Leveraging Technology for Risk Assessment and Risk Reduction in MSIG

Initiatives driven by our innovation team, Global Digital Hub

14 December 2023
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Business Development & Digitalisation, MSIG Asia

A Member of MS&AD INSURANCE GROUP

Agenda

1. Company Overview
2. Our Vision & Aspiration
3. Showcases in Risk Assessment & Risk Reduction
4. Potential Regulation Challenges

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Company Overview

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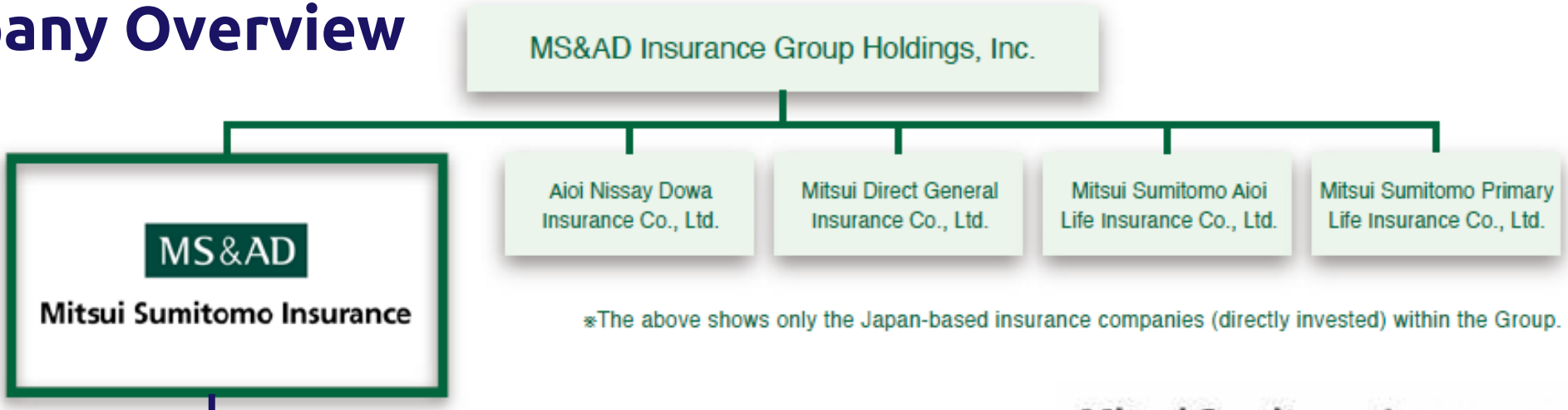

※The above shows only the Japan-based insurance companies (directly invested) within the Group.

MSIG

‖ Global Network ‖

41 countries and regions

Mitsui Sumitomo Insurance

CEO	Shinichiro Funabiki
Established	October 21, 1918
Paid-in Capital	JPY 139,595 million (USD 1,004 million)
Net Premiums Written	JPY 2,207 billion (USD 16.4 billion)
Number of employees	Domestic 13,453 Global 7,796
Financial Status	A+ (Standard & Poor's) A1 (Moody's)

(* USD 1 = JPY 135)

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Facts of MSIG Asia Region:

14 markets including unique footprint
in all 10 ASEAN member countries

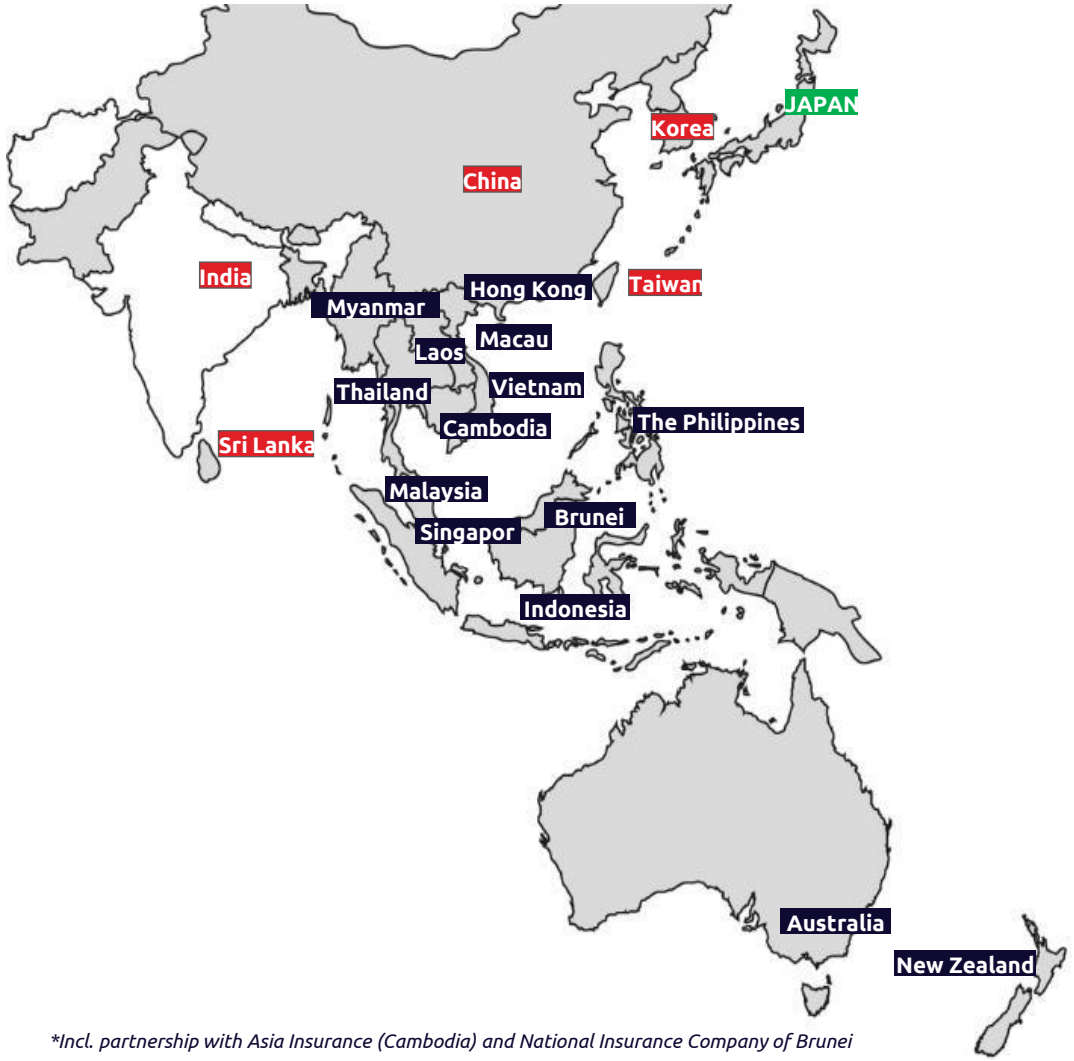
4,241 employees

2,139,656 policyholders

GWP JPY 272.6bn (USD 2.1bn)

PAT (MSI Shares) JPY 26.9bn (USD 0.2bn)
(as of end of 2022)

MSIG is the no. 1 general insurer in GWP and profit in ASEAN.



*Incl. partnership with Asia Insurance (Cambodia) and National Insurance Company of Brunei

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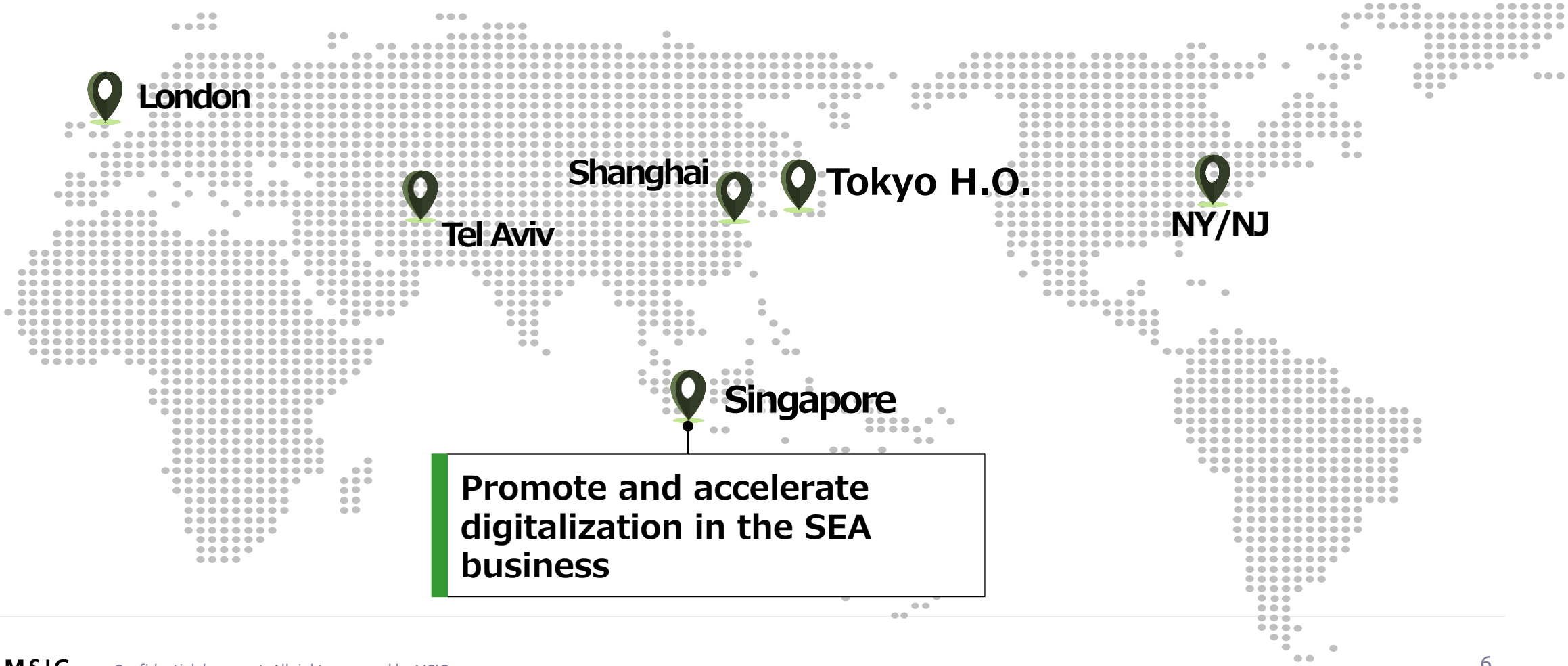
Our Innovation Teams: Global Digital Hub (GDH) Network

Since 2019, MSI has established six Global Digital Hubs across the globe to acquire new technologies and business models, assist our global business. **GDH is positioned as a "Center of Excellence" to promote transformation globally.**



Promote and accelerate digitalization in the SEA business

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Our Vision & Aspiration

Vision & Approach

Vision

- Make MSIG a **"Unique and Cutting-Edge Company"** in Asia

What is the Unique and Cutting-Edge Company?

- Ensure customer focus and stick to customer value
- Be beyond competitors in all areas of business such as channels and UW
- Be a fully data-driven company to transform business
- Transform operations to be fully automated

Approach to be a Unique and Cutting-Edge Company

- **Define a target state** to be a unique and cutting-edge company and learn cutting-edge technologies to keep it updated.
- Share showcases of the target state to BUs
- Build and repeat quick wins and ultimately achieve the target state.

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Summary of Target State to be a "Unique and Cutting-Edge Company"

- Easy and convenient purchase via online*
- Partnerships with digital players

- Fully automated operations

- Advanced UW by AI/ML model

- Fully automated operations

Channel & Sales → **Underwriting** → **Policy servicing** → **Claim servicing**

Product development

Loss Prevention

Customer Relationship Management (CRM)

Data utilization

- Simple products to distribute digitally*

- Standard data model and platform

- Customer 360 view under a single customer key

- Advanced loss-prevention services by data

*: For retail and SME business

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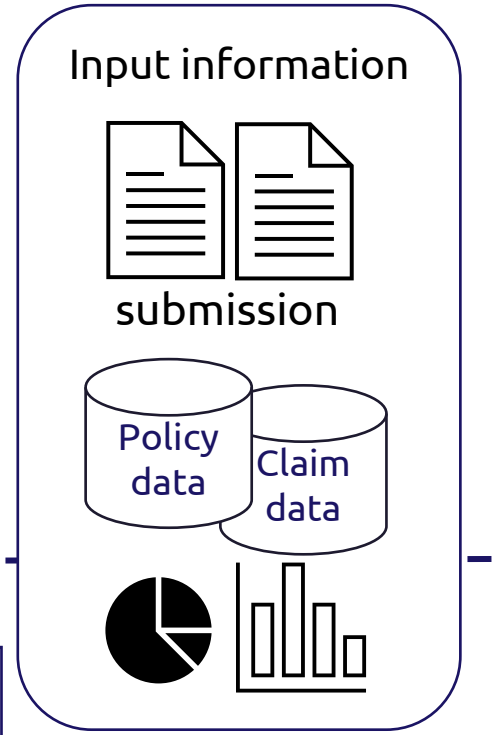
Showcases in Risk Assessment

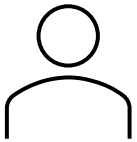
Underwriting Data Strategy

Most of input information is unstructured

AS IS



Relies on UW's knowledge & experiences

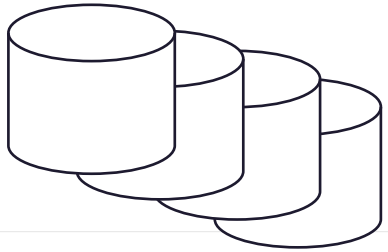


Heavily relies on UW's personal performance

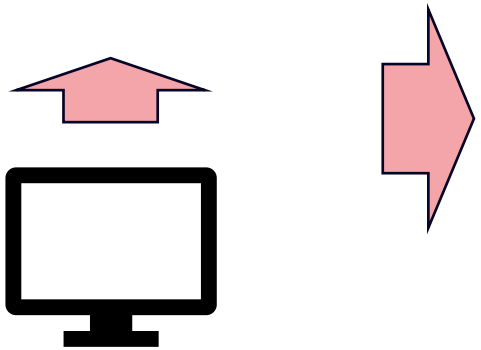
UW decision

- ✓ **Digitize information**
- ✓ **Leverage publicly available data**

TO BE



AI/ML model to provide risk assessment insights to UWs



- Help UWs by providing insights,
- improve efficiency to collect and organize information,
- Mimic high-performance UW's decision

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Risk Predictive Tool for UW in EU

External Data

Ship Data
Casualty Data
Defects Data
Detention Data
Class History Data
Movements Data etc.

Internal Data

US Pro Flag Y8
PSC Class
Trade Areas Y8
Class MSAM Data
PSC Def etc.

Risk Assessment Report for Vessels

RAP* ***
IMO: 82 ***
4294GT

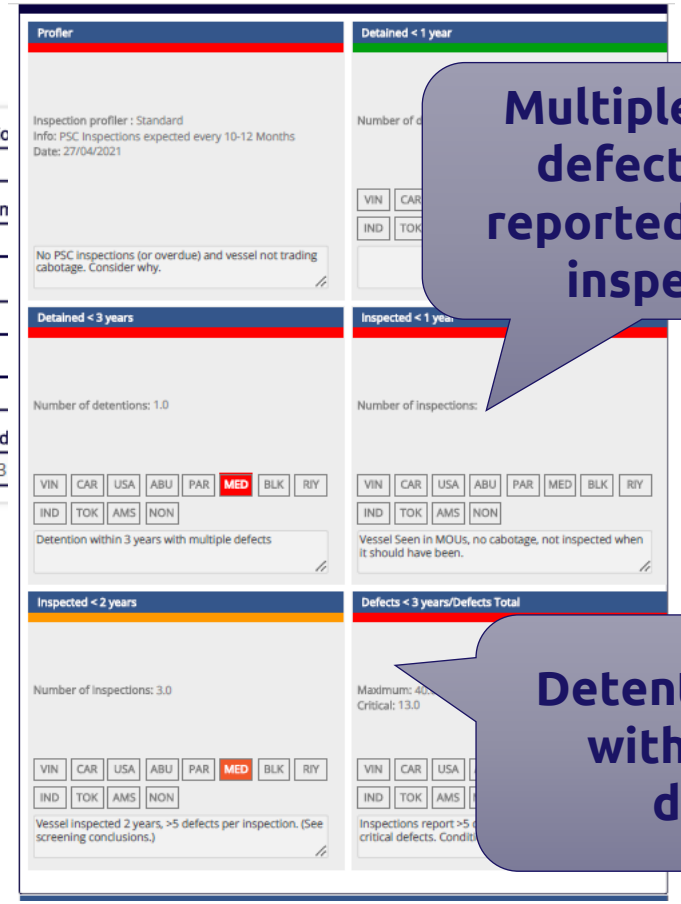
Assured Name
Assured Co
Date Acquired
dd/mm/yyyy
Insured Lin
MSAM Policy Reference
Flag
Comoros
Delivery
01/12/1984
Age
38.0
Screen Start
16/08/2022
Screen End
16/08/2023

- ☐ Conversion
- ☐ Layup
- ☐ INL
- ☐ Worldwide tr.
- ☐ Cabotage

Sanctions Screening

OFAC No | OFAC NON SDN No
EU No | UN No

This data is updated monthly, current status available via the Sanction Screening function of this tool.



Multiple critical defects were reported through inspection

Detention history with multiple defects

A risk predictive tool by internal and external vessels' data provides insights for underwriting decisions

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Comoros-flagged Raptor cargo ship sinks off Greek island of Lesbos, leaving 13 missing - ABC News

Showcases in Risk Reduction

Vision – Being a risk solution platformer

Change our position from “claim payer” to “customer’s partner” in managing their risks including accident prevention and post-accident recovery.

Provide **“values before and after Insurance Coverage”**

Before accidents | After accidents

Prevention	Insurance Coverage	Recovery
Prevent losses/damages	Compensation for economic losses	Minimize losses/damages

Risk Solutions

Examples

- **Fleet management & safe drive program by telematics**
- **Drone Survey and AI damage detection**
- **Cyber security solution bundled with cyber insurance**

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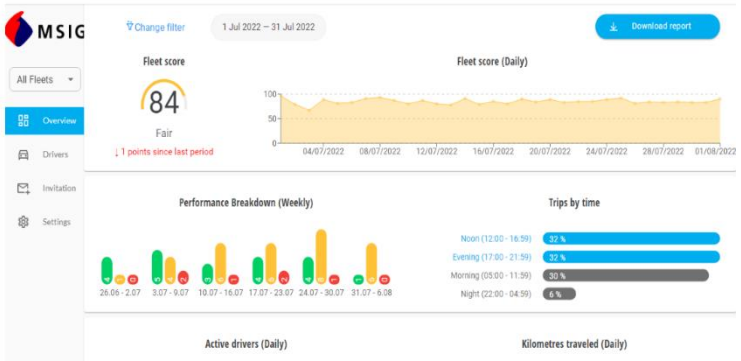
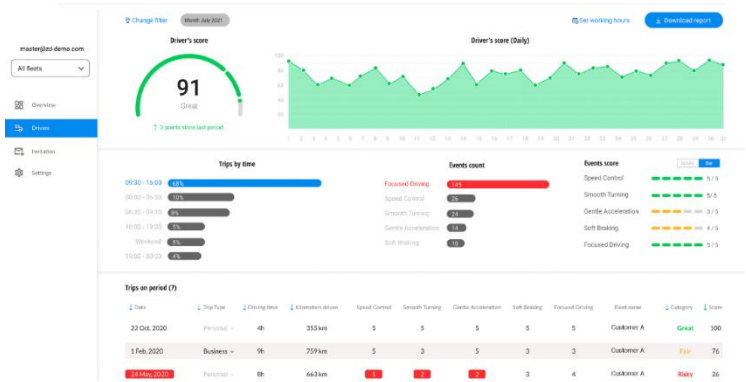
Fleet Guard leveraged by telematics in Thailand

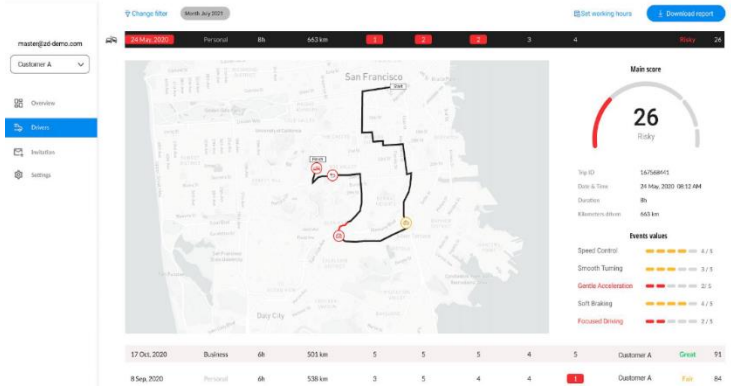
Fleet Guard, Fleet management & safe drive program by telematics, has been launched for educating drivers safer driving.



Dashboard for company safety driving scoring



Dashboard for driver's safety driving score



Fleet management: route and analysis

It is also effective for acquiring new businesses attracted by this service to prospects.

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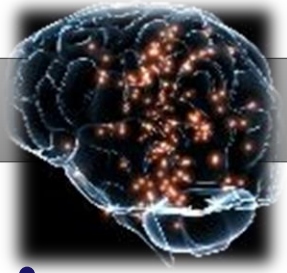
Drone Survey and AI Damage Detection in Indonesia

Photos taken by a drone and AI judgement makes the factory site surveys much efficient and less risky.



1. Drone to take photos of **<u>roof-top or solar panel</u>** during a site survey in addition to a general survey

2. **<u>Analyse the photo data from drone, identify the damage</u>** and summarize the suggestions

3. A survey report including analysis from drone photos is delivered

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Detected damages by AI

Original photos

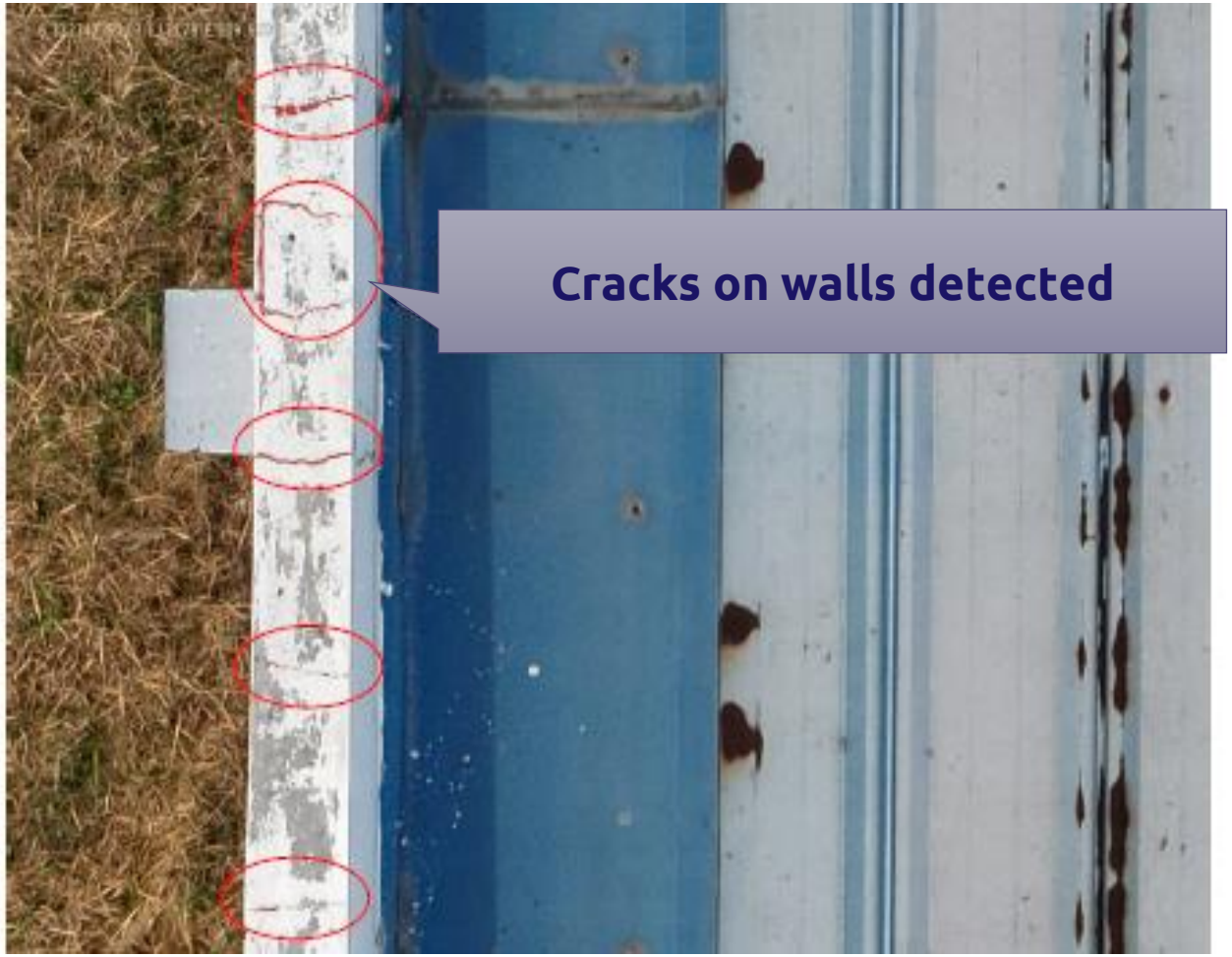
錆画像1

錆画像2

Rust detected by AI

錆画像1

錆画像2



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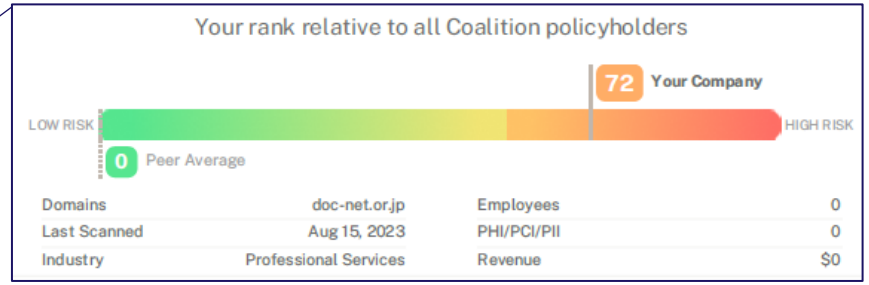
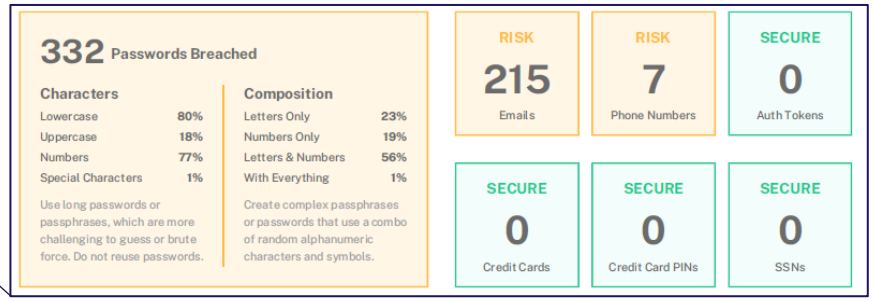
Cyber Risk Finder in Japan

"The Cyber Risk Finder" provides cyber risk assessment and regular updates to protect SME customers from cyber incidents. The service is recommended with cyber insurance.



Vulnerability Scores compared to industry norm

Security findings are reported based on criticality. You can see what critical issues to work on quickly.



Data Breaches shows # of information such as passwords breached in public

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Potential Regulation Challenges

Potential Regulation Challenges

- ✓ Different regulation in countries makes difficult to standardize practices

  It makes difficult to enjoy economy of scale. The scale of insurance business in a single country is sometimes difficult to meet ROI.

- ✓ Restriction on the use of cloud computing and cross-border transfer of data makes difficult to speedy and cost-effective delivery, as well as to standardize multi-national operations. (e.g. using AWS from Indonesia where no data center)

- ✓ Foundation of publicly available data (i.e. data about commercial buildings) may significantly enhance risk assessment practice.

- ✓ Sharing claims associated data in the industry may generate opportunities to enhance prudent underwriting decisions. (e.g. Verisk in the U.S.)

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Thank you!