Federation of Livestock Farmers' Associations of Malaysia

清 美 有 限 公 司
CHOP CHEONG BEE SDN BHD
142808-K
清 美 农 场
CHEONG BEE POULTRY FARM

JOURNEY OF DIGITAL AGRICULTURE IN LIVESTOCK FARMING

by
Datuk Jeffrey Ng Choon Ngee
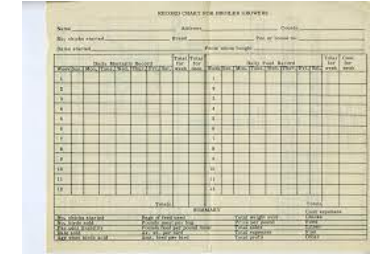**WPSA (Malaysia Branch)**
Scientific conference-2023

6 September 2023 | Wednesday

COMPANY EXPERIENCE ON DIGITIZATION THE IT'S BROILER FARMING OPERATION

Manual recording on paper with WhatsApp reporting

Server system in the farm and linked with internet reporting (e-system)

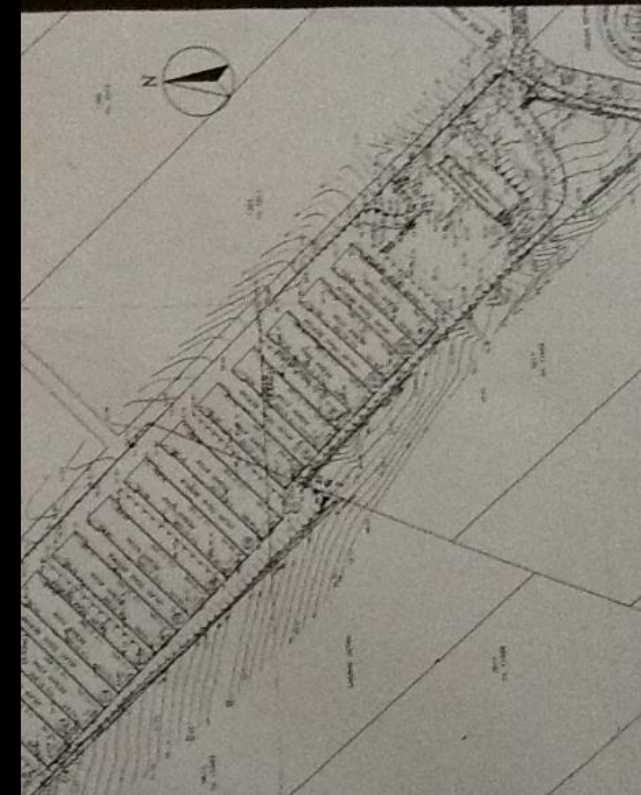**IOT system (Cloud system)**

Cloub and AI
Landang Pintar

When We Started – Open House System

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Building Steel Structure Closed House
- **Start Built in 2009**
- **12 chicken houses**
- **300,000 Chicken per Batch**

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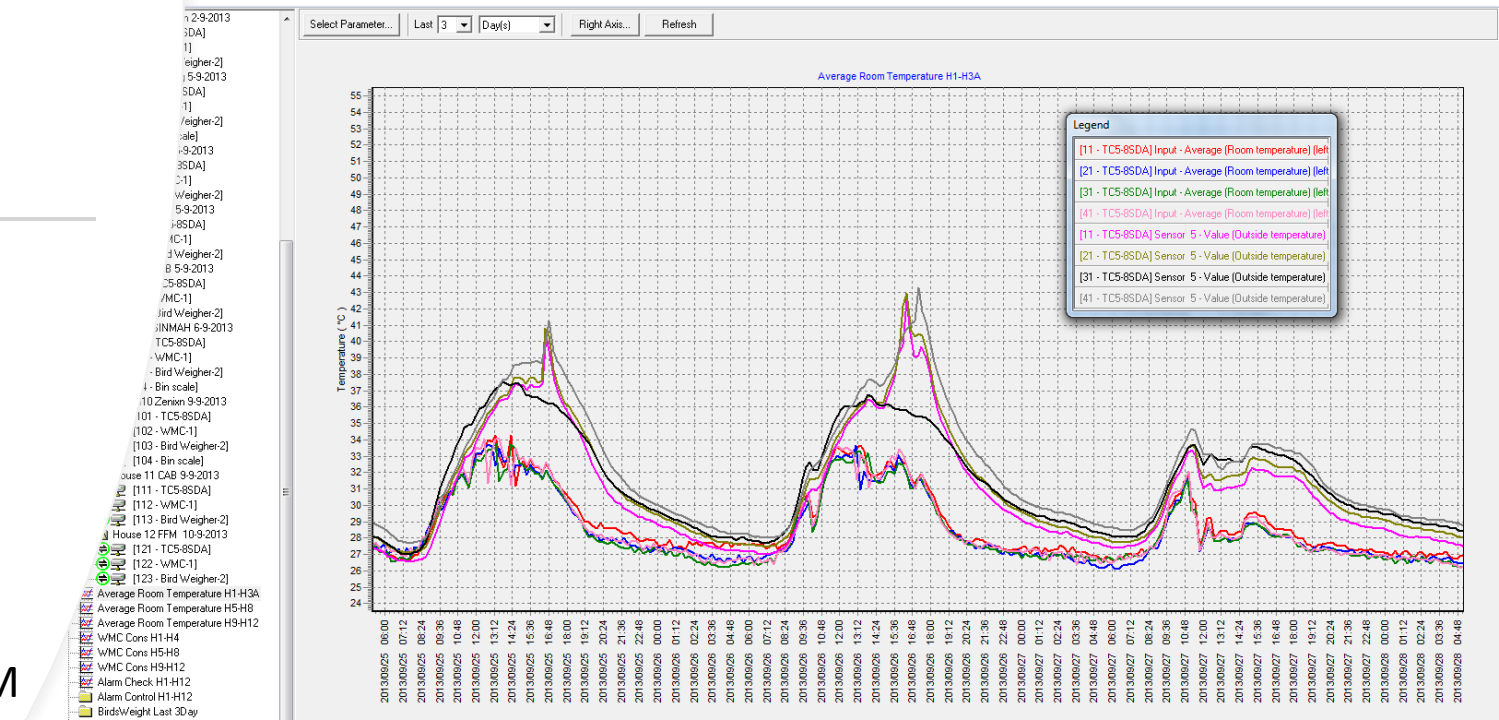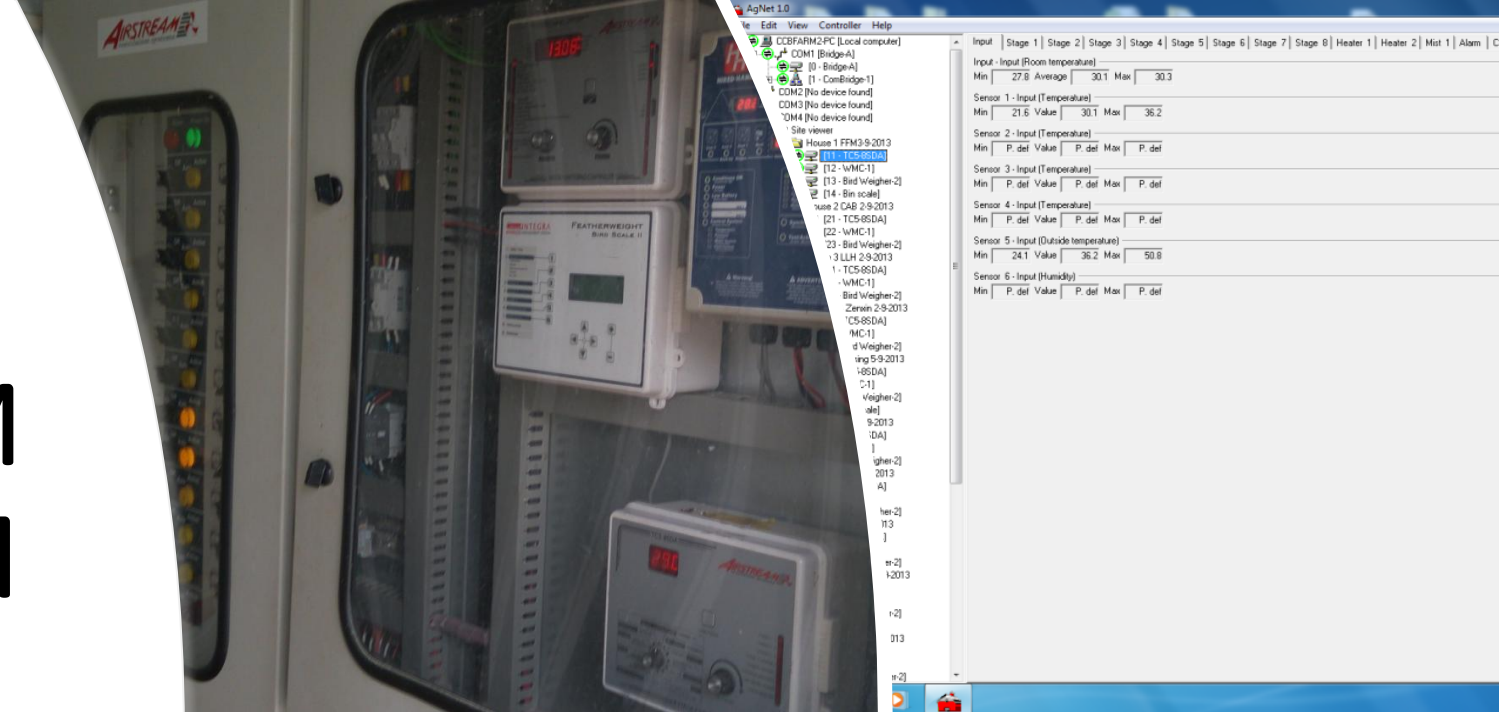# E-FARMING SYSTEM - SERVER

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E-FARMING SYSTEM - Monitor

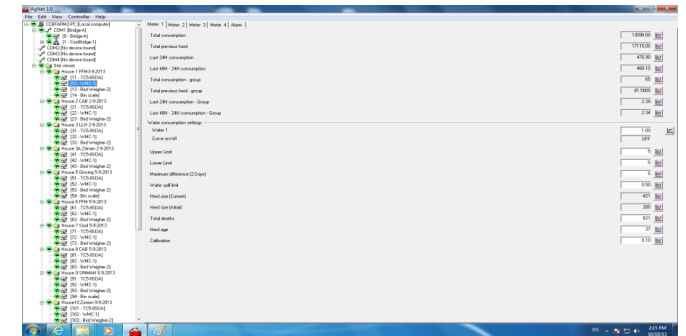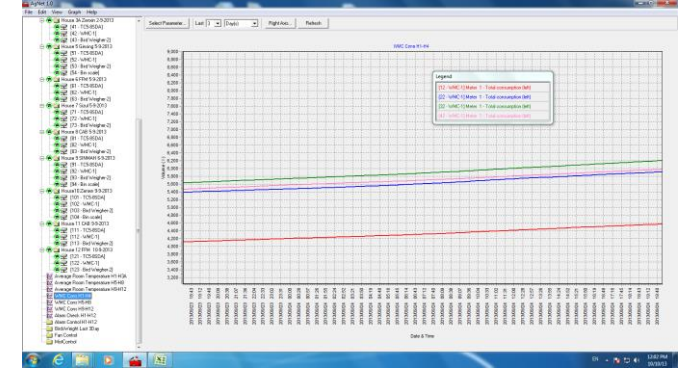# E-FARMING SYSTEM – CONTROL SYSTEM FOR TEMPERATURE RECORDING
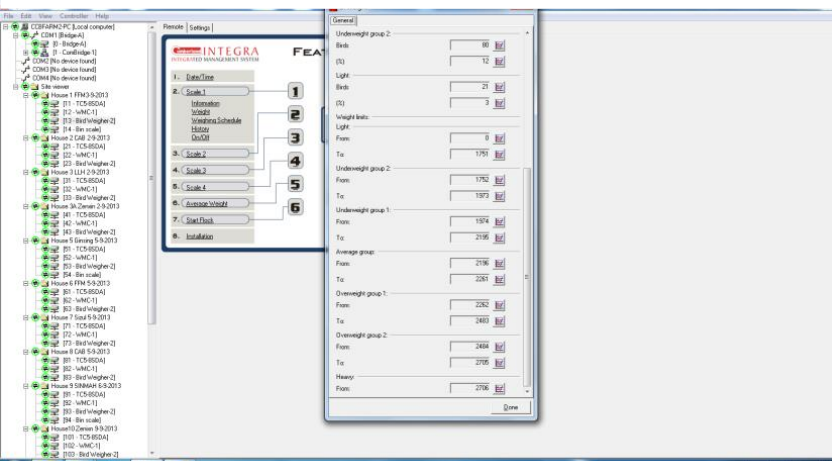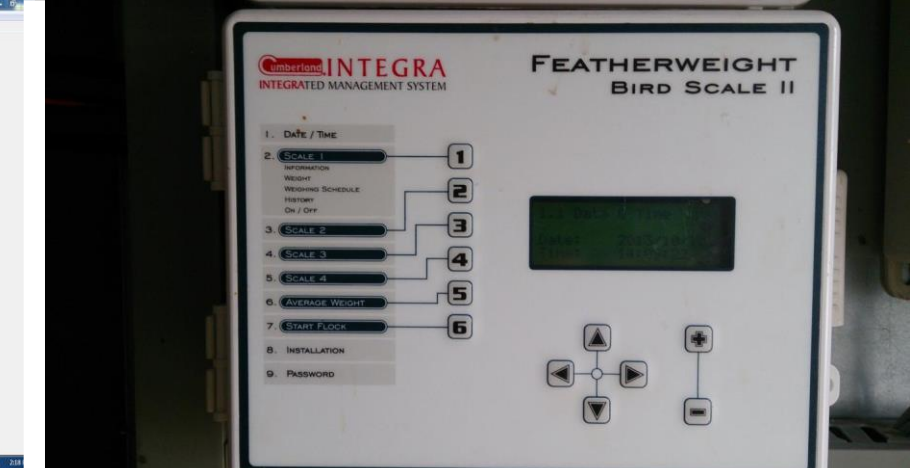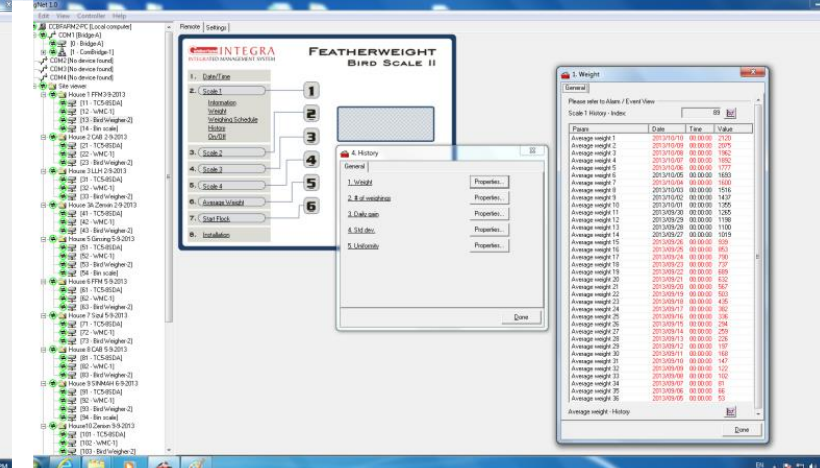
E-FARMING SYSTEM – WATERING SYSTEM
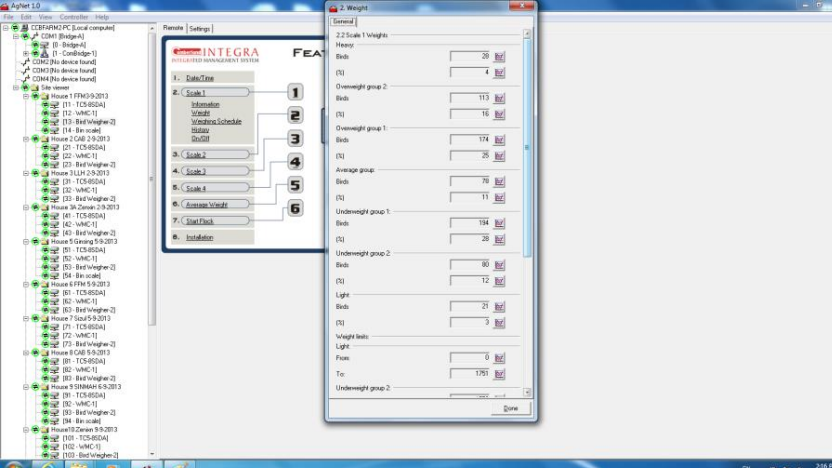
E-FARMING SYSTEM – BIRD WEIGHT

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E-FARMING SYSTEM – FEEDING SYSTEM
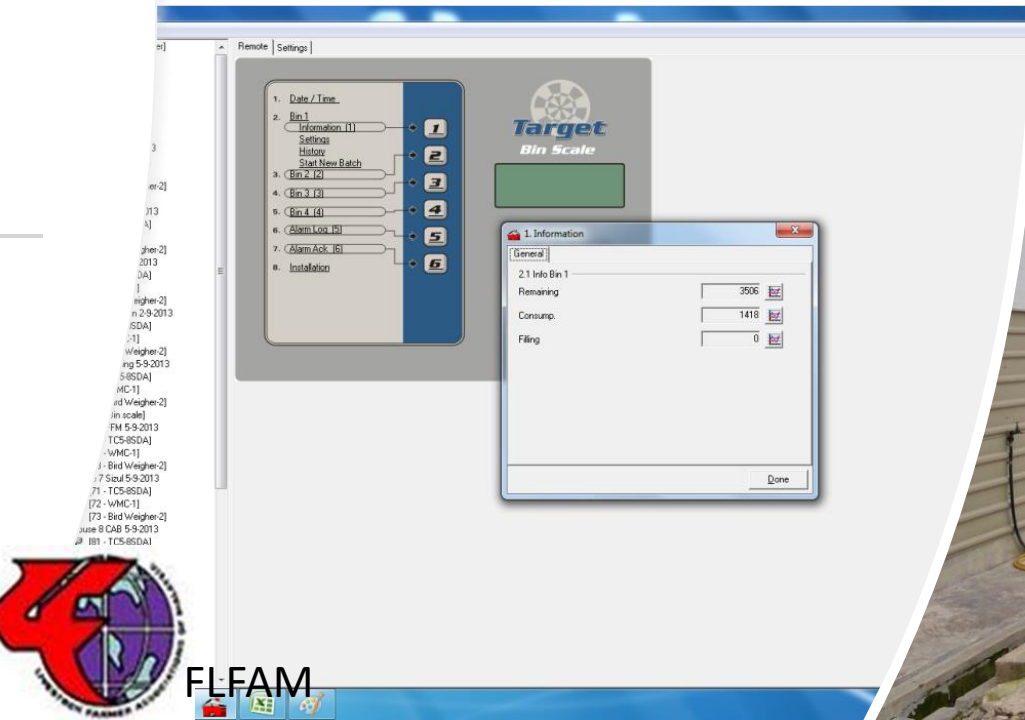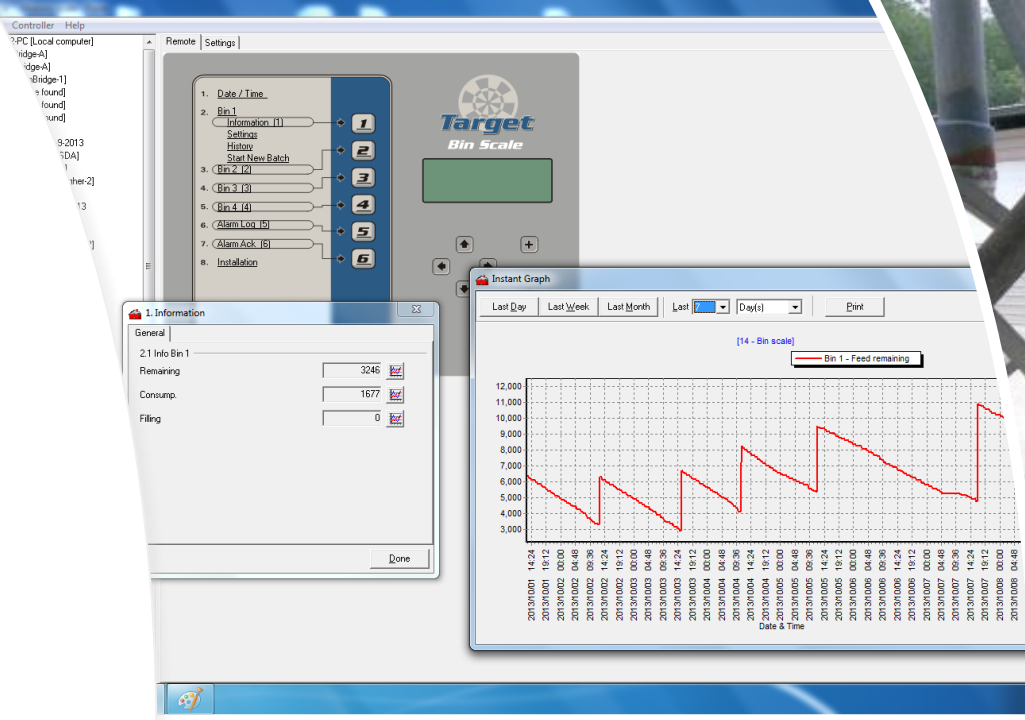
E-FARMING SYSTEM

A system that will record, control, share and guild all operator in any location and anytime
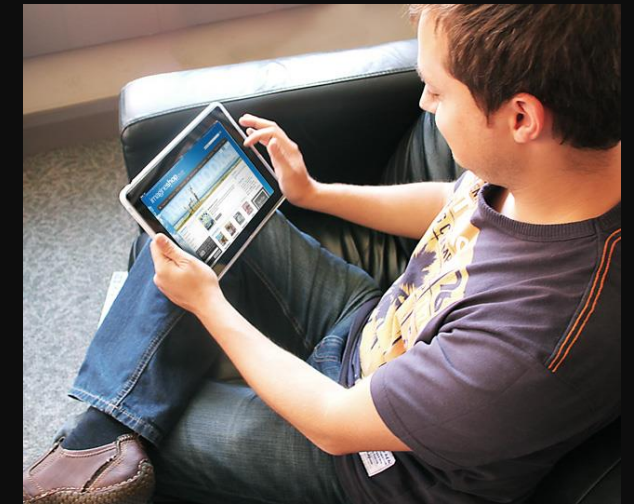
BENEFITS OF THIS E-FARMING SYSTEM

- Allows us to setup a better SOP for operation and monitoring

- Allows to recall data for problems solving

- Better monitoring of the chicken health and growth

- Utilizing technology to reduce human errors in farming

- Able to operate from long distance

UPGRADE THE SYSTEM TO CLOUD SYSTEM (IOT)

- **Started in 2016**

- **Better Data managements and storage**

- **Allow many users to monitor**

- **Do not need to maintained Farm Servers**

- **Remove operation**

- **To prepare for future AI control**

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- **Steel Structure Closed House System**
- **10 chicken houses**
- **200,000 Chicken per Batch**

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IOT-farming system

- **Using tablet or handphone to operate – thus able to monitor the whole farm at any location**

- **The controller is able to take over others if others break down**

- **All data keep in the farm and cloud**

- **More control options**

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IOT-farming system

EXPANSION BOX

17cm REMOTE DISPLAY

CONTROLLER

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IOT-FARMING SYSTEM

Short Coming!!!

- **Need to many wiring to connect to multiple devices.**

- **Lack of data processing and data analysis.**

- **Lack of artificial intelligent and machine learning for future planning.**
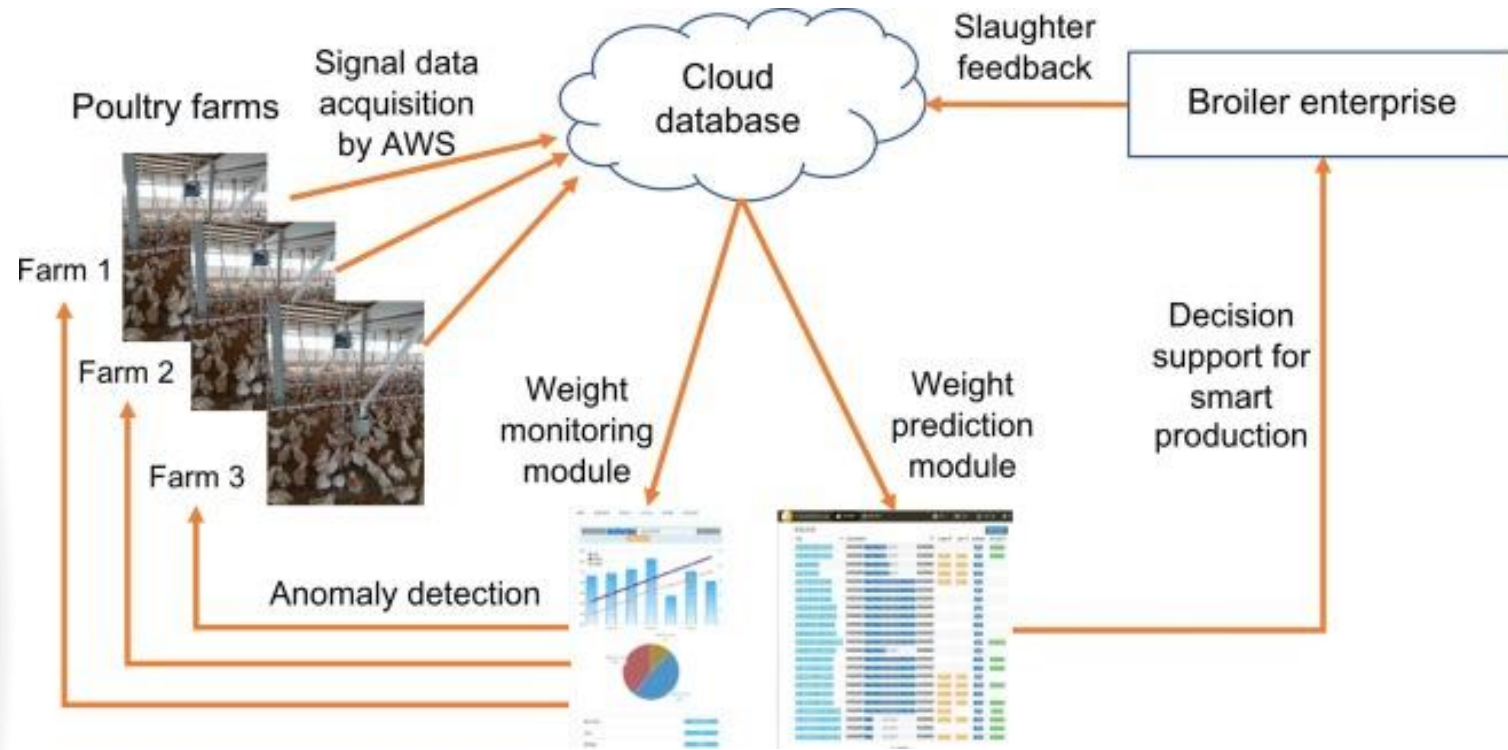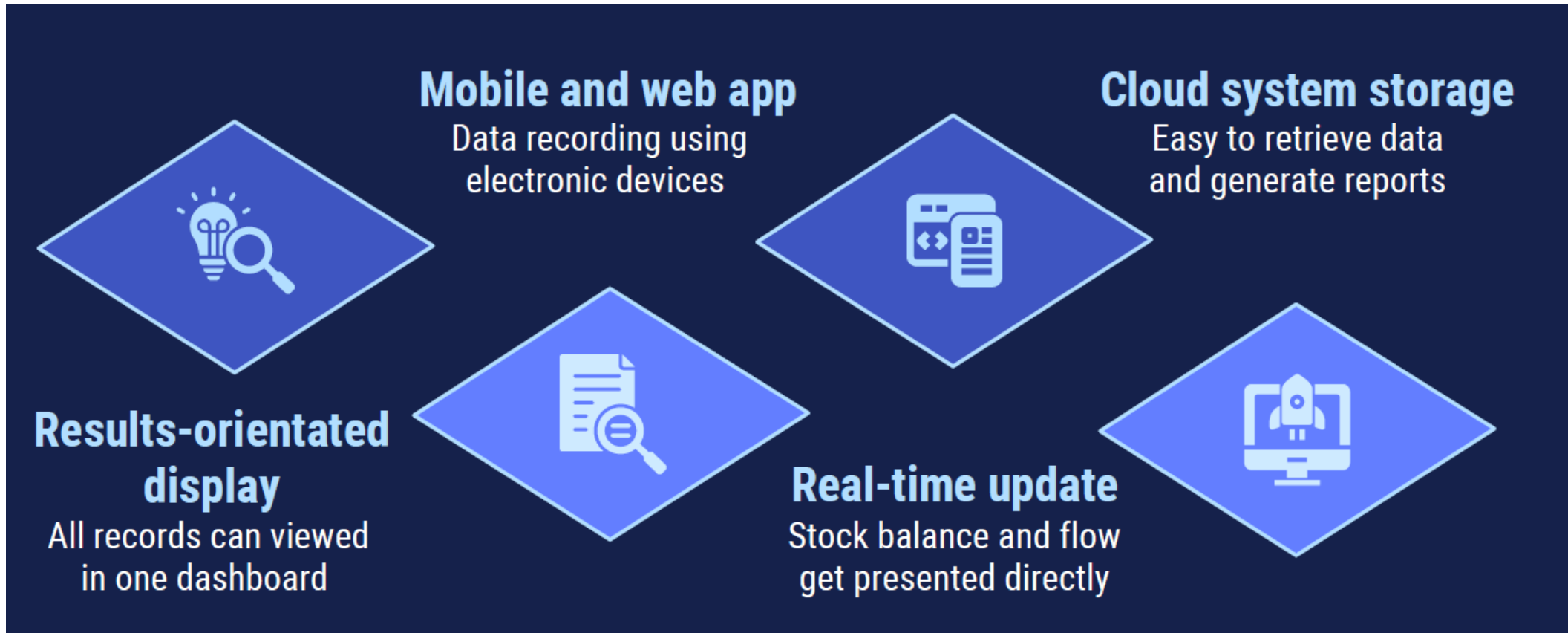
- **Heavy investment.**

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INTERNET OF THINGS

We Invest into Smart Farming in 2021 with Mobile and Web app

Mobile and web app
Data recording using electronic devices

Cloud system storage
Easy to retrieve data and generate reports

Results-orientated display
All records can viewed in one dashboard

Real-time update
Stock balance and flow get presented directly

Focus of Digital Solution

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Your smart poultry assistant

✉ Username / Nama Pengguna

🔒 Password / Kata Laluan

LOG IN

...ome to Smart
...ultry System

...nter Your Username and
...ssword to Continue

...er Me

LOGIN

...r your password? **Reset Password**

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SMART POULTRY

Mobile and Web app

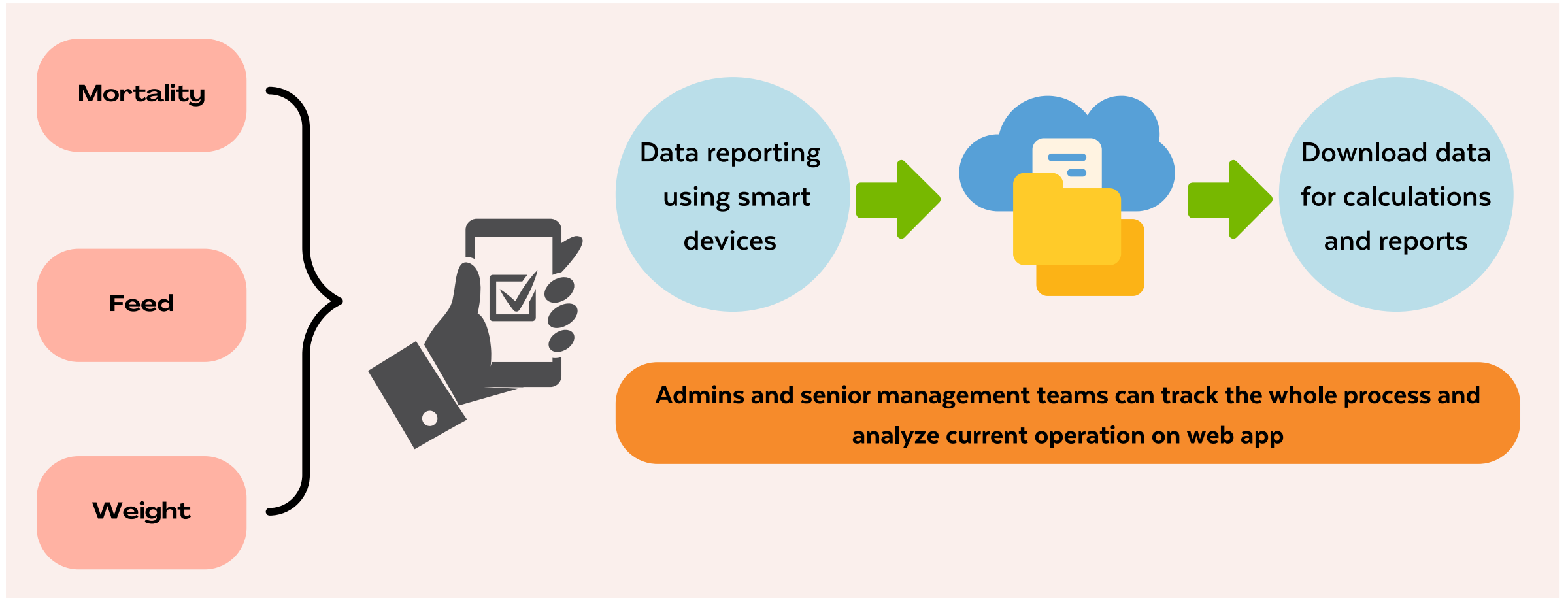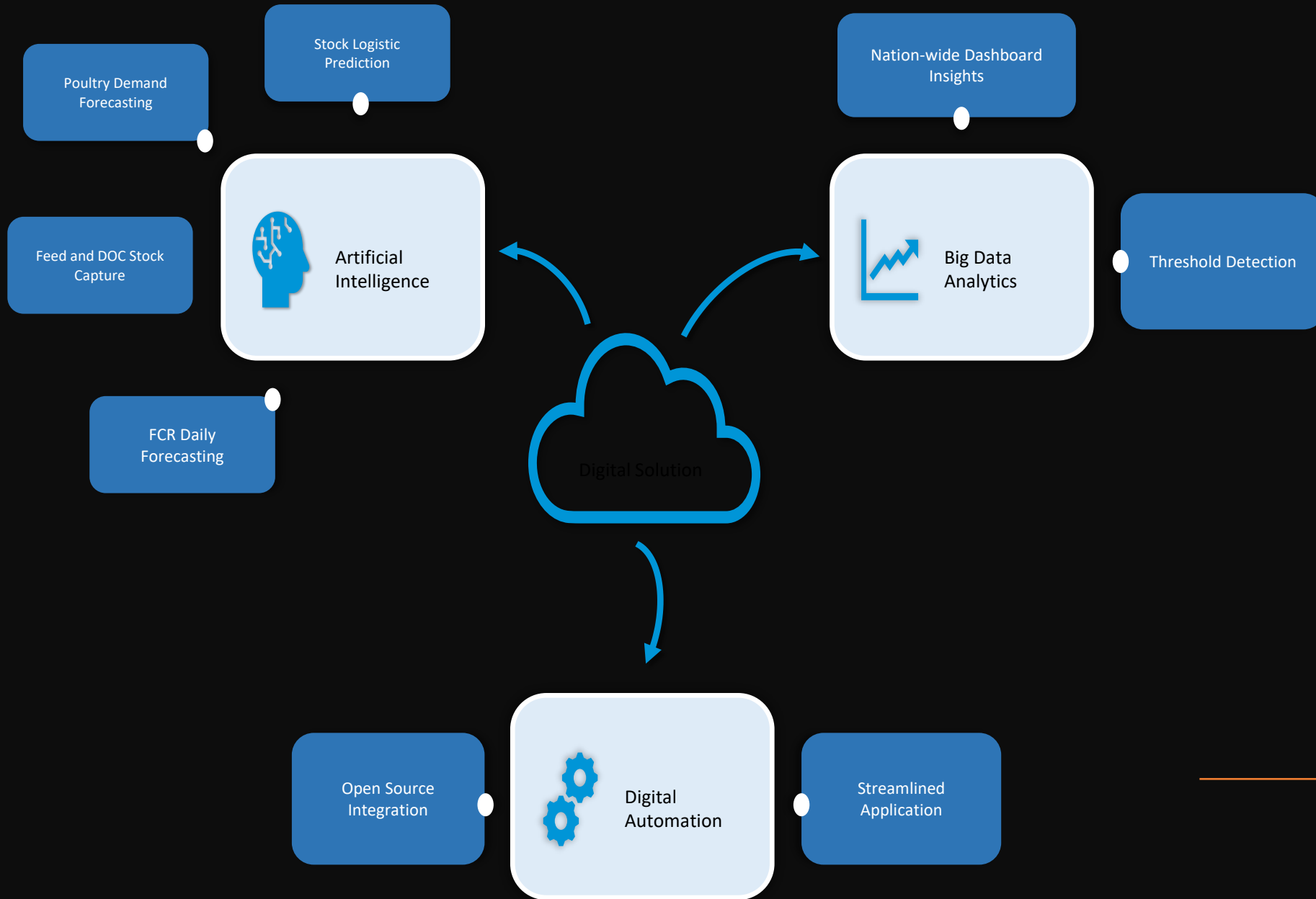清美有限公司
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Digital Solution Process

Mortality

Feed

Weight

Data reporting using smart devices

Download data for calculations and reports

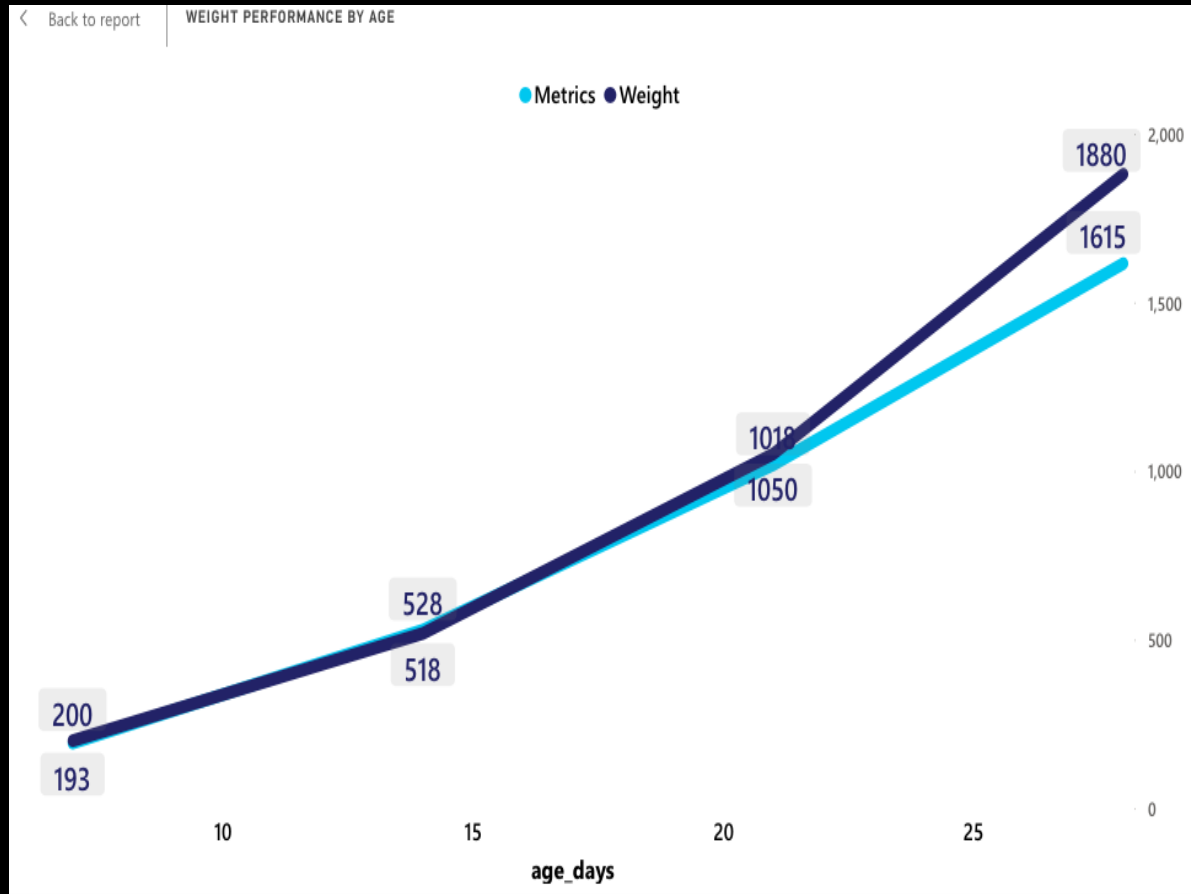Admins and senior management teams can track the whole process and analyze current operation on web app
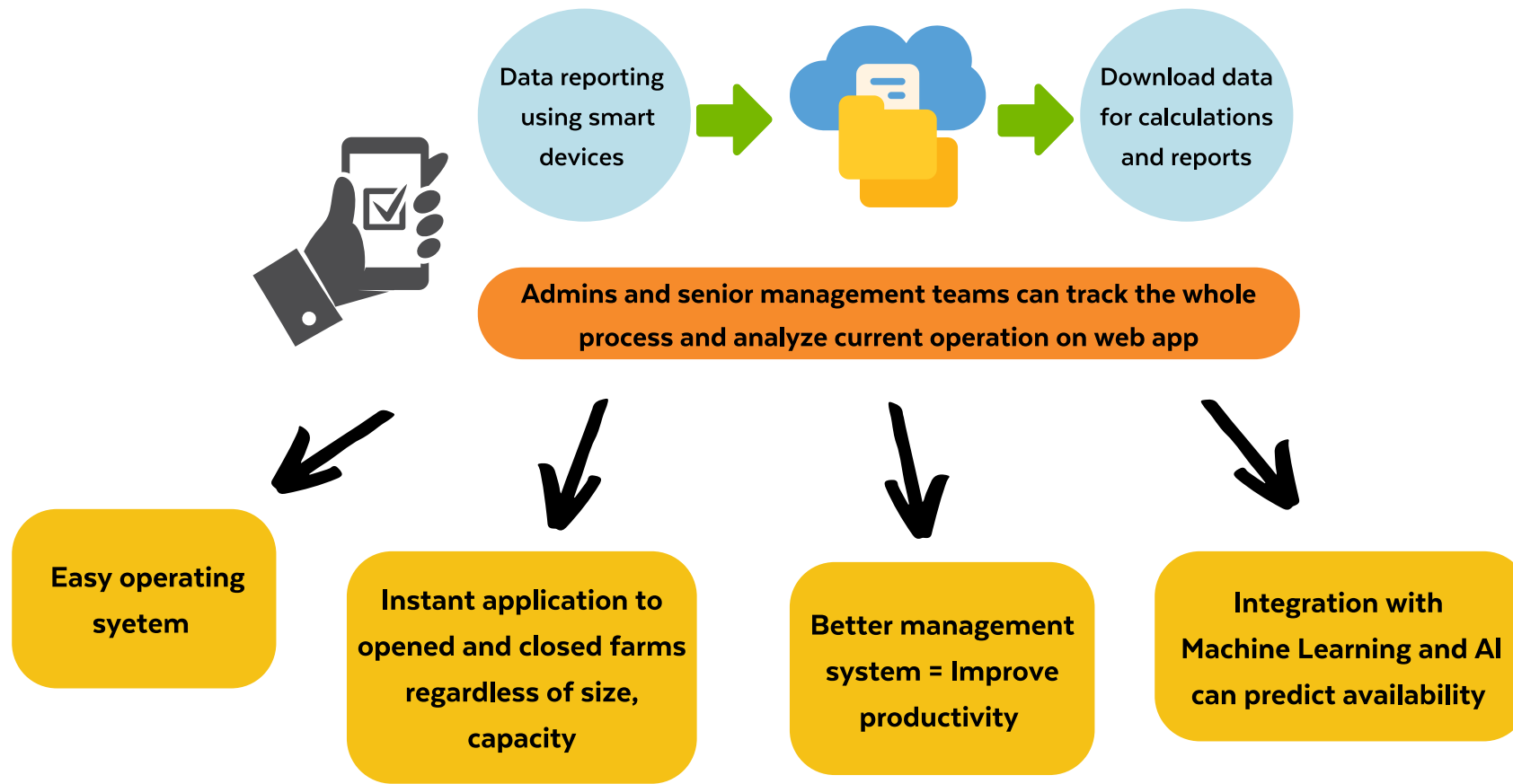
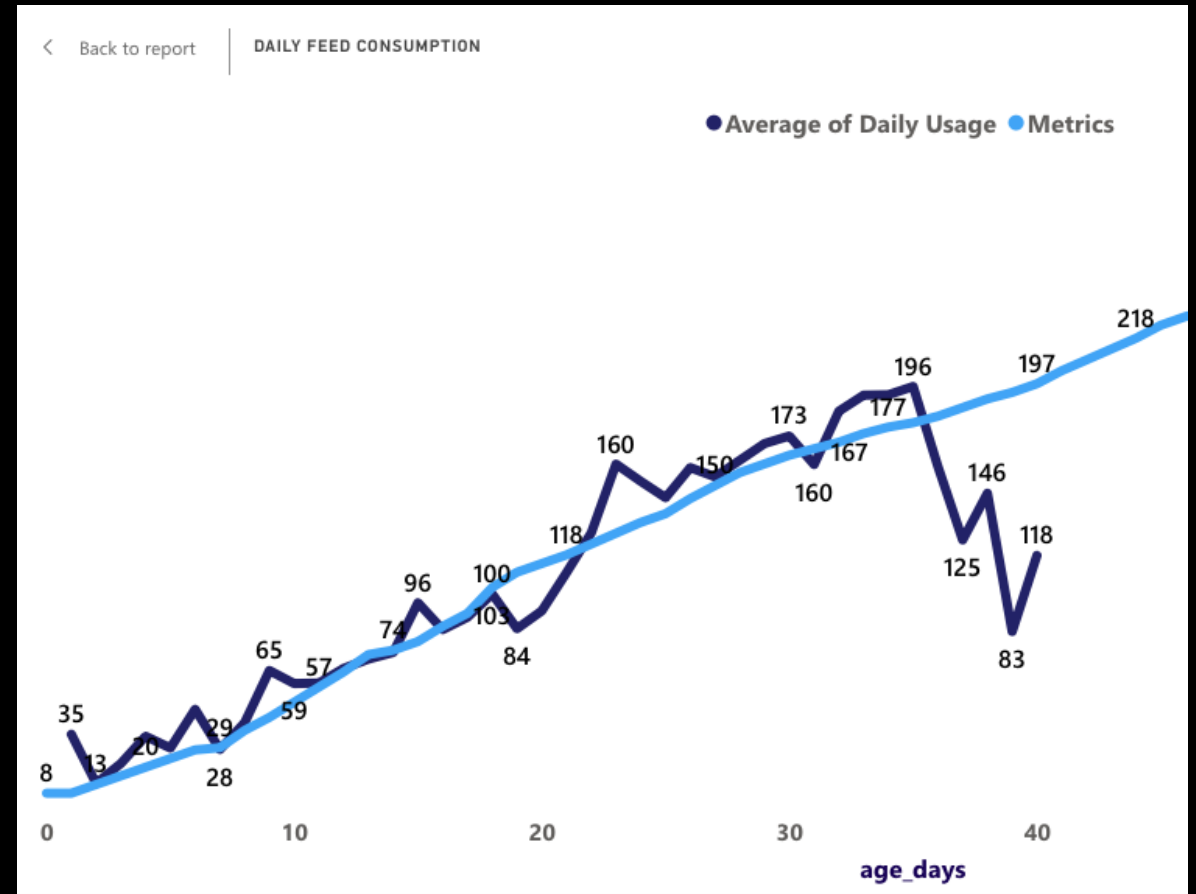Advantages of Digital Solution

Future Potential of Digital Solution

Weight Performance

Feed Consumption

Display Dashboard

SMART AND PRECISION FARMING (LADANG PINTAR)

Benefits:

❖ **Easy access via simple device with data connection.**

❖ **Data processing and data analysis for future planning.**

❖ **Mistakes can be identified immediately.**

❖ **Low cost.**

SUMMARY DISCUSSION

Transform the agriculture sector by introducing smart and precision farming

Establish Internet of Things (IoT) technology ecosystem and facilities in agriculture training premises and research station.

Collect, monitor, and store data for analysis purpose. Data is important to help and reduce farmers costs of operation.

Pilot smart and precision farming application and trying to allow more farmers to use.

Thank You