



AI & Smart Transportation

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**"If it scares you,
it might be a good
thing to try"**

Seth Godin

Cyber - A Strategic Threat

Strategic Trends

Artificial
General
Intelligence

NEW

The
International
arena

NEW

News/Social
Media
campaigns

Supply Chain
Attacks

State & Super
Power Level
Threat

Cyber crime

Cyber
Attacks On
Critical
Infrastructure

Large Scale
Industrial
Espionage

CNI
(Influence &
Disinformation
Campaigns)

Use of
publicly
available
malware by
threat actors

Weaponization of
the cyber domain

Lack of attribution
and accountability

The widening skills
gap, and less
trained experts to
fill security roles

Attackers eyeing
"New
Technologies" –
the **Cloud, IoT, 5G,
AGI...**

The Digital Transformation of Transportation

I

Infrastructures

- Smart cities
- Smart sensors
- Smart analytics

E

Electrification

- EV revolution
- E-Public transport'
- New Charging devices

C

Connectivity

- Cloud, Cloud, Cloud
- Real time Analytics

A

Autonomous

- Total change for humanity

Connectivity

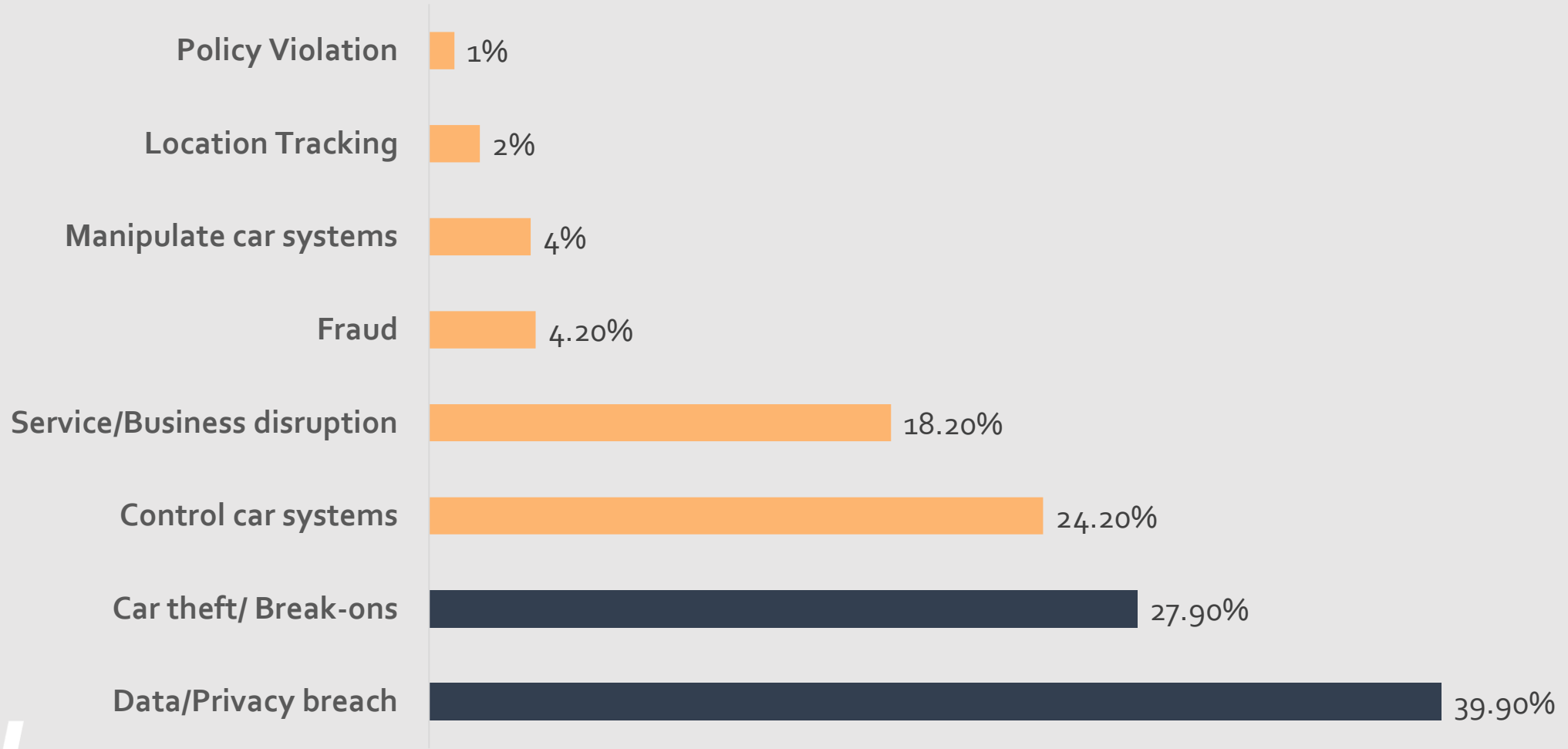
Vulnerabilities

Dependency

Attack Surface

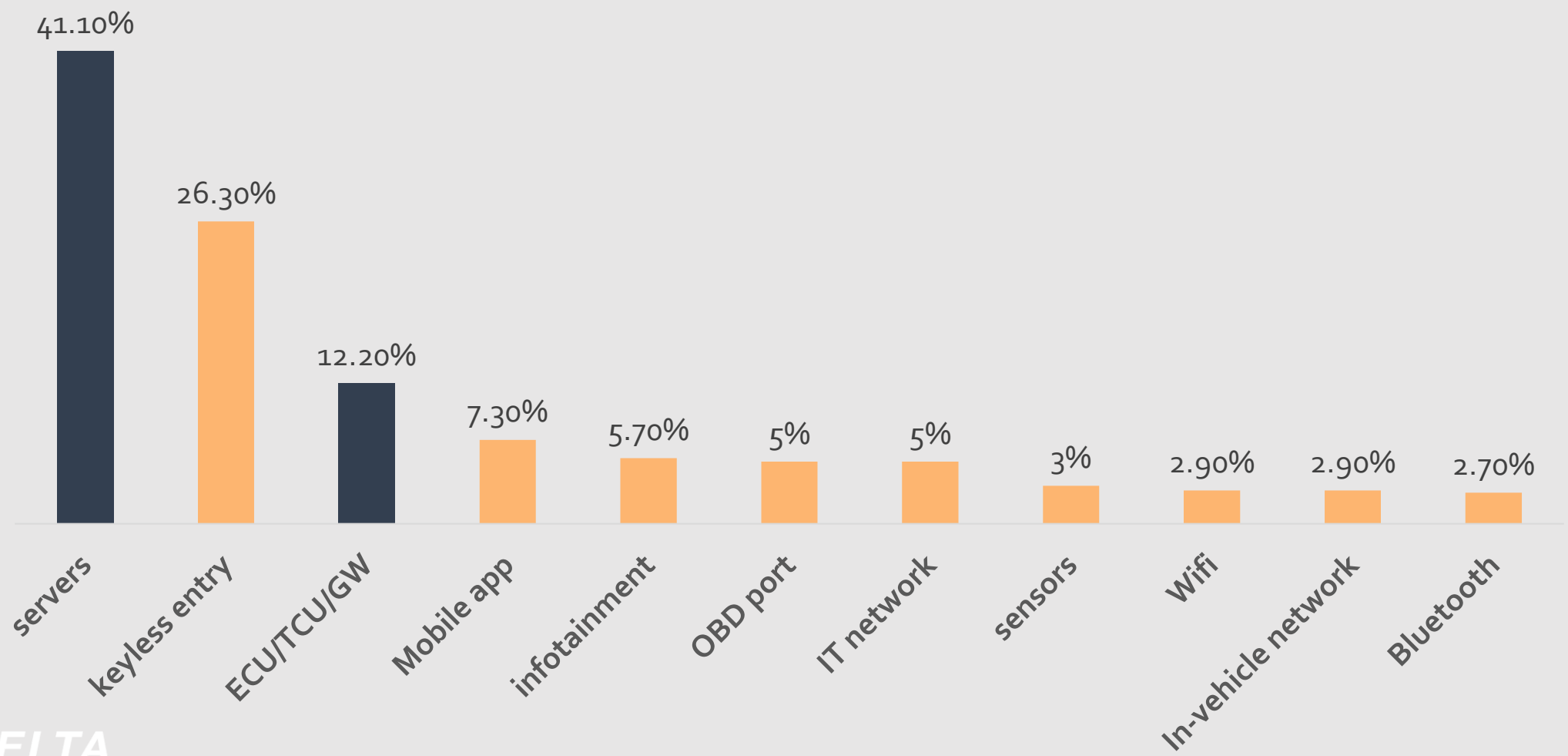
Potential Damage

Impact breakdown 2010-2021, based on 900+ automotive cyber incidents



Source- Upstream Security

Connected vehicle's most common attack vectors 2010-2021



Source- Upstream Security



THE REAL **REAL** CHALLENGE

Cyber Security

Business / National Continuity

In the **Artificial General Intelligence** Era

What is AI?

- AI, or Artificial Intelligence, refers to the development of computer systems that can perform tasks that typically require human intelligence, such as learning, problem-solving, and decision-making
- AI systems use algorithms and statistical models to analyse large amounts of data and make predictions or decisions based on that data.



How AI is changing the world of transportation

Autonomous
vehicles

Traffic
management

Predictive
maintenance

Personalized
transportation

Logistics and
supply chain
management

Improved
safety

AI in Smart Transportation



Buses

optimize bus routes and
reduce congestion



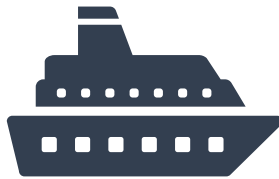
Private vehicle

reduce traffic congestion, air
pollution, and carbon emissions



Airplanes

improve efficiency
and safety



Ships

optimize routes, reduce fuel
consumption, and improve navigation.



Trains

optimize their schedules
and reduce delays



Intelligence-saturated control arrays

optimize traffic flow and
reduce congestion

Artificial General Intelligence in Cyber Security - A Two Edged Sword

Detecting Threats Quickly (RT)

Automation: Skill Crunch

**Adaptability: Moving Target
Defense**

Better Use of Data

Advance Forensics

**New Detection Processes (e.g.
predictive)**

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**Finding Vulnerabilities Quickly
(RT)**

Introducing New Vulnerabilities

Better Advance Persistent Threat

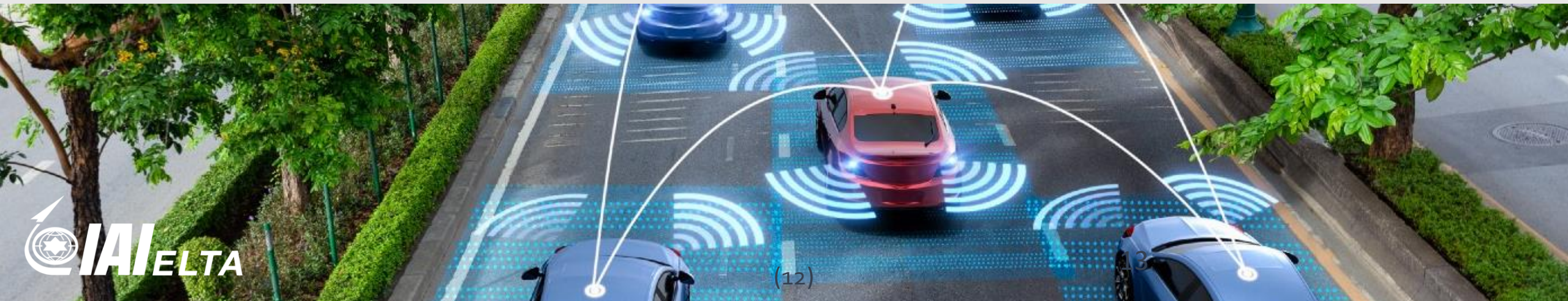
Data as a Single Point of Failure

Better Testing of Attacks

**New Attack Vectors (e.g.
predictive)**

National Grade Challenges Requires National Grade Solutions

- Innovative Technology
- Unique Methodology
- Constant innovation
- National & Global Cooperation
- Professional expertise for testing
- Capacity build-up and maintenance

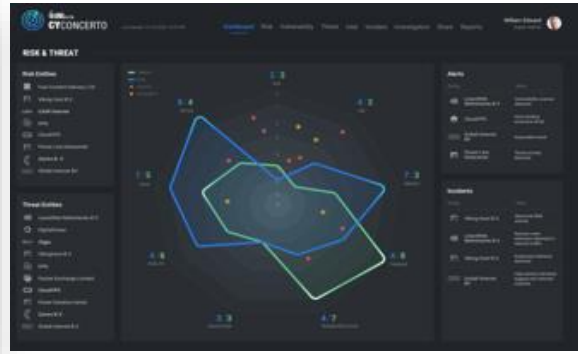




Cyber Resilience – Building Blocks



NextGen Forensics and IR



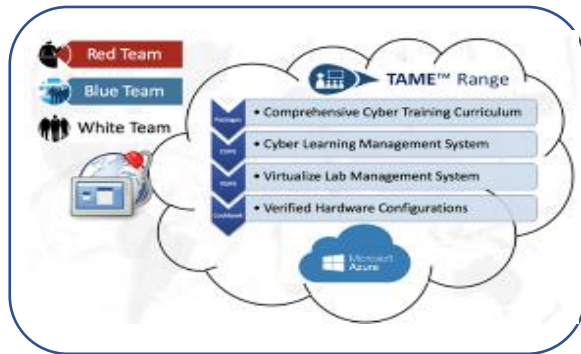
NextGen SOC



Pro-Activity



Predictive CTI



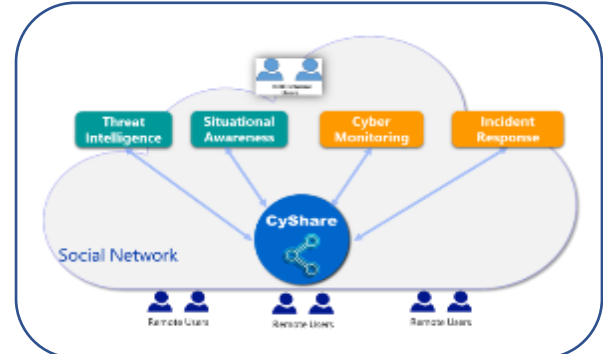
Capacity Build Up



Critical Infrastructures



Supply Chain Security

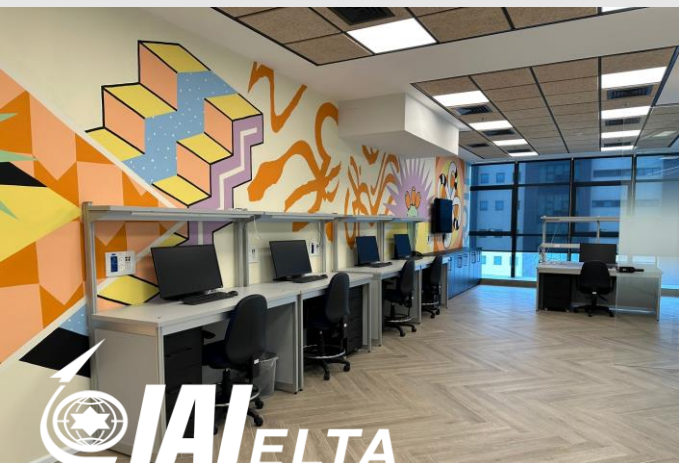


Knowledge Sharing and Collaboration

About CyITS

Israel's National Cyber center for Intelligent Transportation Systems (CyITS), is a joint venture between the Israeli government and industry, led by the Ministry of Transportation

CyITS conducting cyber security Tests for Vehicles & Autonomous platforms, as well as railways and smart infrastructure

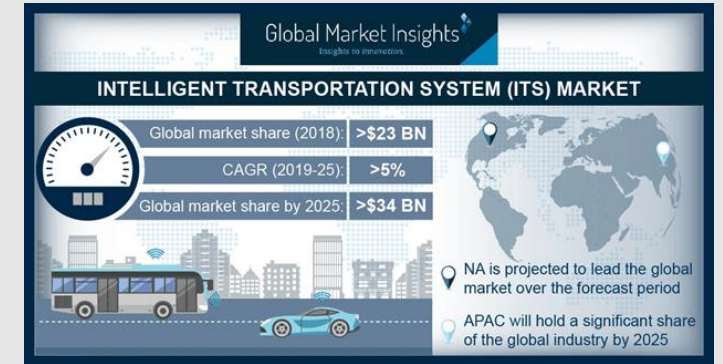


Israel readiness for the **Smart Transportation** Revolution



CyITS- The first of his kind in the world- authorized by the state

Smart Transportation Market



The new automotive era



Israel Cyber Center for Intelligent Transportation Systems



CyITS Offering

