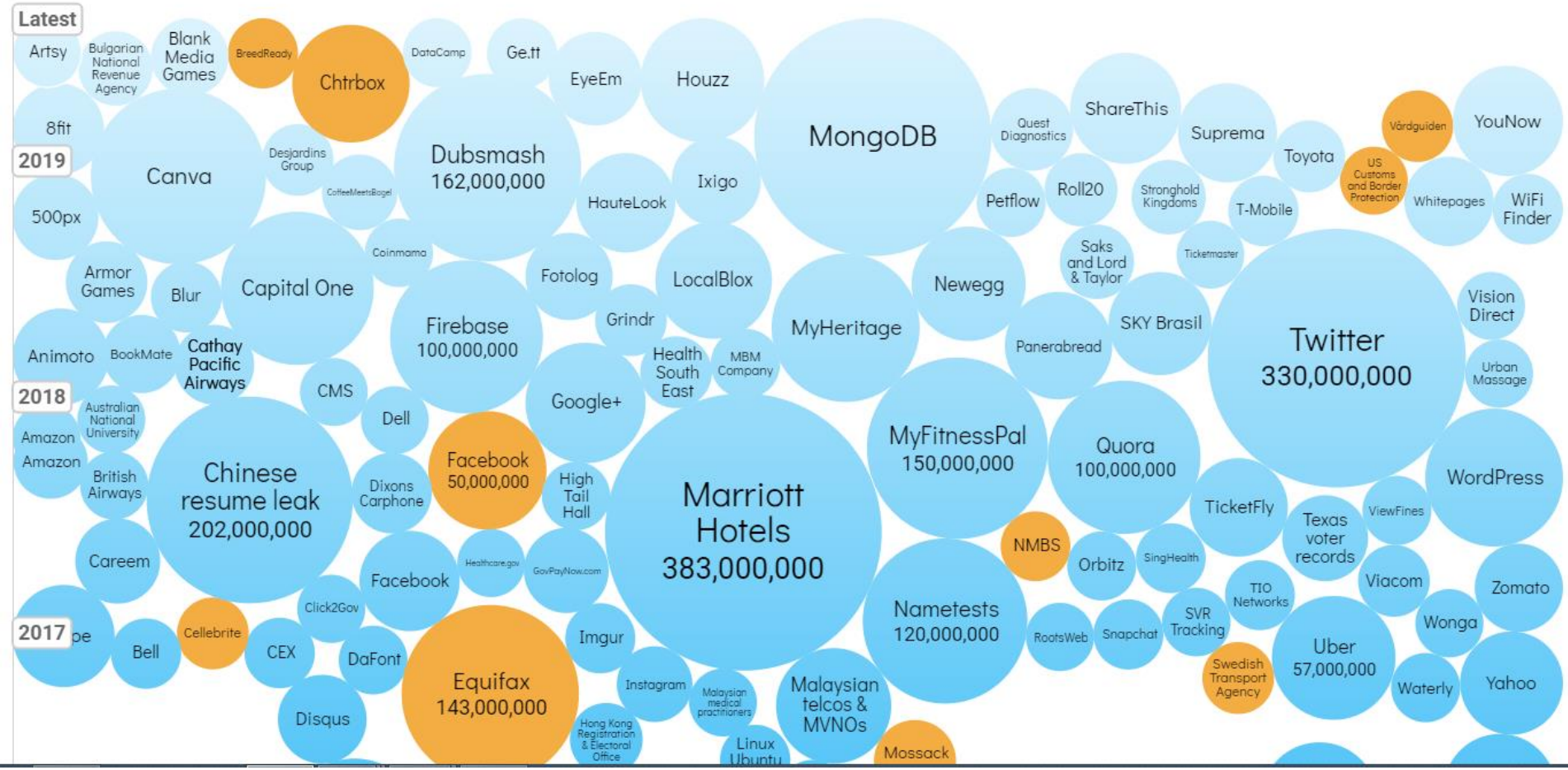
1. INTRODUCCIÓN

1.1. Desafíos de Seguridad de la Información

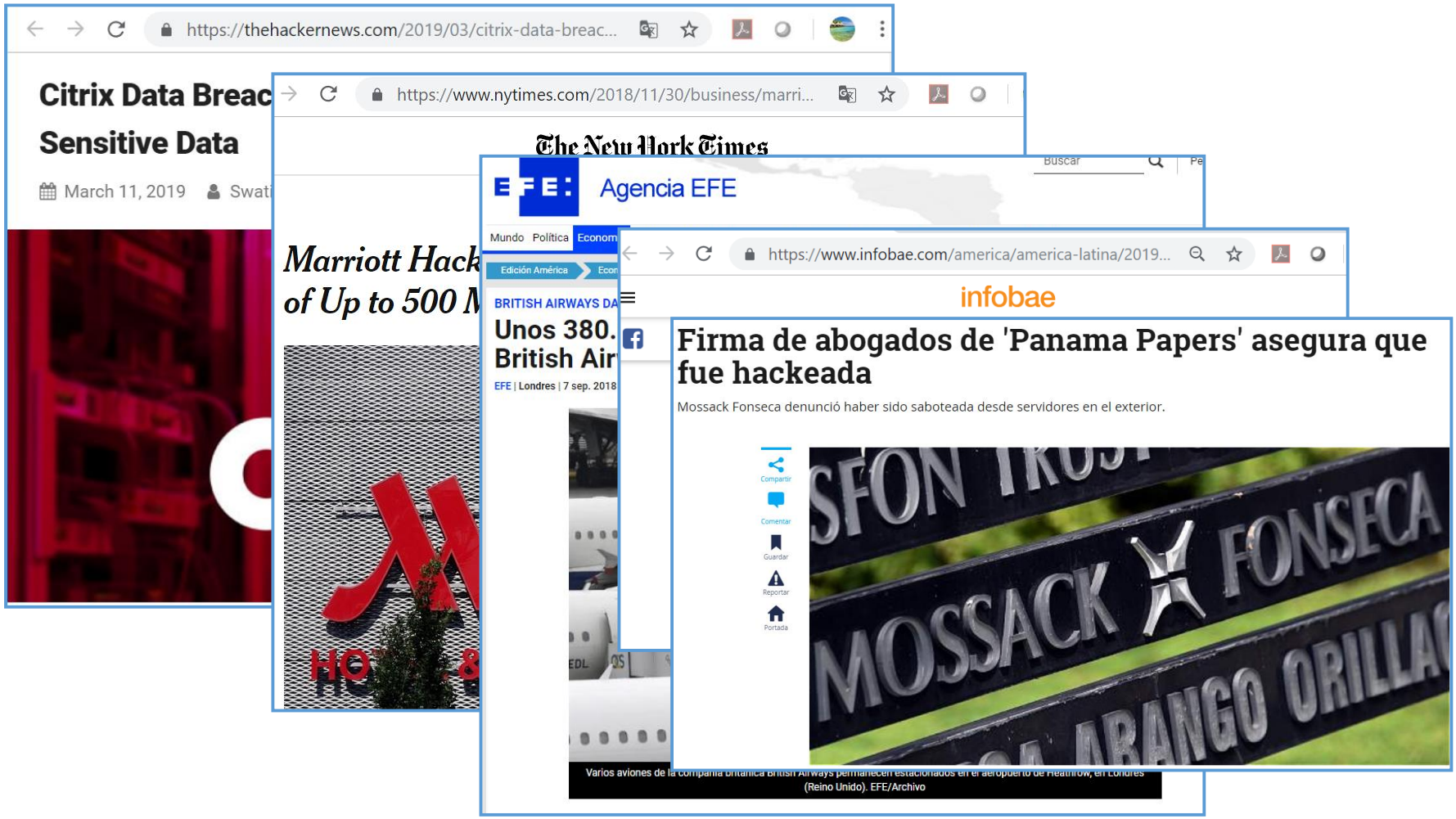
1.2. Contenedores de Información

1.3. El valor de la información

1.1. DESAFIOS DE SEGURIDAD DE LA INFORMACIÓN

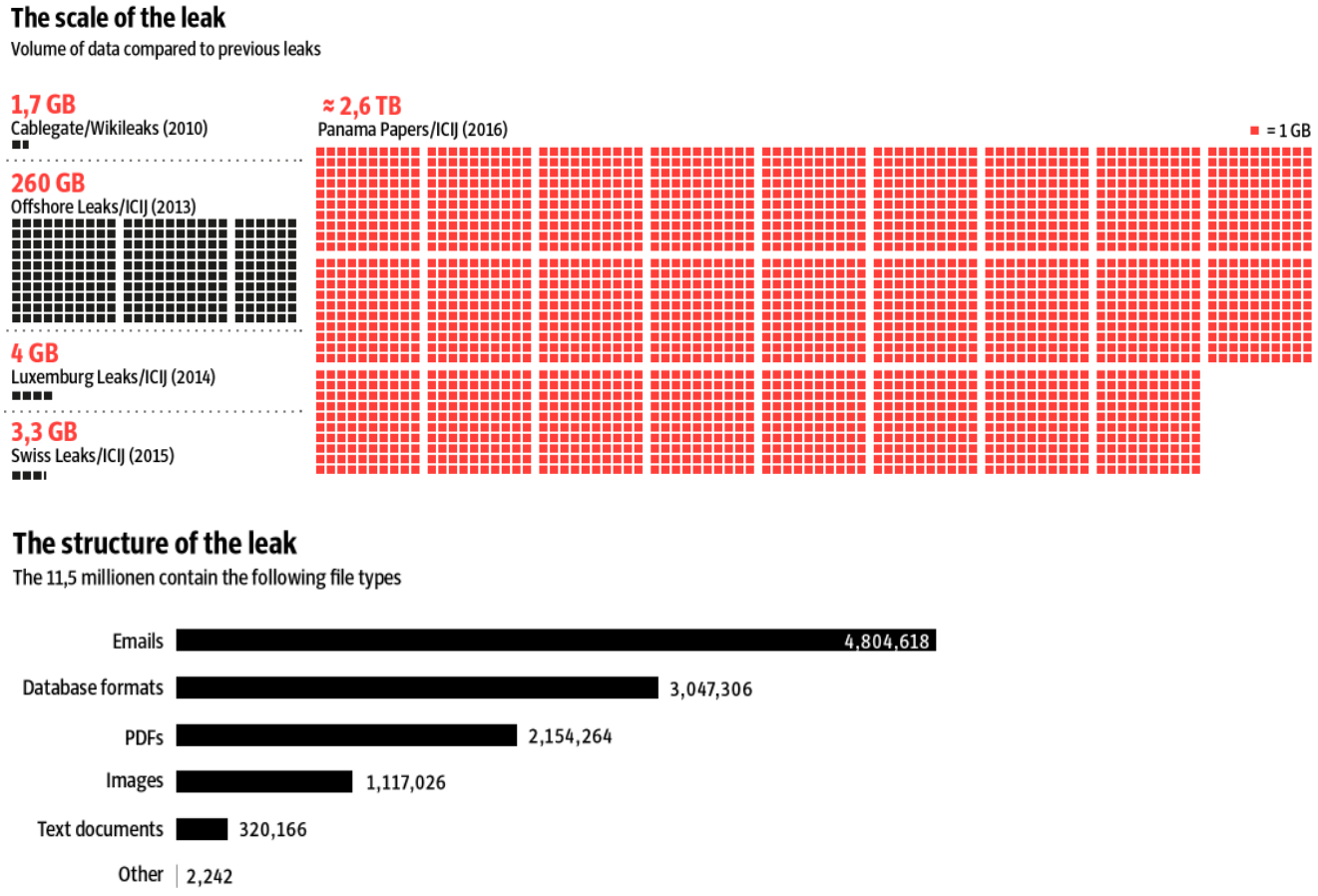


1.1. DESAFIOS DE SEGURIDAD DE LA INFORMACIÓN



1.1. DESAFIOS DE SEGURIDAD DE LA INFORMACIÓN

Mossack Fonseca – Panamá Papers (Abril 2016)



- Vladímir Putin
- Mauricio Macri
- Leo Messi
- Michel Platini
- Iván Zamorano
- Jackie Chan
- Juan Manuel Santos
- Reina Isabel II

1.1. DESAFIOS DE SEGURIDAD DE LA INFORMACIÓN

Mossack Fonseca law firm to shut down after Panama Papers tax scandal

Firm at the center of controversy over tax evasion cites economic and reputational damage in announcement

▲ The law firm at the center of the Panama Papers controversy said it would keep 'fighting for justice'. Photograph: Arnulfo Franco/AP

The scale of the leak

Volume of data compared to prev

1,7 GB
Cablegate/Wikileaks (2010)

260 GB
Offshore Leaks/ICIJ (2013)

4 GB
Luxemburg Leaks/ICIJ (2014)

3,3 GB
Swiss Leaks/ICIJ (2015)

The structure of the l

The 11,5 millionen contain the

Emails
Database formats
PDFs
Images
Text documents
Other | 2,242

límir Putin
ricio Macri
Messi
hel Platini
Zamorano
ie Chan
Manuel Santos
a Isabel II

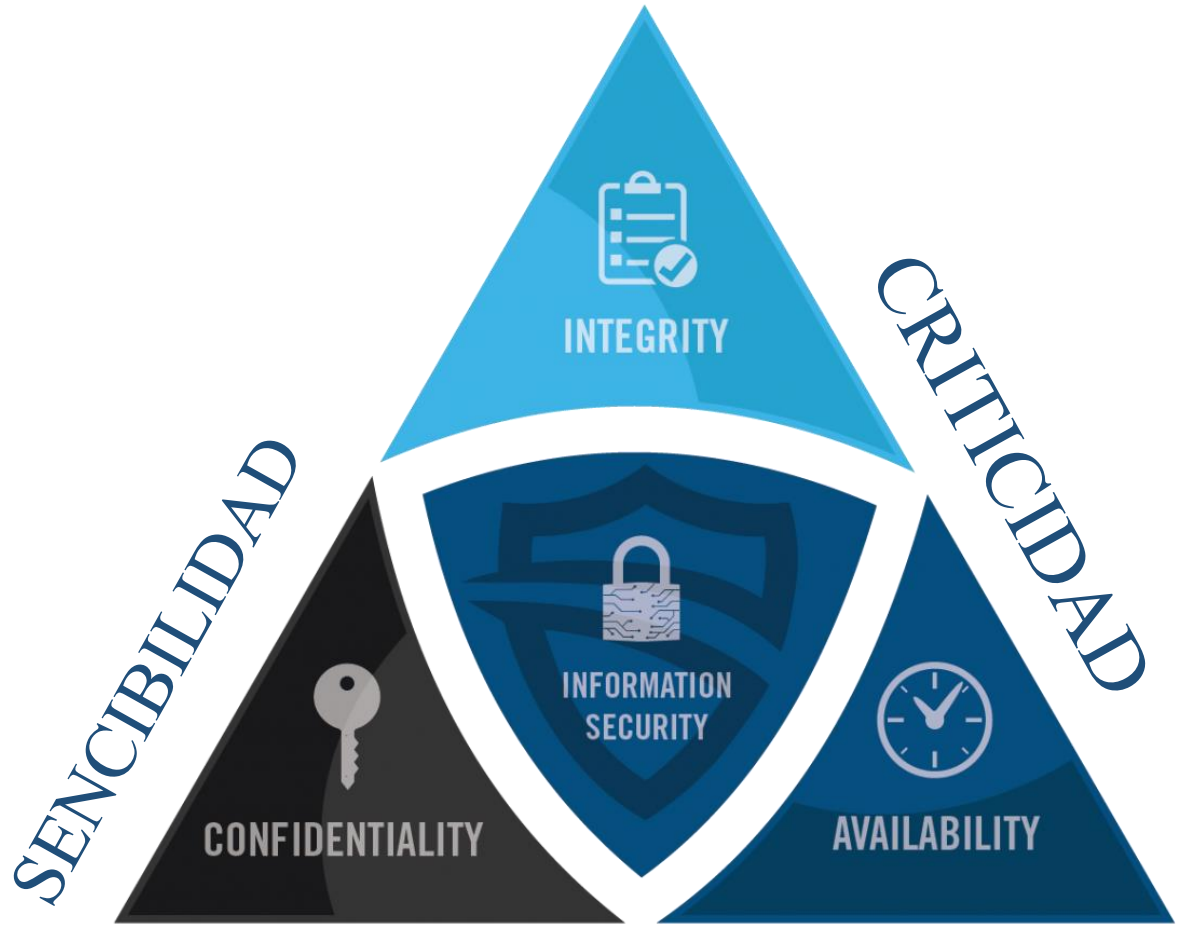
1.1. DESAFIOS DE SEGURIDAD DE LA INFORMACIÓN

Entity	Records lost	Year	Story
Desjardins Group	2,900,000	2019	June 2019. An employee of financial services federation Desjardins Group leaked personal de
US Customs and Border Protection	100	2019	June 2019. Photos of travellers' faces and license plates were compromised as part of an a "ma
Quest Diagnostics	11,900,000	2019	June 2019. One of the biggest blood testing providers in the United States leaked personal, fi
Australian National University	200	2019	June 2019. A hacker accessed personal information, bank account details and academic record
Canva	139,000,000	2019	May 2019. A hacker stole names, email addresses and location data for 139 million users of Au
First American Financial Corporation	885,000,000	2019	May 2019. A provider of real estate title insurance leaked insurance deal documents going bac
Chtrbox	49,000,000	2019	May 2019. A database of contact details for millions of Instagram influencers, celebrities and b
WiFi Finder	2,000,000	2019	Apr 2019. An Android app exposed the Wi-Fi passwords for more than two million networks.
Toyota	3,100,000	2019	Apr 2019. The personal information of roughly 3.1 million Toyota customers may have been le
500px	14,800,000	2019	Feb 2019. Photo-sharing site 500px announced that it was hacked in July 2018, exposing the pe
Blur	2,400,000	2019	Jan 2019. A file was left freely accessible online, & contained email & addresses, some names
Blank Media Games	7,600,000	2019	Jan 2019. A hacker has stolen the personal details of 7.6 million users of browser-based game
MongoDB	275,265,298	2019	May 2019. A huge MongoDB database exposing records of Indian citizens containing detailed p
Bulgarian National Revenue Agency	5,000,000	2019	Jul 2019. A hacker stole the personal details of millions of Bulgarians and emailed download li
Capital One	100,000,000	2019	Jul 2019. A former Amazon employee was arrested in relation to the hack. A lawsuit has been
Suprema	27,800,000	2019	Aug 2019. Fingerprints. facial recognition information, unencrypted usernames and passwords
Click2Gov	300	2018	Dec 2018. Vulnerabilities in Click2Gov, a type of government payment software, allowed hack
SingHealth	1,500,000	2018	July 2018. Hackers stole personal details of 1.5 million patients, as well as the prescription det
GovPayNow.com	14,000,000	2018	Sep 2018. A company used by thousands of US state and local governments to accept online pa
Cathay Pacific Airways	9,400,000	2018	Oct 2018. The stolen data included names, nationalities, birth dates, phone numbers, address
Chinese resume leak	202,000,000	2018	Dec 2018. The leaked info included name, working experience, mobile phone number, email,
WordPress	76,500,000	2018	Aug 2018. According to security researchers, WordPress was notified of a security vulnerabilit
Google+	52,500,000	2018	Dec 2018. A new vulnerability could have exposed users' personal details to developers, even
Quora	100,000,000	2018	Dec 2018. Compromised: logins for around 100m visitors who use the site to ask and answer q
Marriott Hotels	383,000,000	2018	Nov 2018. Sensitive data on customer to all Starwood hotels (including Sheraton, Regis, W Hot
NMBS	1,460,000	2018	Dec 2018. Data stored on a non-secure server, making it possible to access names, gender, DO
Facebook	50,000,000	2018	Mar 2018. Cambridge Analytica, headed at the time by Steve Bannon, harvested 50m profiles i
Panerabread	37,000,000	2018	Apr 2018. Customer records were available via the bakery chain's site for at least 8 months. Pa
Aadhaar	1,000,000,000	2018	Jan 2018. The personal information of more than a billion Indians stored in the worldâ€™s larg
Dixons Carphone	10,000,000	2018	Jun 2018. Dixons Carphone revealed personal info for 10 million customers was stolen someti
MyHeritage	92,283,889	2018	Jun 2018. Email addresses and encrypted passwords were stolen. As yet there is no evidence t
Saks and Lord & Taylor	5,000,000	2018	Apr 2018. A known ring of cybercriminals implanted software into store cash registers, siphon
Careem	14,000,000	2018	Apr 2018. Careem's official blog stated there was no evidence of payment info having been st
Texas voter records	14,800,000	2018	Aug 2018. A single file containing 14.8 million records was left on an unsecured server withou
British Airways	380	2018	Sep 2018. Personal and financial details of customers making bookings between Aug 21st and
T-Mobile	2,000,000	2018	Aug 2018. T-Mobile initially said that personal data was stolen, but no passwords or financial i
MyFitnessPal	150,000,000	2018	Mar 2018. Usernames, email addresses, and hashed user passwords were stolen.
Health South East	3,000,000	2018	Feb 2018. Health data was stolen from more than half of Norway's population.

1.2. CONTENEDORES DE INFORMACIÓN

1.3. EL VALOR DE LA INFORMACIÓN

1.3. EL VALOR DE LA INFORMACIÓN



2. SISTEMA DE GESTION DE SEGURIDAD DE LA INFORMACIÓN

2.1. ¿Que es un SGSI?

2.2. ¿Cómo debería ser un SGSI?

2.3. ¿Qué no es un SGSI?

2.4. Beneficios de un SGSI

2.5. Ciclo PDCA

2.6. Otros sistemas de gestión

2.1. ¿QUE ES UN SGSI?

Es un enfoque sistemático para establecer, implementar, operar, monitorizar, revisar, mantener y mejorar la seguridad de la información de la organización para lograr los objetivos del negocio.

Consiste en políticas, procedimientos, guías, y recursos y actividades asociadas, gestionados conjuntamente por una organización, con el objetivo de proteger sus activos de información.

2.2. ¿CÓMO DEBERÍA SER UN SGSI?

- Los procesos o áreas bajo el sistema de gestión deberían estar:
  - ❖ Alineados con los Objetivos del Negocio.
  - ❖ Marco que permita gestionar el logro o control de estos objetivos
  - ❖ Diseñado para cumplir con las necesidades de las partes interesadas y mejorar la reputación e imagen.
  - ❖ Aplicado a todos los equipos y actividades
  - ❖ Marco de trabajo que puede ser usado para mejorar el negocio y cambiarlo
  - ❖ Construido en base a la forma de trabajar del negocio y no al estándar

2.3. ¿QUÉ NO ES UN SGSI?

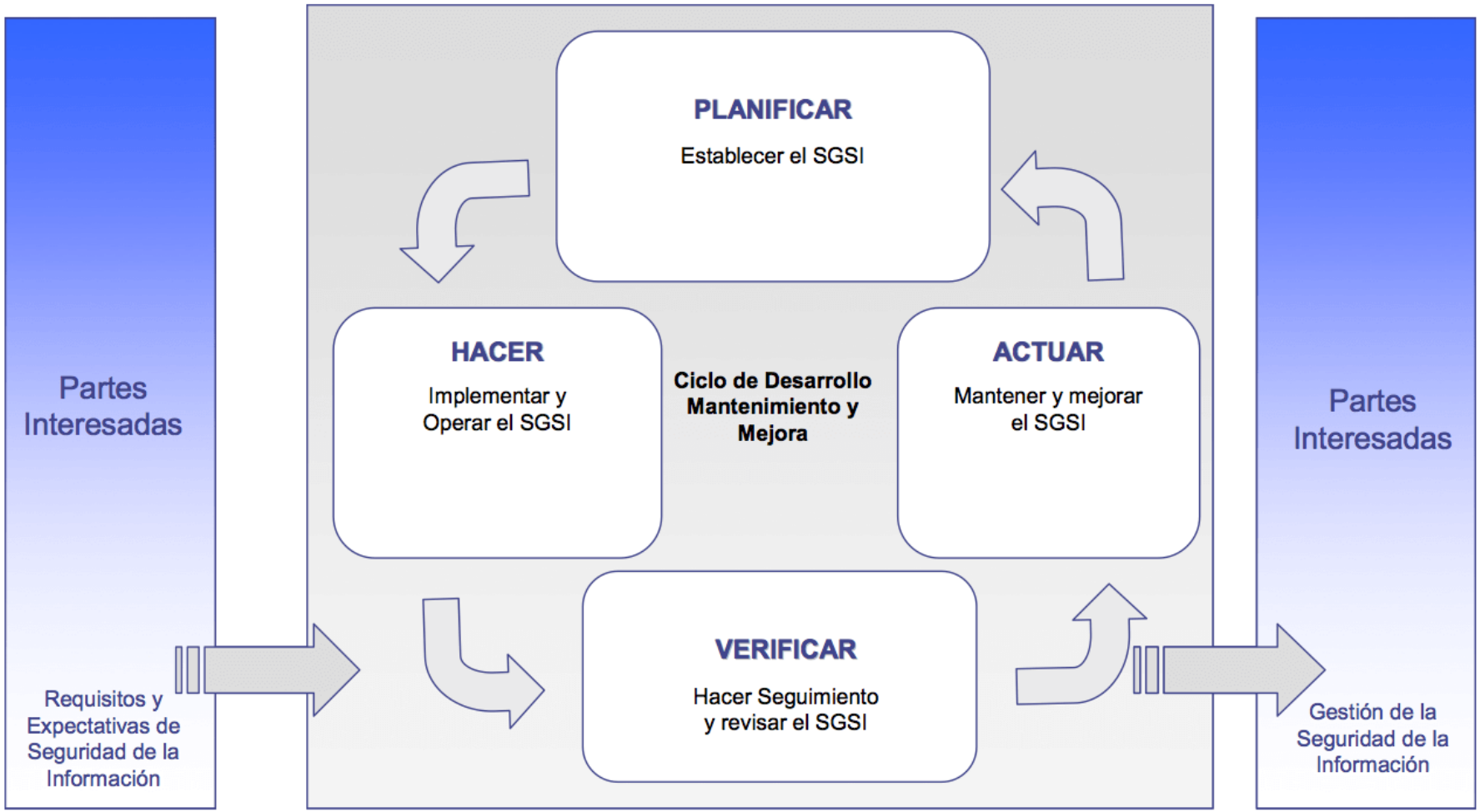
- Literatura
- Trabajo adicional
- Checklist de Actividades
- Compliance de Normas
- Una estructura para justificar cambios

2.4. ¿BENEFICIOS DE UN SGSI?

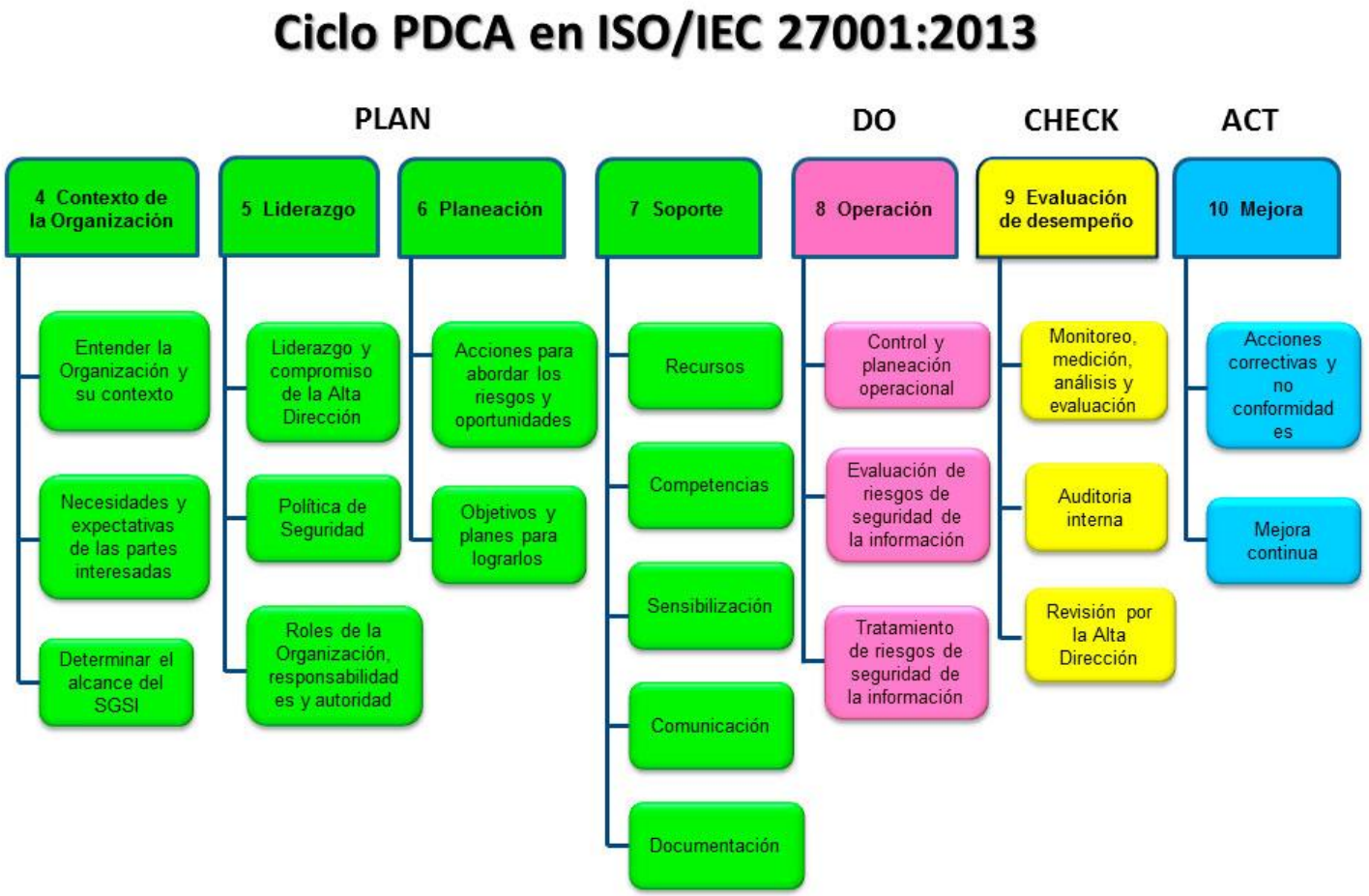
- Tiempo, dinero y otros recursos gestionados de forma eficiente:
  - ❖ Asegurar que nada importante no se hace
  - ❖ Asegurar que no solo se hace lo “que gusta”

- Sistematización de la forma de hacer las cosas
  - ❖ Define claramente quien es el responsable
  - ❖ Define qué hacer, por qué, cuándo, cómo y donde

2.5. Ciclo PDCA



2.5. Ciclo PDCA



CONSULTAS.

MUCHAS GRACIAS