

# **Optimized Human Resource Allocation Service developed with VANTIQ**

## **【Field Engineer Dispatch System / ISV model】**

---

**mitsuiwa corporation**

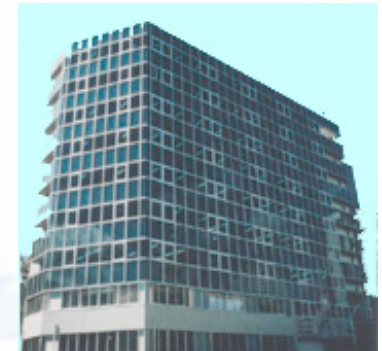
## All for Our Customers

### 会社概要

Corporate name:	mitsuiwa corporation
Headquarters:	Tokyo, Japan
Founded:	July 25, 1964
Capital:	409 million yen
Representative:	Reiji Ramoto, President
Number of Employees:	846 (as of October 1, 2019)
Revenue:	42,4 billion yen

#### Services:

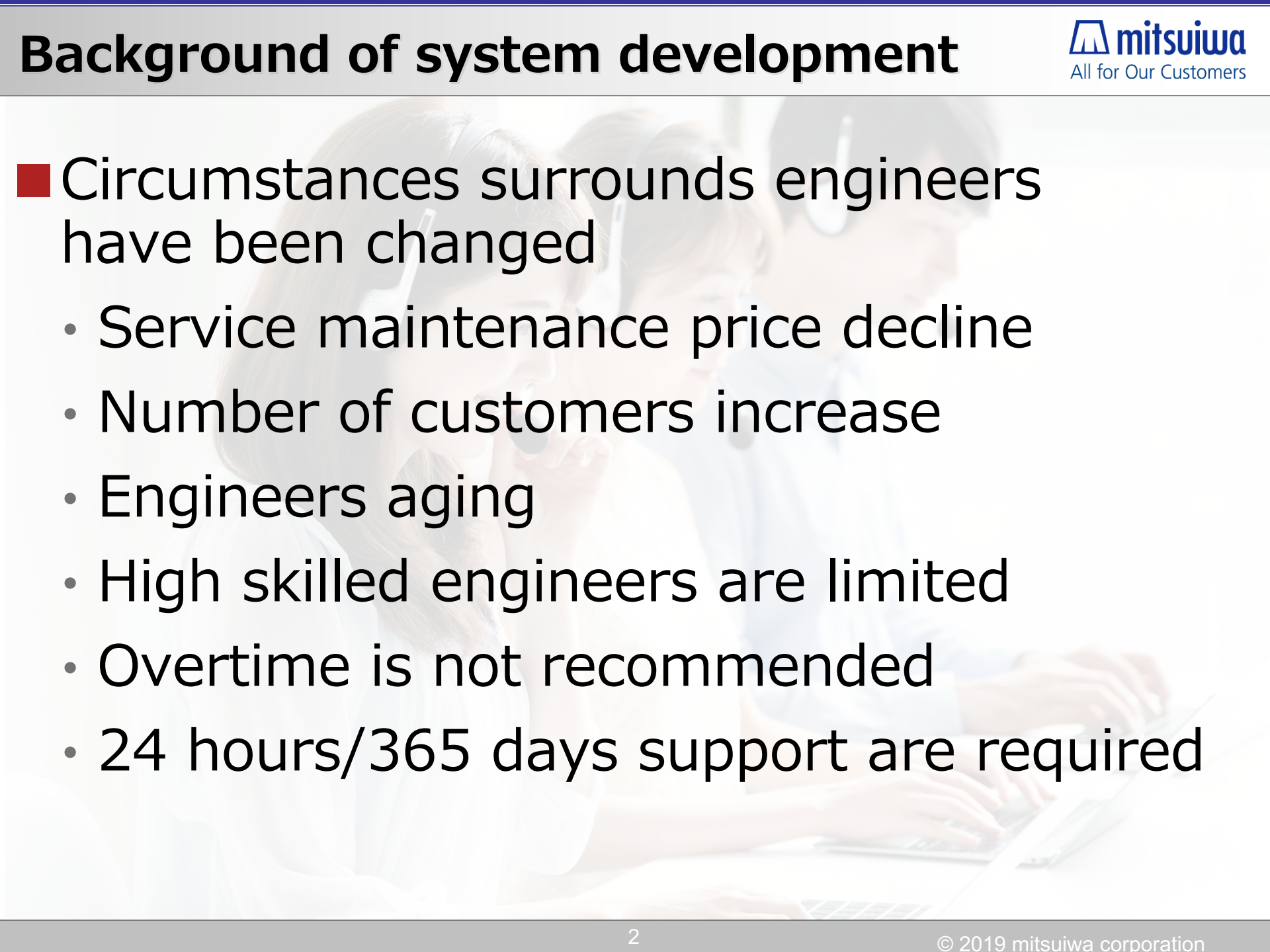
- Sale of ICT devices
- System and network integration services
- Information, network, and communication hardware and software support services
- System operation support services
- Installation of ICT devices and consultation, design, and construction of associated infrastructure systems
- Sale of various electronic products
- Sale and system development in relation to robots/automation and IoT devices
- Sale of energy management system and provide of consulting and installation support service



Headquarters



# Background of system development

- 
- A faded background image showing several people, likely engineers or customer support staff, wearing headsets and working on laptops in an office environment.
- Circumstances surrounds engineers have been changed
    - Service maintenance price decline
    - Number of customers increase
    - Engineers aging
    - High skilled engineers are limited
    - Overtime is not recommended
    - 24 hours/365 days support are required

# Background of system development

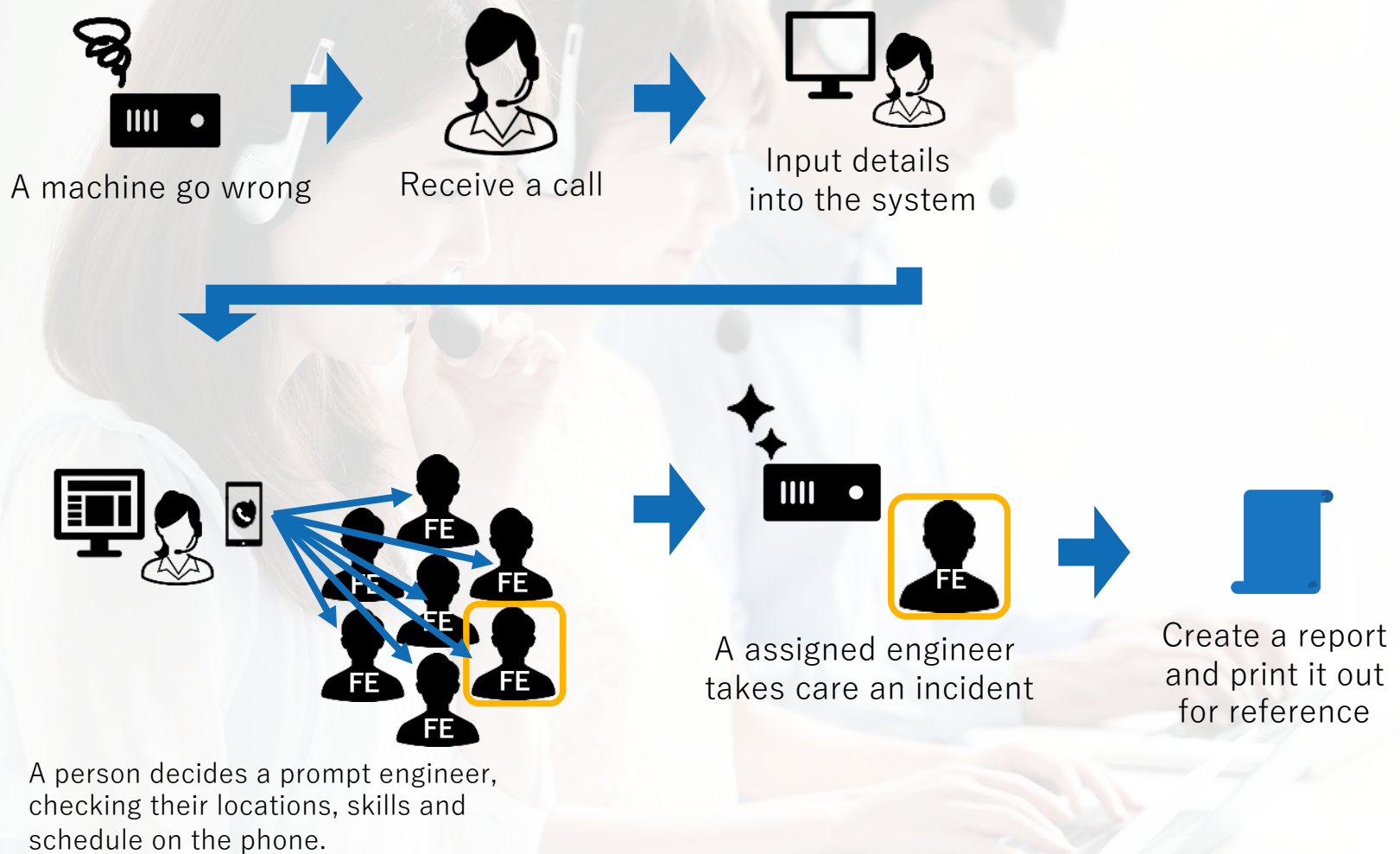
- Mitsuiwa had worked for improve circumstances so far...
  - Optimize engineer's work in each office and department
  - Allocate assistants and retired persons to customer centers and provide them with education for higher skills.

But still, it was not enough



We needed to consider  
more optimized human resource allocation

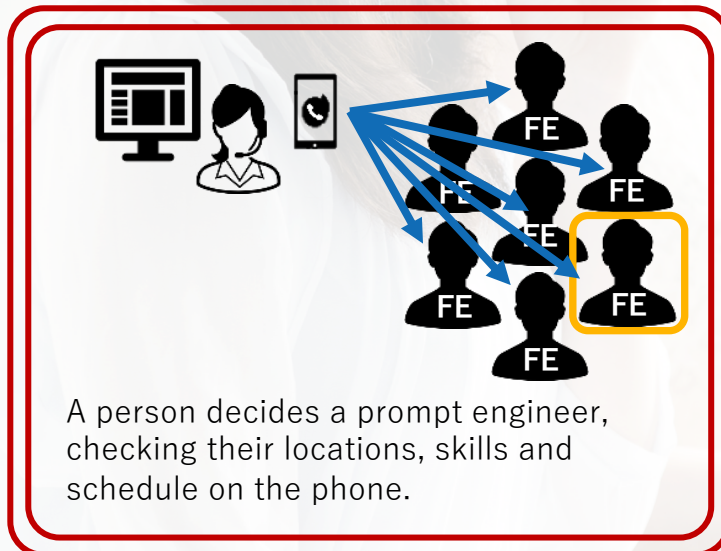
# Our plan to improve the procedure using digital tools





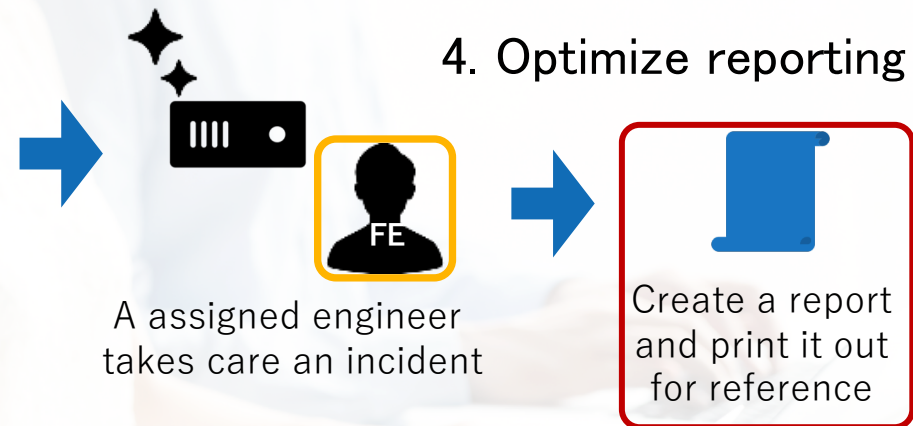
# Our plan to improve the procedure using digital tools

## 1. Reduce manual input of incident details



## 2. Optimize engineer allocation

## 3. Optimize the way of notification





# Three requirements for a new solution

Real-time response

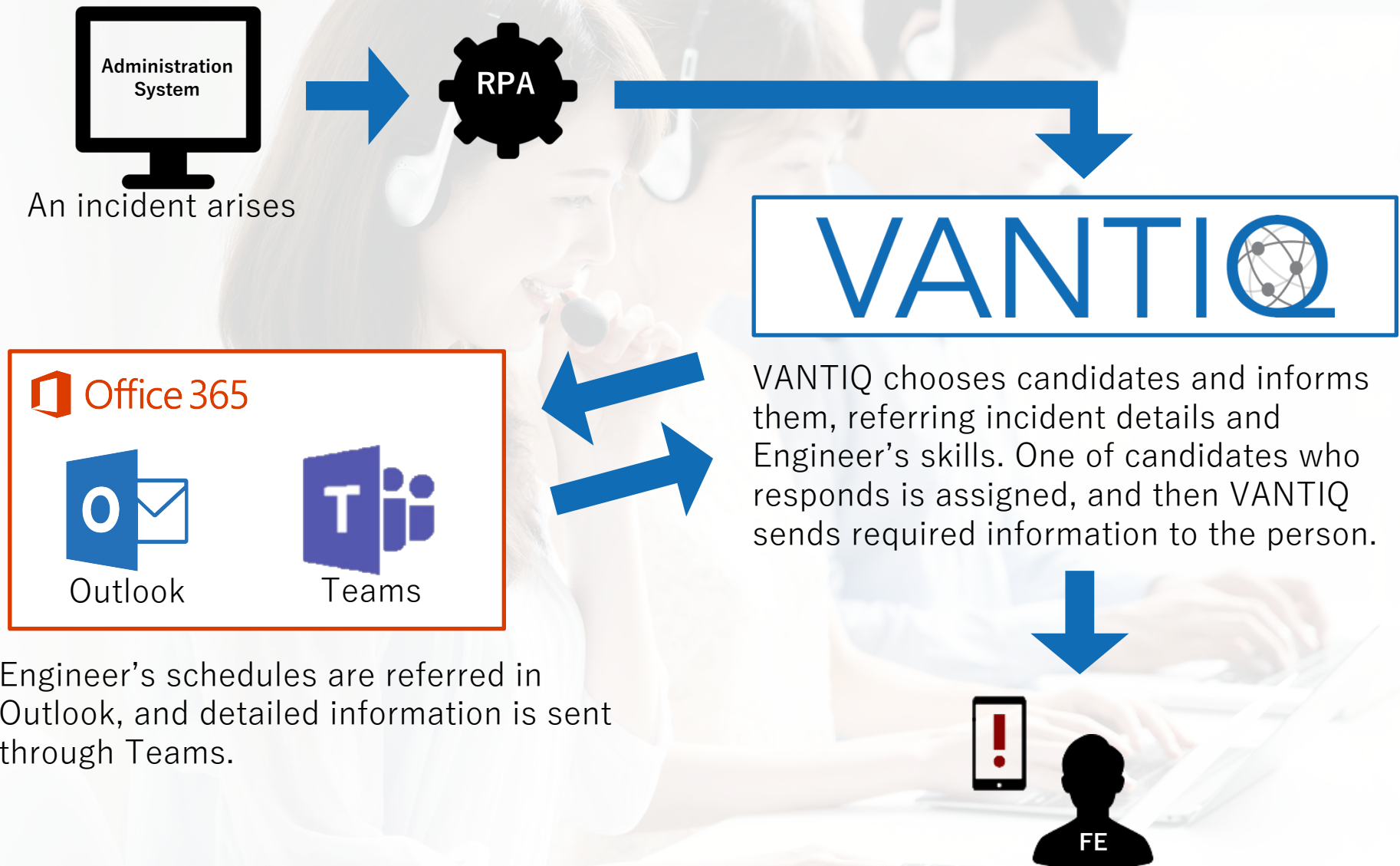
Integration with the existing system

Agile development



**VANTIO** 

# The system develop using VANTIQ All for Our Customers



# Demonstration Movie



# Smartphone interface

## Incident announcement



クライアント IncidentRe...  
インシデントが発生しました。

受付日：2018/11/20 16:29:25  
インシデント番号：1610  
顧客名：TestIncident  
装置名：n  
装置号機：n  
装置状態：n  
住所：神奈川県横浜市西区北幸2丁目

地図表示（Google Maps）  
対応する

## Choose time to correspond

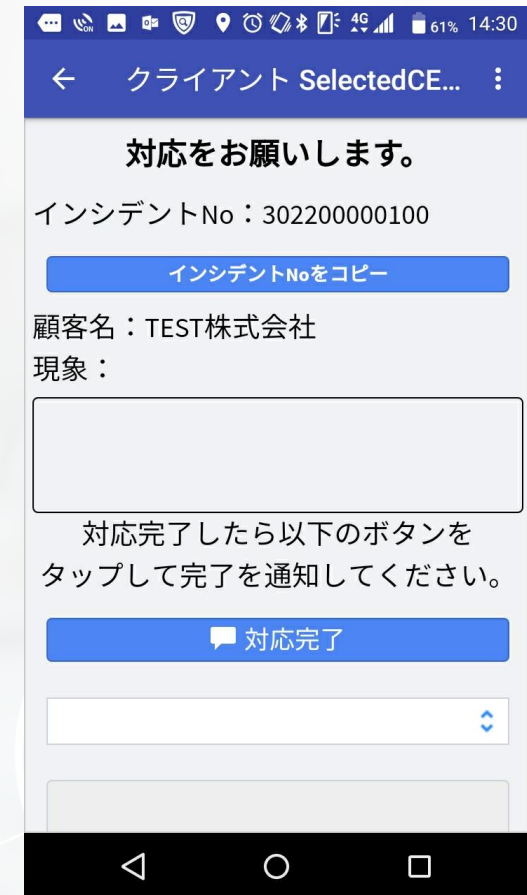


クライアント RepairReq...  
地図表示（Google Maps）

- ☐ 14:30
- ☐ 15:00
- ☐ 15:30
- ☐ 16:00
- ☐ 16:30
- ☐ 17:00
- ☐ 17:30
- ☐ 18:00
- ☐ 18:30
- ☐ 19:00
- ☐ 対応不可

決定する

## Correspond request to an assigned person



クライアント SelectedCE...  
対応をお願いします。

インシデントNo：302200000100

インシデントNoをコピー

顧客名：TEST株式会社  
現象：

対応完了したら以下のボタンを  
タップして完了を通知してください。

対応完了



## VANTIQ CEDコンソール

検証 F S 部

### インシデントリスト

302200000100 kensyo001 【手配中】  
302200000005 kensyo001 【手配完了】  
302200000002 kensyo001 【手配失敗】  
302200000001 kensyo001 【作業完了】

### CEリスト

CE1 【回答なし】  
CE3  
CE2 【回答なし】

CE位置情報更新

手動インシデントクローズ



インシデントID:302200000100  
顧客名:TEST株式会社  
住所:東京都渋谷区渋谷3丁目15-6  
装置型番:TEST  
現象:エラーが発生しました。  
エラーテスト。  
手配CE名:手配中  
手配開始時刻:2019/3/22(金) 14:25:52

- It's helpful for a staff at a customer center that the **system choose an engineer automatically** for a new incident and dispatch is confirmed while all of engineers are absent when an incident occurs.
- Staffs can use time for other jobs, since **the phone calls to engineers are drastically decreased.**
- Staffs don't need to inform engineers of incident details, because **required information is sent automatically to engineers** who are to be assigned.
- A console **shows the current locations of an engineer and a customer** and helps staffs to communicate with them, even if they don't know much about a place.
- Current location information **helps staffs to cooperate with engineers at other areas.**
- The system could be used not only for engineer dispatch arrangement, but for alerts of required regular maintenance and additional needs for help near the place in which an incident occurs.  
(additional functions and operations are under consideration)

Required information is **pushed out to related engineers**, following effects are reported;

- Incident details and location data are sent out to engineers at the same time, and it enables engineers **quick decision whether to comply with such request.**
- It is easy to answer who will correspond an incident, just by **tapping a button on a phone**, it enables an engineer answer an incident request at another customer place.
- **Only information relevant to a particular engineers is sent to an engineer in the field**, he/she does not need to search information, which reduced the operation time.
- **The system integrated with Microsoft Teams shows what happens and who takes care of an incident in real time**, it helps other engineers to follow up an incident and cooperate each other.
- The system helps **a supervisor check whether he/she is suitable to take care of each case**, since a supervisor can check the status anywhere and anytime.



# Effects after introduction

## ◆ Engineer dispatch operation (Key data)

No. of customer centers : 30

No. of engineers : 126

Total No. of incidents : 1,800/month

No. of incidents can be covered by the system : 1,500/month

Required time to arrange dispatch

**Before** introduction 30 minutes/incident

**After** introduction 10 minutes/incident

## ◆ Effects

### ★ Quantitative effect

Reduction in manpower (in case of automatic engineering allocation success rate is 70%)

20 minutes/incident × 1,050 incidents

= 350 hours = 2.2 man-month / month

### ★ Qualitative effect

- Customer satisfaction improvement through quick response
- Better collaboration between engineers through sharing information how to correspond incidents in real time
- Standardization of engineer dispatch operation





All for Our Customers