Electronic form system i-Reporter

TOMAS TECH CO., LTD.

Introducing i-Reporter

What is the i-Reporter ?

The familiar paper forms and EXCEL forms can be converted into electronic forms with the same laitt.
Forms entered in the field are **quickly digitized, eliminating the need for data entry after returning to the office**.
It can also reduce the management of forms, printing costs, and overtime.
Significantly improve work efficiency and speed by **completing reporting and recording work on site and reducing post-processing work**.
As soon as a form is uploaded from the site to the server, it is converted into data immediately, and the information is shared in real time between the site and the office. It is also possible to search and refer to past data.

By using i-Reporter,

- **It can streamline the time involved in creating forms**
- **Zero errors in form entry/transcription**
- **Costs related to paper, printing, and management can be reduced**
- **Because it can support multiple languages, reporting and consultation will be smooth.**
- **Customers can create reports using a no-code program.**

Benefits of i-Reporter

By using i-Reporter, it is possible to solve various problems and obtain results.
It plays a very important role in realizing digitization.

Poor operational efficiency

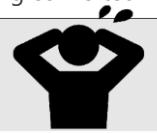
It takes time to "collect", "organize" and "analyze" information by managing it on paper.
- Printing paper data from data
- Entry into paper data
- Classification and sorting of recorded paper data
- Transfer the recorded data to Excel

Management cost

Cost" is born by managing with paper.
- Paper for printing data
- Printing machine, ink cost
- Storage area and equipment for managing paper

Business as a black box

By managing on paper, the business situation cannot be visualized.
- The method of filling out forms differs from person to person.
- The method depends on the worker, and it becomes dependent on the individual.
- Paper is stored without being converted into data.



Improve operational efficiency

Through digitization, management man-hours can be reduced and efficient "collection", "organization" and "analysis" can be achieved.
- Data can be entered, viewed, and corrected from devices (PCs, smartphones, tablets).
- It is possible to automatically classify by data.
- The input data is directly reflected in the database.
- As PDF data, it is possible to collaborate between departments and processes within the company.

Reduce administration costs

Digitization can reduce "costs" by reducing management man-hours.
- Printing man-hours can be reduced by not requiring printing.
- Paper cost, printing machine, ink cost, printing labor cost
- There is no need for a storage area or equipment for managing paper.

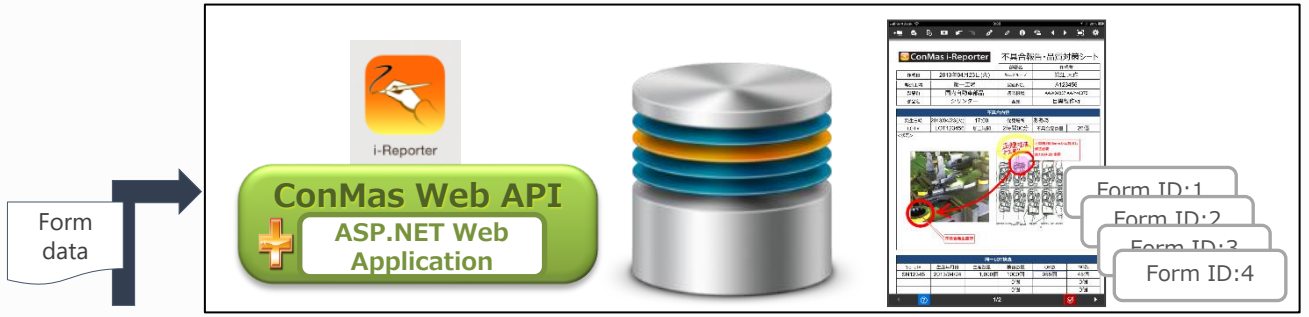
Visualization of the entire business

Digitization makes the business situation visible.
- The entry method can be unified on the tablet.
- Anyone can easily enter.
- All data can be viewed in real time.
- Users can create and modify reports themselves.

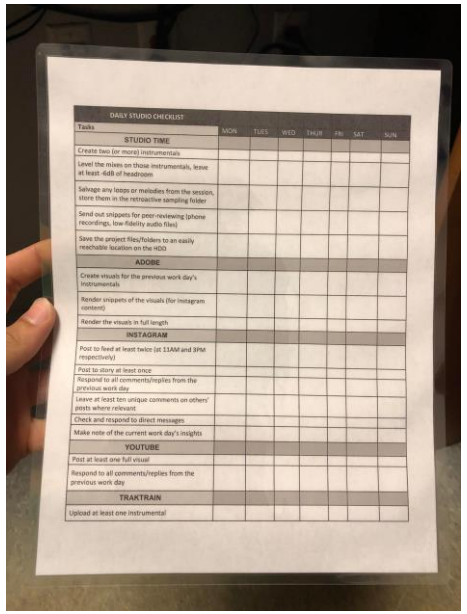
Function of i-Reporter

i-Reporter configuration diagram

i-Reporter supports both on-premise and cloud.
Data can be reflected on the server in real time by connecting to a factory network such as WIFI.
It can be used offline, so it can be used even in environments without WIFI.

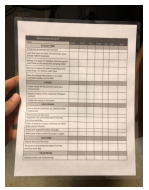


Inspection work



Tablet recording

Handwritten record



Excel creation

Data Analysis

Four features of i-Reporter

1 Very easy form creation

Feature 1

Creating electronic invoices is very easy.
It can import the Excel of familiar on-site forms.

2 Can be used even in an offline environment

Feature 2

Since i-Reporter is a native application,
It can be used even in an offline environment.

3 Centralized management of form data

Feature 3

in one database,
Form data can be centrally managed.

4 Linkage with external systems and measuring instruments is possible

Feature 3

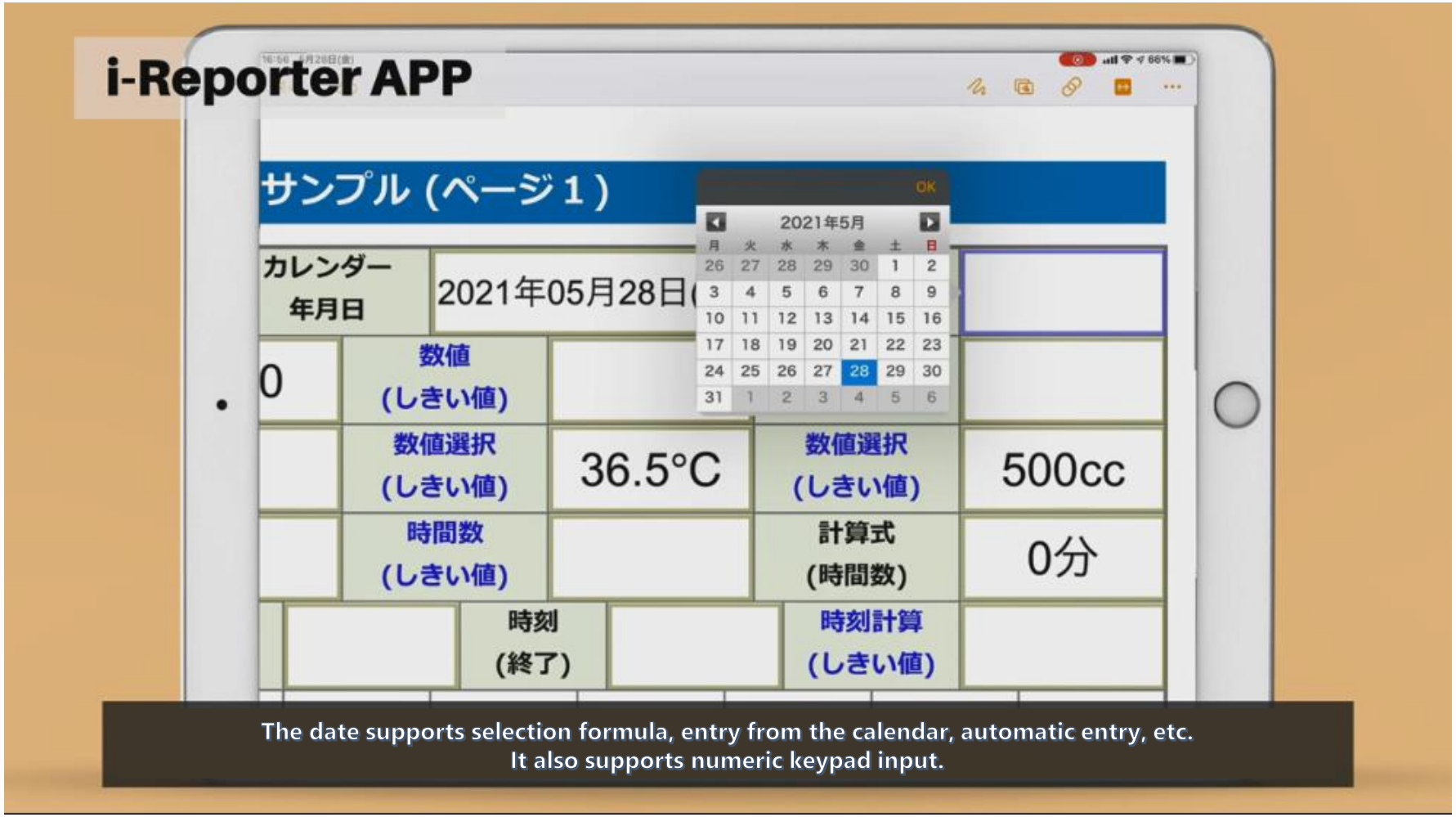
Other external systems, measuring instruments,
IoT devices, etc. Data collection and collaboration are possible.

i-Reporter function list

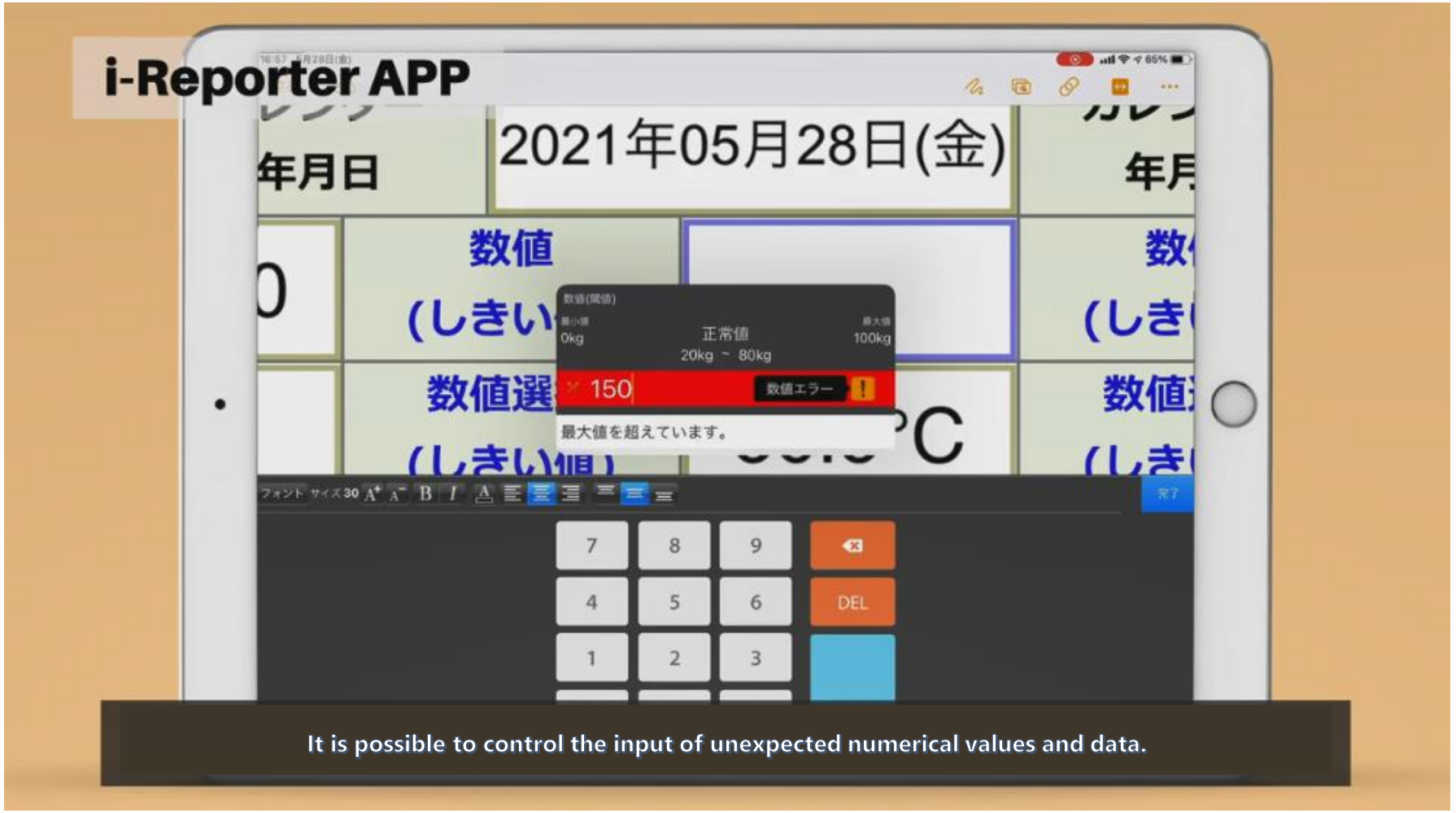
Various data input formats	The date supports selection formula, entry from the calendar, automatic entry, etc. It also supports numeric keypad input. *Standard-Customize
Change cell color	It can change the character color etc. when an error occurs, such as when it is outside the threshold. *Standard-Customize
Automatic time calculation	It is possible to automatically calculate the time from the input time. In addition to time, calculation of input numerical values is possible. *Standard-Customize
Easy keyboard input	Keyboard input is possible in Japanese, English, Thai, etc. *Standard-Customize
Photo shoot /freehand	It is possible to take photographs and attach drawings. You can also add freehand comments from the attached photos and drawings. *Standard-Customize

Data entry error check	It is possible to control the input of unexpected numerical values and data. *Standard-Customize
List selection formula input	From multiple candidates, you can enter the determined numerical value and data by selection. *Standard-Customize
Various check inputs	There are various check input methods such as circle, ellipse, check box, etc. *Standard-Customize
Approval request flow	Supports approval flow functions such as electronic staff and electronic signatures. *Standard-Customize
Barcode/QR code scanning	Barcodes and QR codes can be scanned, reducing the time and effort required to enter information. *Standard-Customize

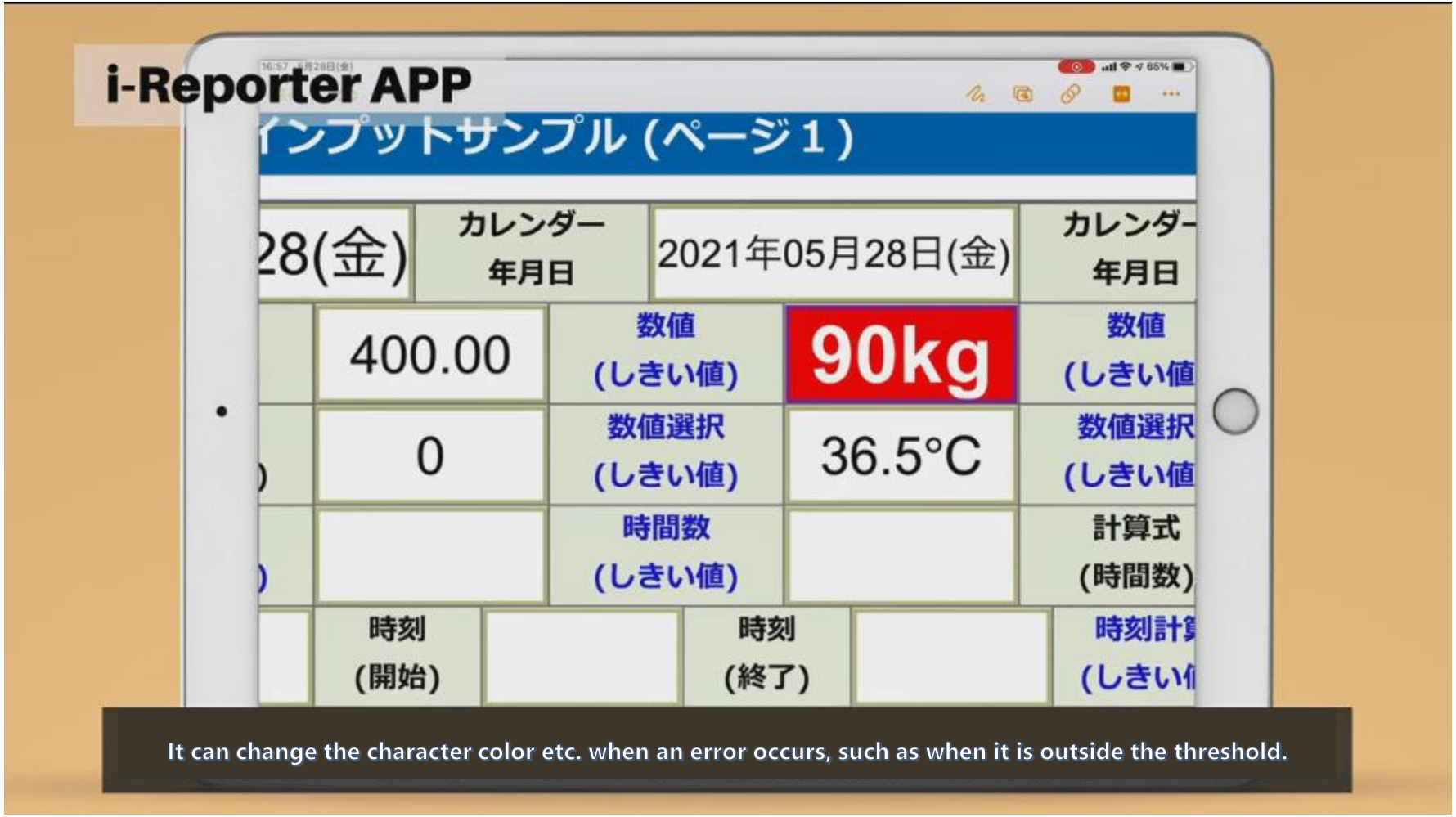
i-Reporter function list | Various data input formats



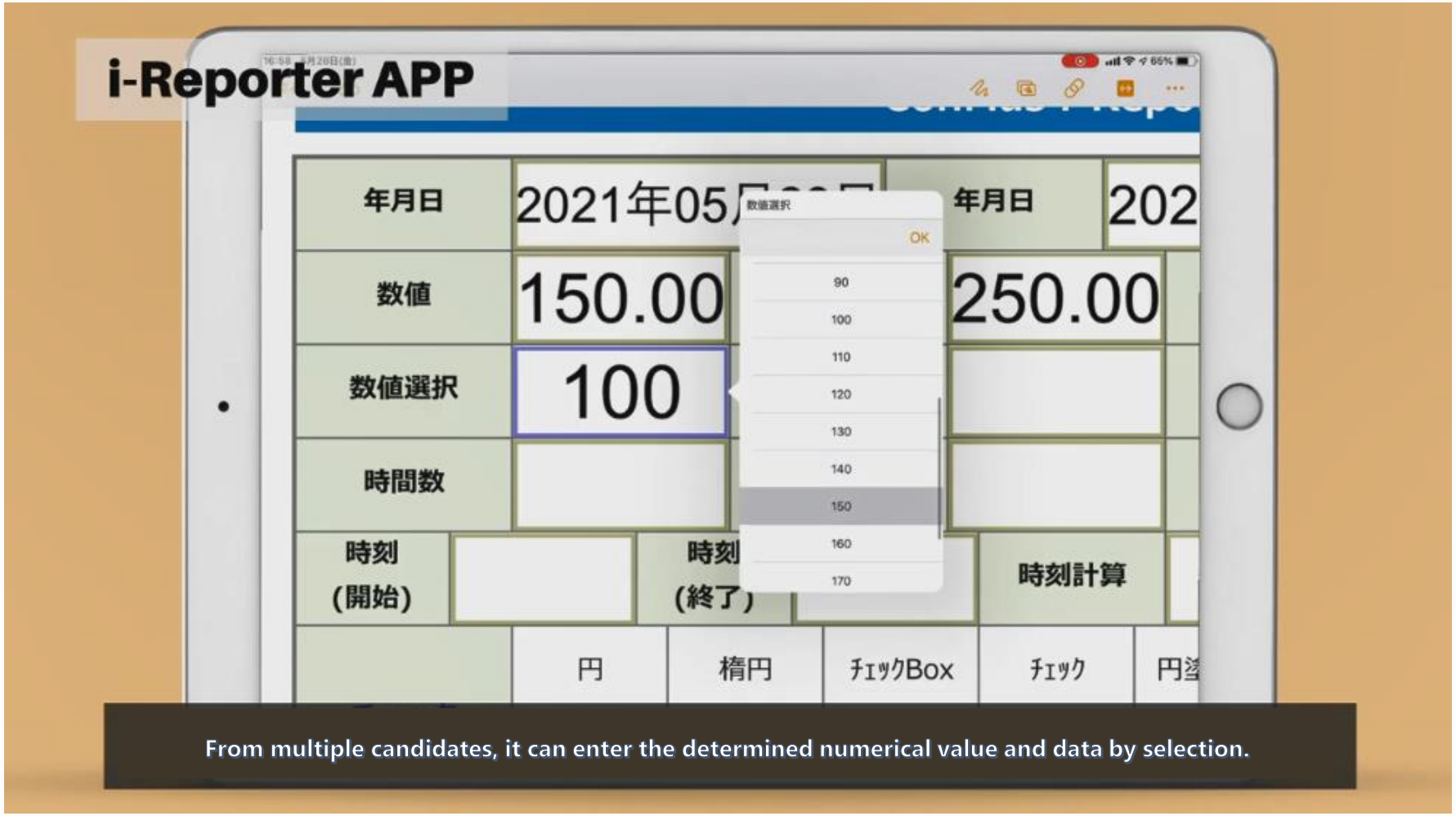
i-Reporter function list | Data entry error check



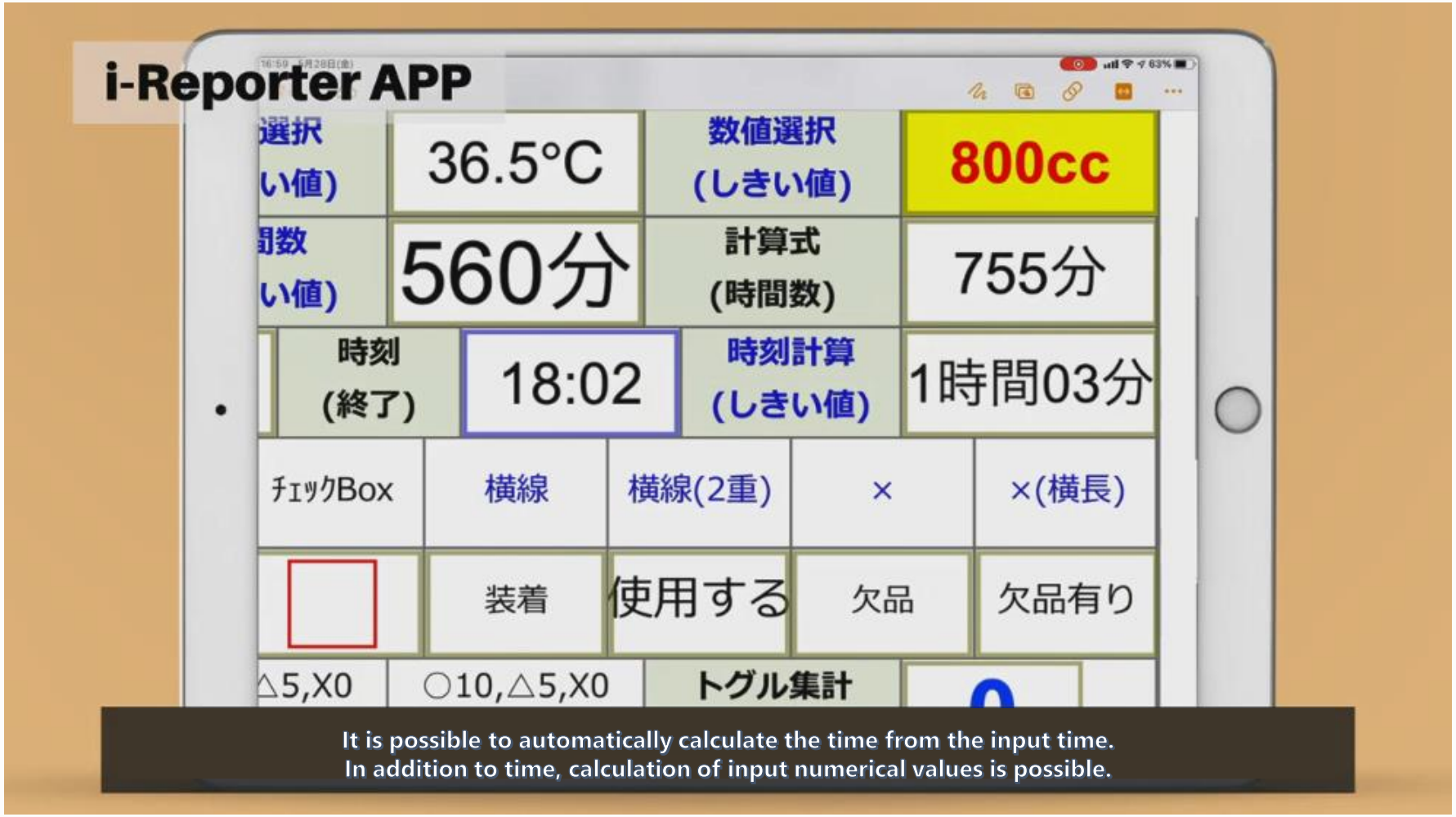
i-Reporter function list | Change cell color



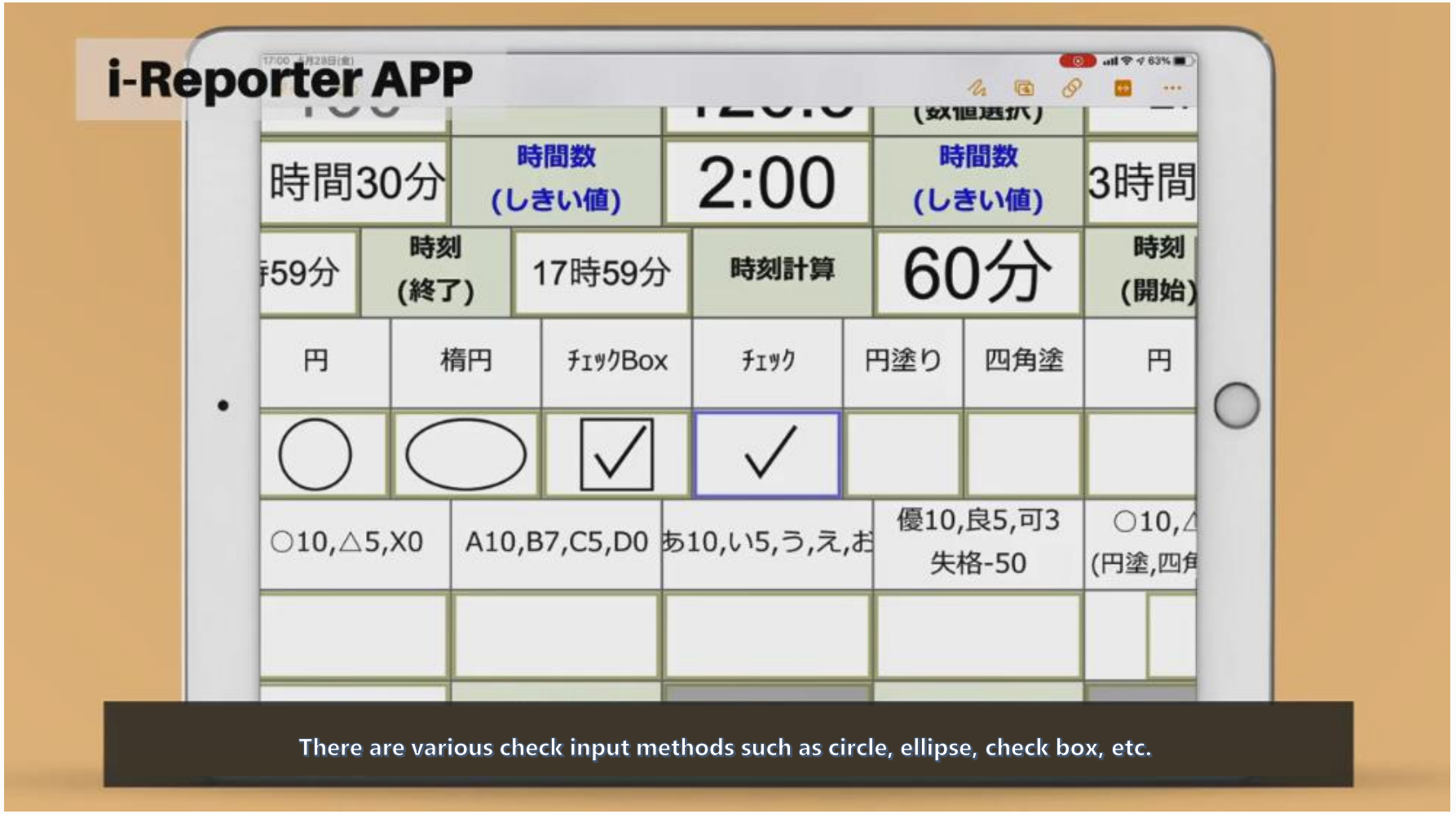
i-Reporter function list | List selection formula input



i-Reporter function list | Automatic time calculation

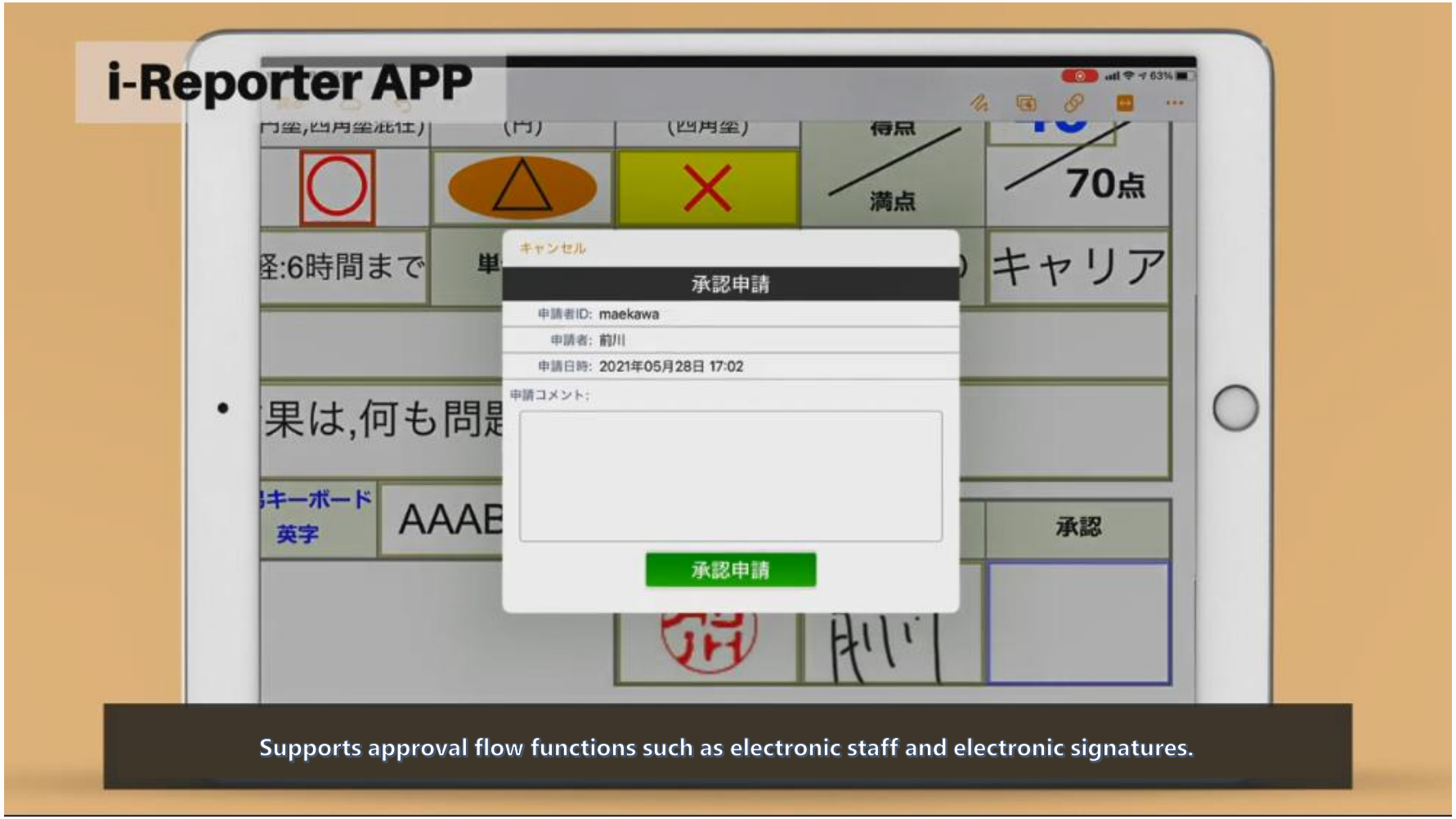


i-Reporter function list | Various check inputs

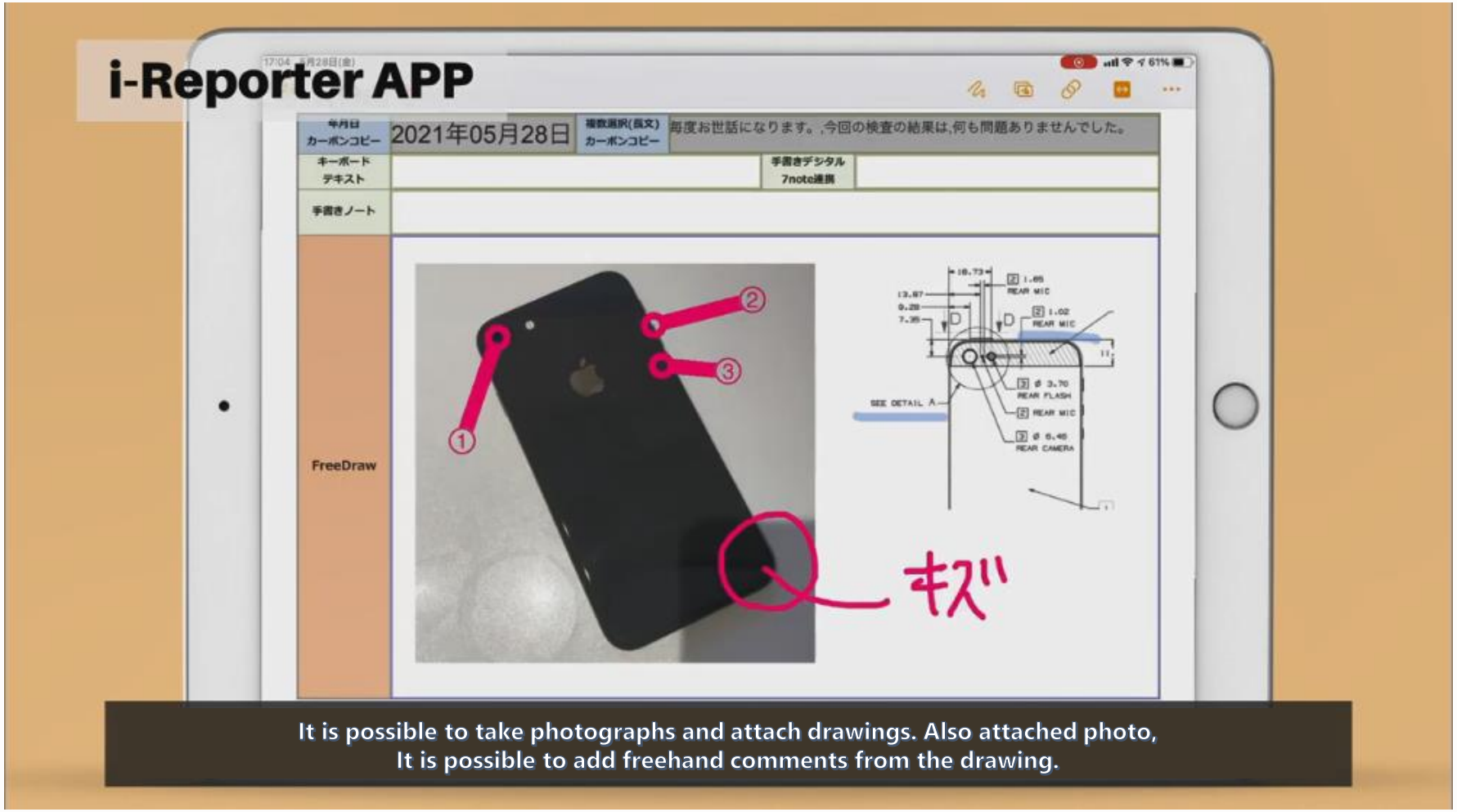


i-Reporter function list | Easy keyboard input

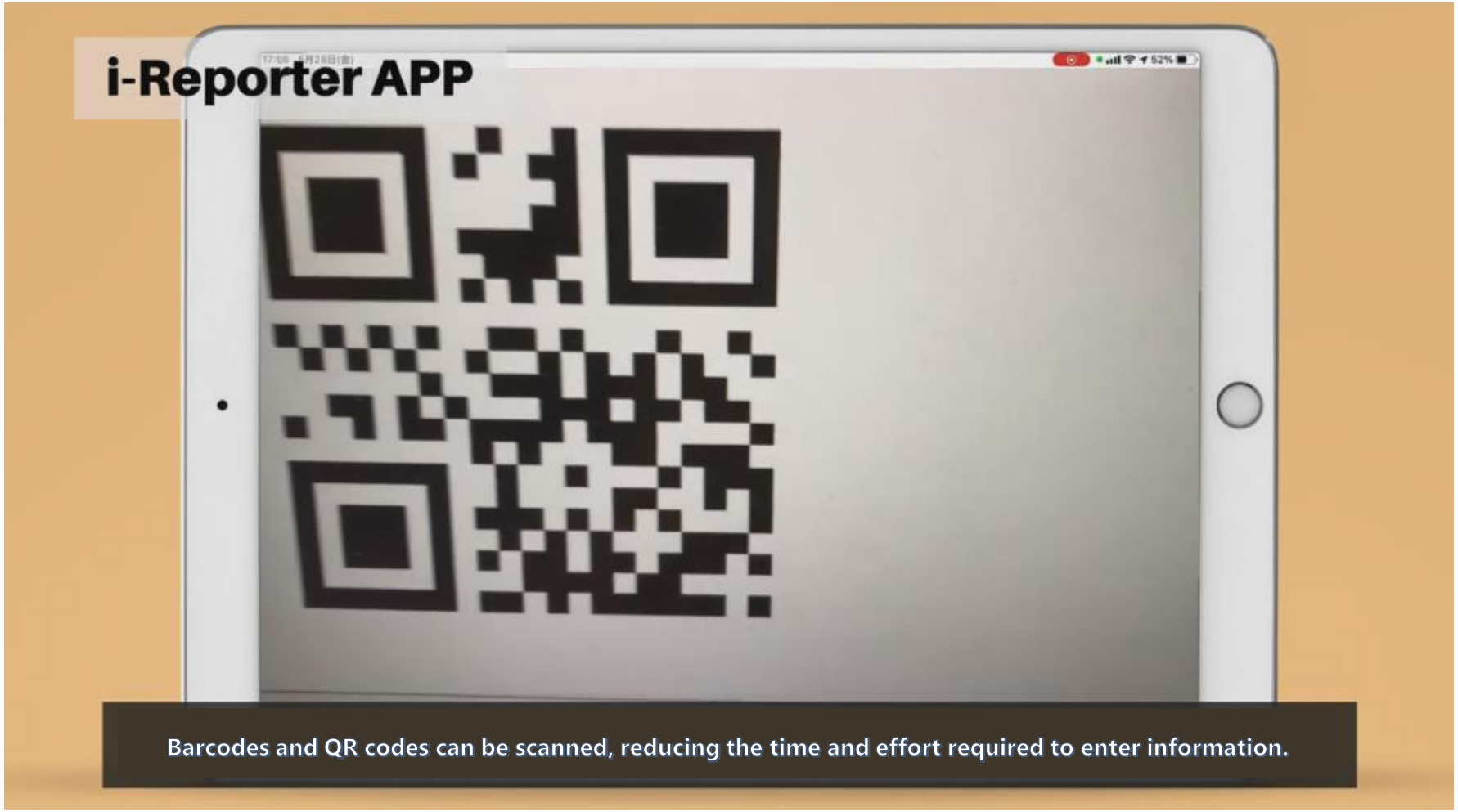
i-Reporter function list | Approval request flow



i-Reporter function list | Photo shoot/freehand



i-Reporter function list | Barcode/QR code scanning



Case study of introduction effect

Introduction of case studies

Renewal of paper-based quality inspection with i-Reporter and digitization of inspection process operations

An example of introducing i-Reporter to the inspection process of vehicle parts and vehicle body.
Due to the paper work, there was a delay in communication between processes. By realizing digitization, we were able to realize a significant reduction in man-hours.

Issue

- Manufacturing inspections, quality inspections, and corrections exist on each assembly line for each part, and the correspondence is duplicated.
- Manufacturing inspection and quality inspection point out each, and the inspection report is also different, so double points and management index values are different.
- Insufficient information sharing between processes resulted in miscommunication.

Solution

- Integrate the correction of each part and the correction of the assembly line...Review the process.
- Share inspection forms for manufacturing inspections and quality inspections.
- Real-time cooperation by system connection between processes.

Effect

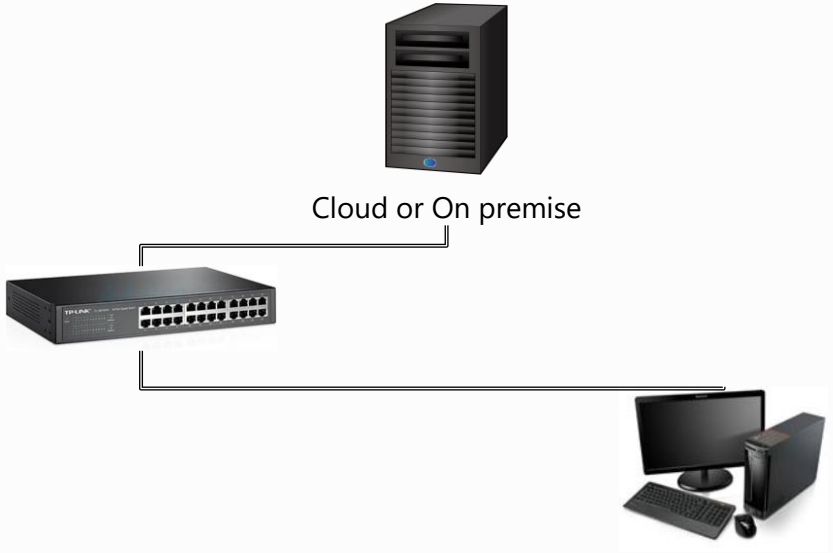
- By using the system, we were **able to standardize work**, which made it possible to share work among employees.
- By using tablets to link information between processes, we were **able to reduce human errors and man-hours.**
- Since the status can be monitored in real time, the **status can be visualized.**

Country	Thailand
Scale	1,000- people
Industry	Automobile manufacturing industry
Purpose / Effect	Work man-hour Reduction paperless Work visualization

Appendix

System configuration

iOS i-Pad or iPhone
Or Windows tablet



No	Item	Recommended specifications and models
1	On premise or Cloud Server for Azure	OS: Windows Server 2019R2 Standard / Memory: 8GB or more / Hard disk: Free space 50GB or more / Display: Resolution 1366 x 768 or more / Browser: Google Chrome (latest version) *Server machine with recommended model specifications or higher
2	Client PC	OS: Windows 10 / Memory: 4GB or more / Display: Resolution 1366 x 768 or more Browser: Google Chrome (latest version) *PC machine with recommended model specifications or higher
3	Tablet	iOS type or windows type with WIFI

Maintenance

#	Software maintenance		Standard / Option
1	Operation support / recovery support	We will open a support window and provide operational support by phone and email, and recovery support in the event of a software failure.	Standard*1
2	Upgraded software provided	We will provide an upgraded version when the software functions are improved. We provide the latest software compatible with the latest OS free of charge. It can reduce your life cycle cost by eliminating the need to purchase software when updating the server.	Standard*1
#	**Software re-setup**		
1	Software re-setup	If it need to re-set up the software after repairing a server failure Perform restoration work. (Repair of inventory data is not included in software re-setup)	Standard*1

* 1) Service is provided at the system purchase fee in the first year of the contract. Contract on a yearly basis from the second year onwards

Schedule | Go live schedule

1. Current situation analysis	We will inspection the current business and the system being used, confirm the requirements, and analyze the customer's current situation. And will make an estimate based on customer requirements.	**Within sales**
2. Requirement definition	Detailed requirement definition will be performed based on the analysis result. Check the detailed requirements so that the system can be implemented in a manner that matches actual operation.	**1-4 weeks**
3. Design	While a process meeting, we will perform basic design, detailed design, and preparation for transfer based on the requirements.	**1-3 weeks**
4. Development / Test	Perform the test that fits with customer work and start the test. We will consider a transfer every method for let smooth working process.	**1-20 weeks**
5. Introduction support	We will have an operation training to introduce the system that is currently being used or work in parallel with the work, and after confirming the usability, etc., And the final acceptance will be continue to process.	**1 week**
6. Production operation	When start operation. We will provide a long-term support for safe and comfortable system by providing operation maintenance support, information provision, and revision edition.	**Min : 4 weeks** **Max : 28 weeks**