



Digital Log-books for Lifts and Escalators

*Presented by: Kaiser CHEUNG
Electrical and Mechanical Services Department
The Government of the HKSAR*

機電工程署
EMSD



Log-books Around the World

Aviation Pilot Log-book



Marine Ship's Log-book



Scuba Diving Divers Log-book



Dive # _____ Date _____
Location _____

Depth _____
Avg _____
Max _____

☐ Fresh ☐ Shore ☐ Deep ☐ Night
☐ Soft ☐ Boat ☐ Night

Activities ☐ Reef ☐ UW Photo
Recreation ☐ Cave ☐ UW Navig
Wreck ☐ Search & Recover

Temperature _____
Air _____
Surface _____
Bottom _____

Visibility _____

Air
Start _____ psi
End _____ psi
Air _____
Nitrox _____ %

Weight
Start _____ lbs
End _____ lbs

Exposure Protection
☐ Full _____ mm
☐ Short _____ mm
☐ Boots _____ mm
☐ Hood _____ mm
☐ Gloves _____ mm

Equipment
☐ Camera
☐ Computer
☐ Flashlight

Bottom Time
To Date _____
This Dive _____
Cumulative _____

☐ Instructor ☐ Divermaster ☐ Buddy
Certification # _____

Log-books in Hong Kong

Requirements under the Lifts and Escalators Ordinance



- Basic particulars
- Technical information



- Maintenance and examination records
- Fault and breakdown records
- Incidents
- Passenger trapping cases



- Maintenance plan

01. KEEP

Owners of
Lifts or Escalators



02. INSPECT

Registered Contractors
Registered Engineers
Registered Workers

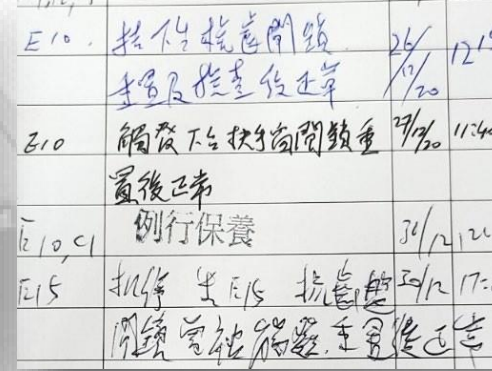
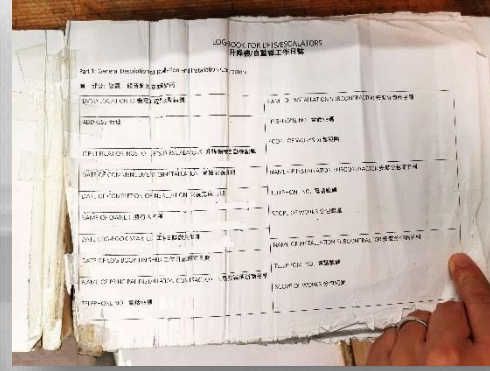
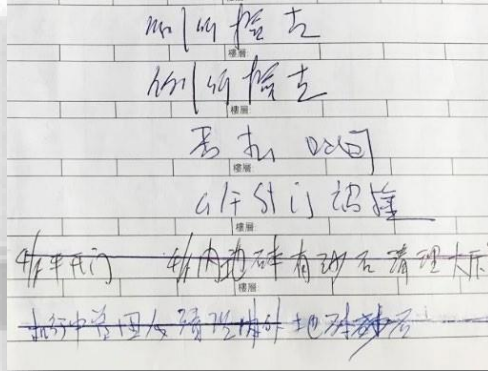


03. INSPECT

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Limitations of Paper-bound Log-books



01



Accuracy

Missing
information,
amendments
or deletions

02



Availability

Lost or
damage
d

03



Legibility

Poor
handwriting
s

04



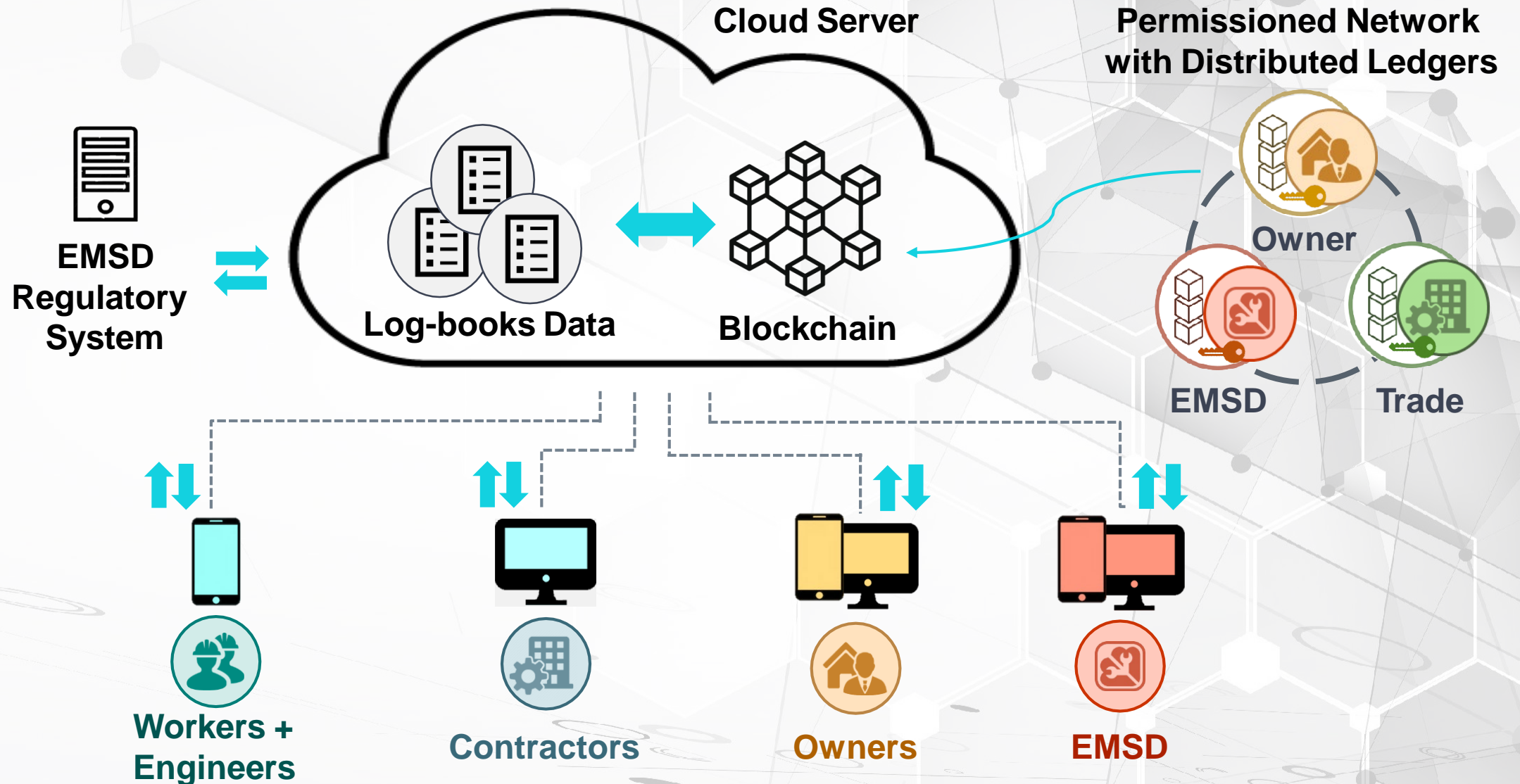
Accessibility

Scattered
over Job
Sites

Our Approach to Digitization

All parties work together
to uplift lift and escalator safety and
management

System Architecture of Digital Log-books



User Interface (UI) Design

Digital Log-books on devices



DESKTOP VERSION

For property management companies, registered contractors and EMSD

TABLET VERSION

For users that require handy access to the web portal or dashboard

PHONE VERSION

Mainly for workers, engineers, frontlines staff of all kinds of users

Benefits to Practitioners (Workers and Engineers)



Convenient & User Friendly App

Just a few clicks
to complete
a precise report

**Higher
Efficiency**



Systematic & Analyzable Records

Preview records
anytime, anywhere
Nurture good practice

**Works Quality
Booster**

Transparency & Traceability

Impersonation in
filling in log-book
and false input will
disappear

**Better
Compliance**



Pioneer & Role Model in E&M Industry

Pioneer
in E&M Industry

**Improve Trade Image,
Attract New Blood**



Full Management Solution to Contractors

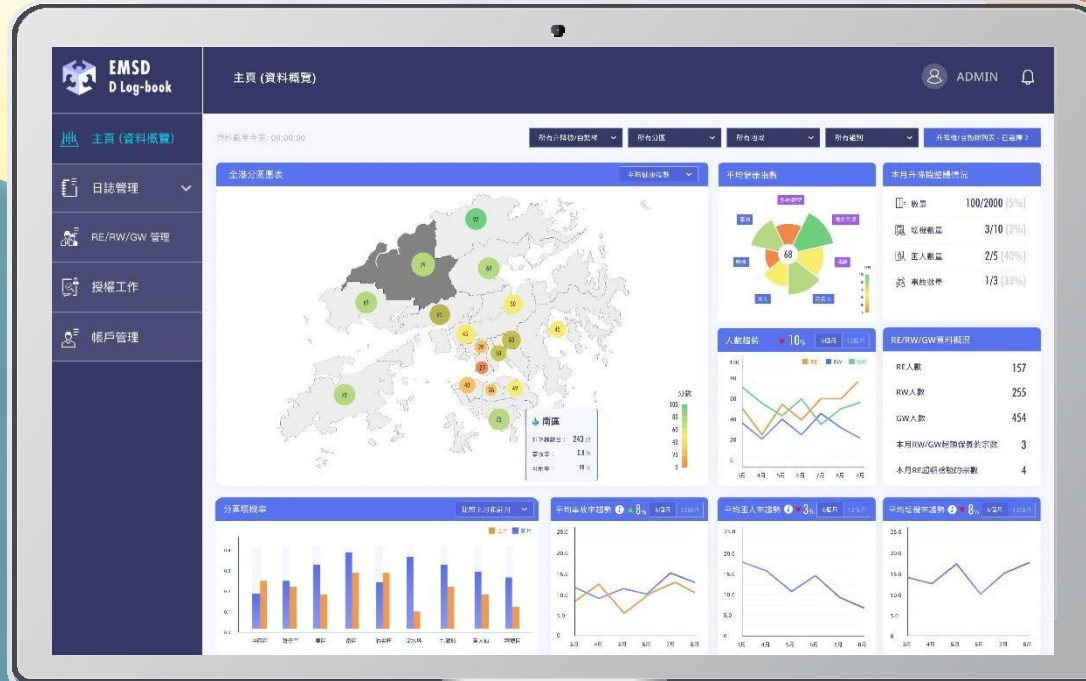
Fulfillment of
legal
requirements

*Contractors rely on practitioners
to fill in the log-book.*



Real
time job
monitoring

- *Job distribution*
- *Maintenance time*



Dashboard to
meet operational
needs

Resource
s
planning

Pre-
tender
assessment

Powerful Tools for Owners

To facilitate owners to monitor their lifts and escalators

Use and Understand the Data

- Smart reports
- Powerful search functions

Facility Management

- Service availability
- Breakdown rate
- Incident rate
- Passenger trapping rate
- Health Index



Smart Notifications

- Overdue reminders
- Safety messages

Contractor Management

- Recovery time
- Rescue time...

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A better way to regulate (facilitator and promotor)



Efficient Monitoring

Improve efficiency of inspection



Data Analytics

Identify lifts and escalators with higher risk for inspection



Rule Abiding

Blockchain helps improve compliance & promote rule-abiding culture



Smart Notifications

To minimise the chance of contravention



New Communication and Publicity Channel

Paperless publicity



Promote Shared Responsibility Culture

Increase awareness & active monitoring of lift and escalator safety

Latest Update

- ⌘ As at June 2023, 15 200+ lifts/escalators have their log-books digitized
- ⌘ Digital Log-books target participation rate is to exceed **50% (or 40 000) of lifts/escalators** at end 2023
- ⌘ RCs are encouraged to promote the Digital Log-books to RPs to boost the adoption rate
- ⌘ EMSD would work with RC's coordinators closely for smooth migration to Digital Log-books



EFFICIENCY



MOTIVATION



TRUST



POWERFUL

WE BUILD Smart Platform TO UPLIFT Safety Level

The Digital Log-books project is a novel approach in bringing all stakeholders to work in conjunction for management and upkeep of lifts/escalators. The Digital Log-books could also help monitor for compliance with statutory requirements. The Digital Log-books can be taken as the ultimate safeguard (or safety net) for the less fortunate RPs (e.g. 3-nil buildings) to perform the necessary management

to avoid contravening statutory requirements (routine maintenance within a month, examination within a year, etc.). The Digital Log-books will be a game-changer for fostering a compliance culture and maintenance of high lift/escalator safety standard, alleviating the burden on physical inspection with the increase in lifts/escalators.

Thank
You

