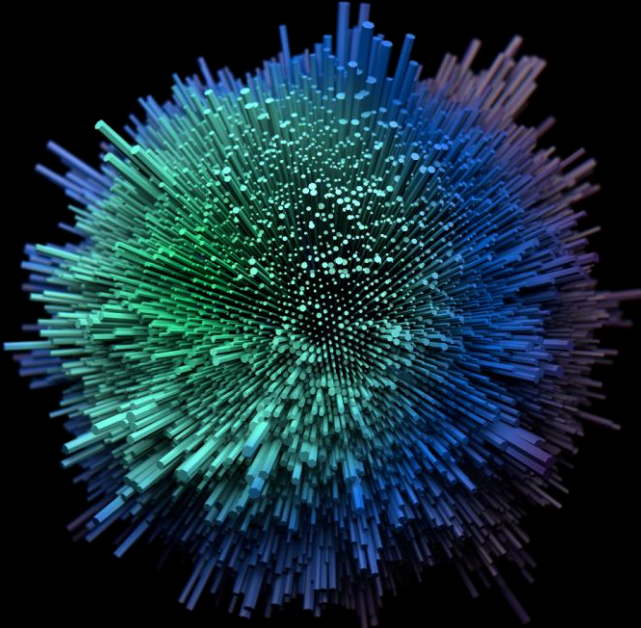


Shedding light on Shadow OT

What is Shadow OT and how does it impact Industrial Organizations?



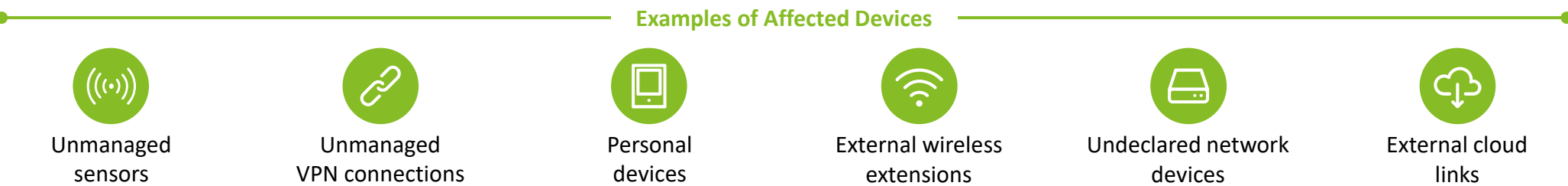
Industrial organizations are facing new challenges with the convergence of Operational Technology (OT) with Information Technology (IT), such as **network blind spots** caused by **not knowing the data flows** or by **unknown devices** that are placed between these networks, increasing the likelihood of a **cyber incident** in these environments.



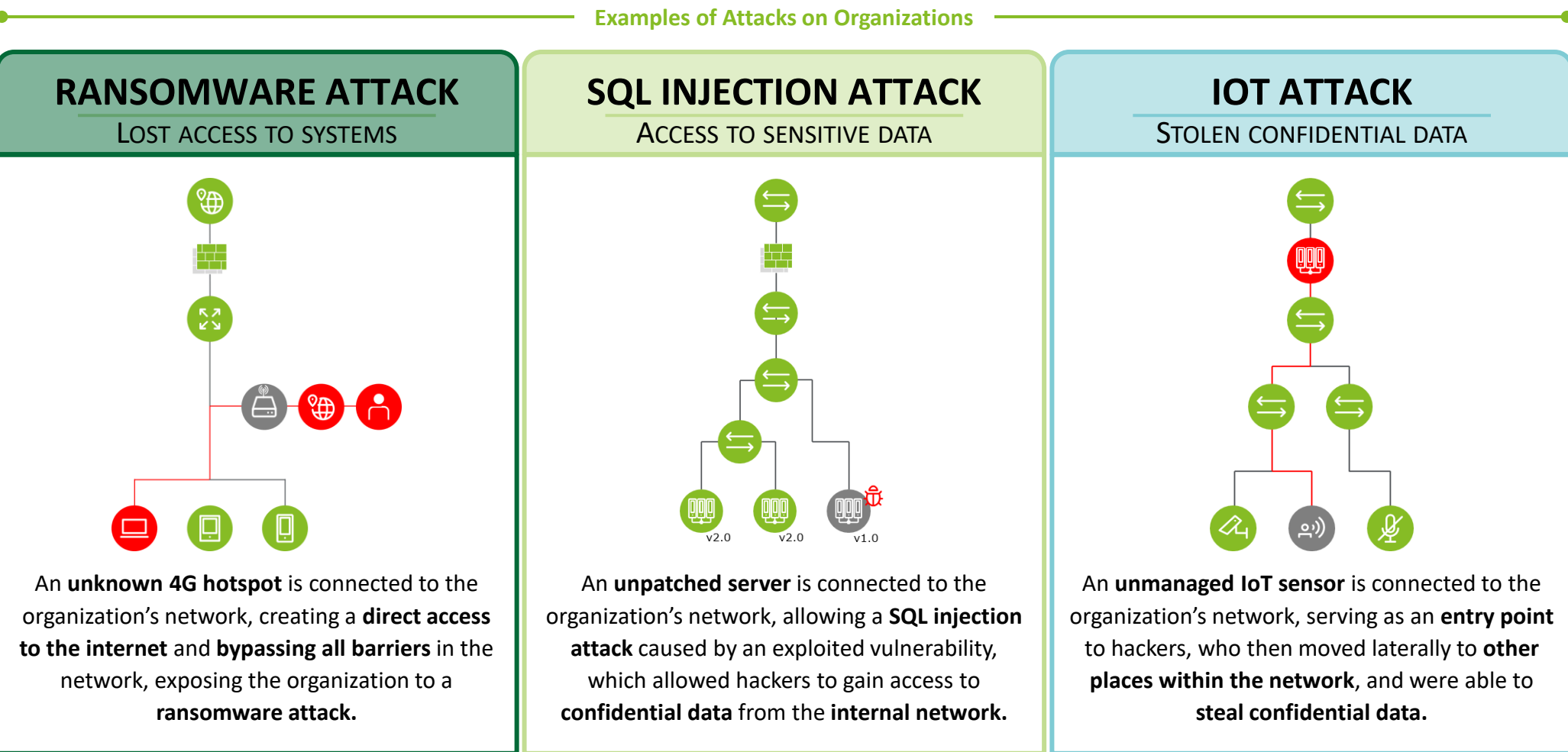
! Having **reduced visibility** of the operational systems and a **poor network device inventory**, can make activities such as **network assessment** and **hardening of network devices** more complex, and lead organizations to face a phenomenon known as **Shadow OT**.

Sources: [1] Fortinet (2022), [2] Dragos (2021), [3] Ponemon Institute (2021), [4] Forrester (2017)

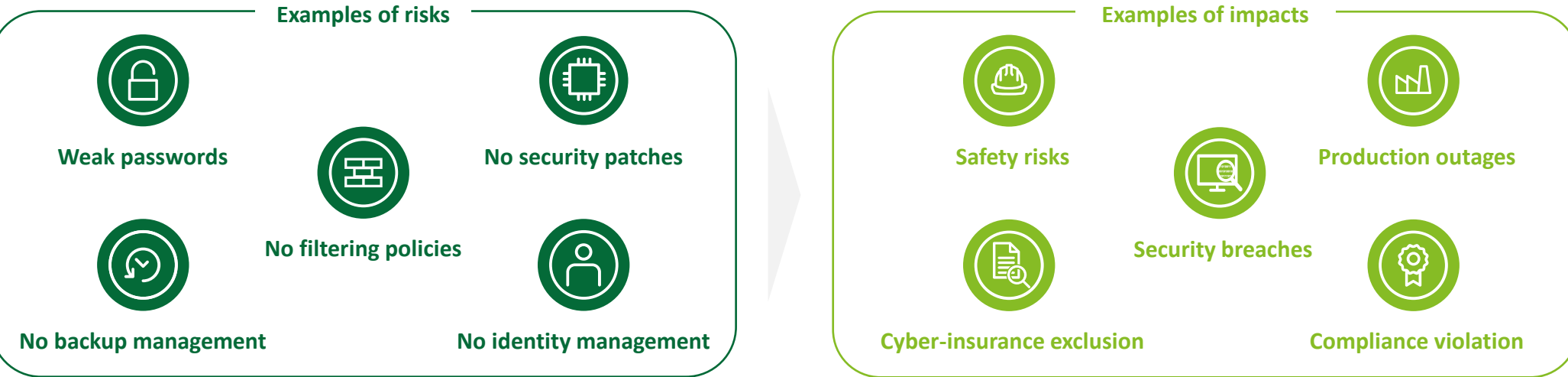
Shadow OT refers to **unidentified and unmonitored assets** inside an organizations’ network and can be caused by the **lack of complete visibility** into the network and operational systems, **inappropriate asset management** and **no OT discovering tools**.



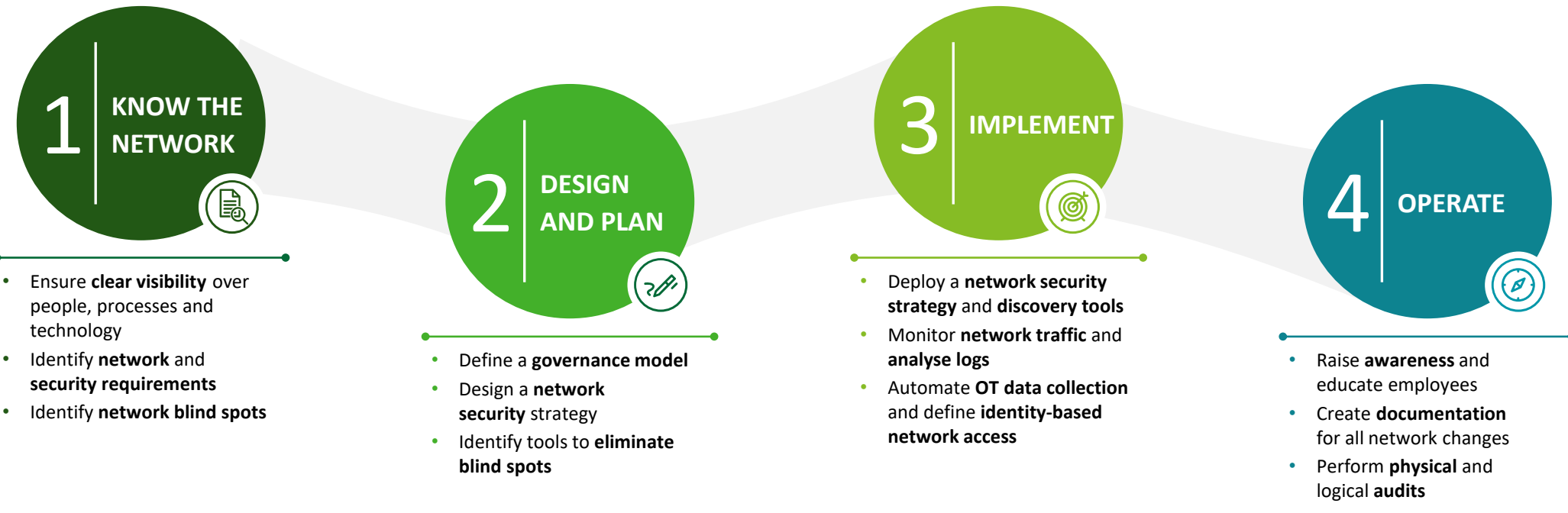
There are **several examples** of situations in which **shadow devices endangered organizations’ networks**, by allowing cyber incidents such as **Ransomware**, **SQL injection** and **IoT attacks** to happen.



Unidentified devices present several **technical and business risks** that can **impact organizations** at different levels, so being able to identify them is crucial to define a security strategy capable of mitigating these vulnerabilities.



To mitigate Shadow OT different actions are required, and they can be structured in a **four-step approach**:



How can Deloitte help?

Our technology and engineering expertise and business strategic skills allows us to be a trust-worthy advisor for every step of the journey.

- Wide experience** in **OT/ICS environments**, with a proven methodology from assessment to design until implementation in several industries.
- Global Telecom CoE** with **unique technology** and **engineering knowledge**, and a proven track record in network and tech transformation.
- Multidisciplinary specialized teams, which combine the **high technical expertise** with **business and strategic consulting teams**.

Contacts

Experts



Bruno Pires
Telecom Engineering Excellence Manager
brunpires@deloitte.pt



David Andrade
Telecom Engineering Excellence Senior Consultant
davandrade@deloitte.pt

Sponsor



Pedro Tavares
Telecom Engineering Excellence Partner
petavares@deloitte.pt



Luís Abreu
Telecom Engineering Excellence Partner
labreu@deloitte.pt

“Deloitte,” “us,” “we” and “our” refer to one or more of Deloitte Touche Tohmatsu Limited (“DTTL”) member firms, and their related entities (collectively, the “Deloitte organization”). DTTL (also referred to as “Deloitte Global”) and each of its member firms and related entities are legally separate and independent entities and, therefore, do not bind each other for all intents and purposes. Accordingly, each entity is only liable for its own acts and omissions and cannot be held liable for the acts and omissions of the other. Furthermore, DTTL does not provide services to clients. To learn more, please consult www.deloitte.com/about

Deloitte provides industry-leading audit and assurance, tax and legal, consulting, financial advisory, and risk advisory services to nearly 90% of the Fortune Global 500® among thousands of private companies. Our professionals deliver measurable and lasting results that help reinforce public trust in capital markets, enable clients to transform and thrive, and lead the way toward a stronger economy, a more equitable society and a sustainable world. Building on its 175-plus year history, Deloitte spans more than 150 countries and territories. To learn how Deloitte’s 415,000 people worldwide make an impact that matters please consult www.deloitte.com.

This communication contains general information only, and neither Deloitte Touche Tohmatsu Limited (“DTTL”) nor its global network of member firms or their related entities (collectively, the “Deloitte organization”) is, by means of this communication, rendering professional advice or services. Accordingly, before deciding or taking any action that may affect your finances or your business, on the basis of this communication you should consult a qualified professional adviser. No representations, warranties or undertakings (express or implied) are given as to the accuracy or completeness of the information in this communication, and therefore neither the issuer, nor DTTL or its network of member firms, related entities, employees or agents may be held liable or responsible for any loss or damage whatsoever arising directly or indirectly in connection with any person relying on this communication.

