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Banks and logistics

Workflow Optimization

Tasks of transport logistics in the banking industry

01

Debt collection

02

Cash and Valuables in Transit

03

Internal logistics and card delivery

04

ATM services

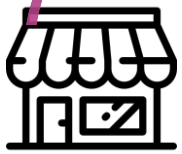
05

Offsite audit and line audit

06

Field customer service

07



Field sales

08

Field service engineering

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DEBT COLLECTION

Planning

Automatic planning and route optimisation with the consideration of:

- portfolio of clients, assigned to each employee
- client availability, depending on the type of address (work / home)
- multifaceted priorities of visits
- calls, assigned and other activities for each employee
- remote collection areas

Manual route adjustments available

Execution

Transfer of information about all customers from the portfolio to the employee's mobile device (including photo and history of communications)

Navigation to the client's location

Registration of the results of the activity in the standardized form and prompt delivery of the information to the *backend* system

Possibility to contact the debtor by any of the known phone numbers in one click. One touch dial In functionality

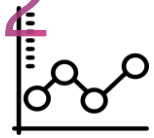
Ability to add additional visits to the clients from the portfolio

Control

01

Real time monitoring of the performed activities, displayed on the map

02



Information on the actual length of the route

03

Control of client visits, including meeting duration

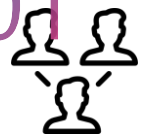
04

"Plan-vs-actual“ analysis reports, generated for each day

Cash and Valuables in Transit

Allocation of jobs by route

01



Building routes for collection points
Build optimized collection routes for cash-and-valuables-in transit operations.

02

Consider type of transport requirements:

- Enhanced protection
- Increased cross-country ability
- Restrictions on the type of transport
- Limitations on the transport capacity (bags, cassettes, amount)

03

Consider special territory admission rules

04

Consider the professional skills of the crew members, needed to work with ATMs / terminals

Route planning

Build an optimal sequence of visits with the consideration of:

- time windows of cash collection
- working schedule of Cash Transportation Officers
- the current graph of the road network and the statistical speed of traffic
- time of pre-trip inspection and instructing, the completion of the shift
- maximum length of the route
- service time of each point (taking into account the history of cash collection)

The ability to manually adjust the route with automatic detection of violations or restrictions

Route planning

Build "game" routes
"What if?"

Optimize route with the ability to fix the collection points

Select service options for a new cash collection point, taking into account financial parameters

Consider special aspects, such as the order of the visits (for example, cash settlement center at the beginning)

Cash transportation cost prediction

Automatic calculation of the cost of the route, based on:

- route length
- fuel consumption & vehicle type
- Working time, including the duration of pre-trip briefing, receiving / giving up guns at the beginning and end of the shift
- crew type (reinforced / conventional)

The possibility of including indirect costs in the cost of production

Automatic calculation of the increase in the cost of the route while adding a new collection point

Control

01

Intelligent vehicle tracking with the ability to be kept informed about emergency situations*:

- alarm button
- opening of the door / safe in the wrong place
- engine shutdown

02

Automatic notification of the dispatcher in case of deviation from the planned route or delay / advance of the schedule

03

Operative control of the timeliness of visiting the collection point

04

Formation of a consolidated report "Plan vs actual" for the day

* while integration with the tracking system

Execution

- Printing of paper route sheets for cash collection teams
- Step-by-step navigation taking into account the actual traffic situation
- Registration and sending to the team of unscheduled applications / refusals from collection points
- Control of the bar codes of bags and cassettes when receiving / dispensing
- Clarify the location of the point in the mobile application of the collector upon completion of collection
- The possibility of using photo fix at the point of collection

Execution

Adding comments on the mobile app about the reasons why a collection failed

Possibility to transfer digital ATM key details to the mobile application used by the Cash Transportation Officer

Notification of clients by text message and email:

- Confirmation of the collection points on the day's route
- departure to the collection point from the previous location
- *N*-minutes before arrival to the client

Forecast of ATM and cash collection

Analysis of the current process of filling ATMs, using methods:

- collection and structuring of data
- clustering

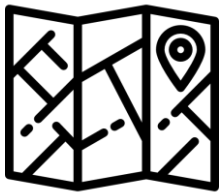
Forecasting the filling of ATMs using one or more methods:

- machine learning
- interval-correlation analysis
- mathematical statistics

Reporting

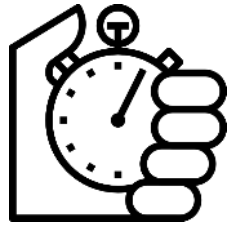
01

Daily routes



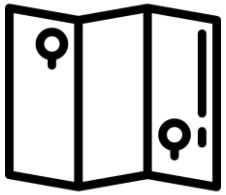
02

Deviation from routes



03

Route start / end time



04

Deviation of the actual duration and length of the route from the planned one

05

Number of successful / unsuccessful collections

INTERNAL LOGISTICS AND CARD DELIVERY

Logistics system

Maintaining the card life cycle:

- list of possible statuses
- transition rules between statuses

Fixing the passage of cards and pin-envelopes according to the regulated statuses:

- request to issue the card
- processing
- card production and transfer to the point
- card delivery to the customer

Logistics system

Logistic planning:

- trunk routes
- *last mile*

Formulation of registers and reports: the register of cards for issue, extradition, etc.

Integration with front and back systems

Card Delivery

01

Express delivery of bank cards

02

Delivery of corporate bank cards

Planning

Allocation of deliveries to couriers

Building optimal routes,
With the consideration of:

- delivery time windows
- working hours of specialists
- Flexible lunch breaks

Route planning using public transport and walking routes

Ability to prioritize public transport

Additional functionality for the delivery of corporate bank cards

Intelligent resource planning taking into account:

- actual resources for the planned day
- level of qualification and access of staff
- the number of cards to be issued

Using historical traffic data

Calculation of arrival time to the department behind the card package

Control

01

Two-factor control of delivery:

- Geo-zone entry analysis
- delivery time stamp

02

Controlling the order of deliveries

03

Generating a consolidated report "Plan-vs-actual" for the day

04

Operational control of staff movements

Execution

Text / email notifications to the clients about:

- scheduled delivery time
- the courier’s departure to the address

Navigation of the courier to the client's location

Read barcode and QR-codes, envelopes in a mobile application

Possibility to attach a photo of the document, the customer with the card

Automatic online card activation

Two-way integration with backend systems

Reporting

01

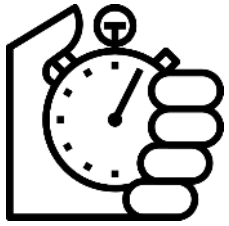
Customer Service Level

02

Daily Routes

03

Productivity of couriers



04

Delays

05

Total accuracy of arrivals

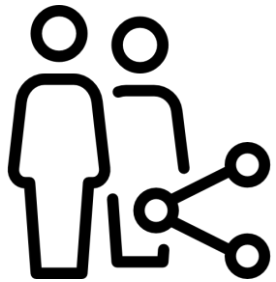
ATM services

ATM service

01

Service engineers

02



Managers

Planning

Allocation of departures taking into account:

- type of equipment to service
- skills of specialists
- availability of access to the territory
- “black" list of employees
- maintenance schedules and inspection of ATMs

Route planning based on:

- working hours of specialists
- flexible lunch breaks
- real time graph of the road network and the statistical traffic speed

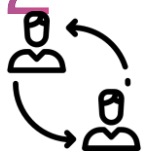
Route planning using public transport and walking routes

Operational planning

01

Distribution of emergency work taking into account the current location of employees and the status of their work

02



Assignment of jobs between employees

Service engineers

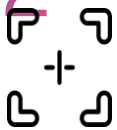
- Standardization of ATM servicing activity
- Time accounting for scheduled maintenance
- Possibility of photo - fixing the "work" and / or the detected malfunction
- The ability to identify the ATM by scanning the bar code
- Fixing used spare parts materials and a list of spare parts necessary for troubleshooting

Managers

01

Inspection and completion of check-lists

02



Ability to download / view the photo of the ATM installation site

03

Accounting for the initial loading of "empty" cassettes

Control

Control of visits
and duration of work

Creation of a consolidated report on the performance of work in the "Plan-vs-actual" mode for the day

Operational control of staff movements

Photo album of the results of visits

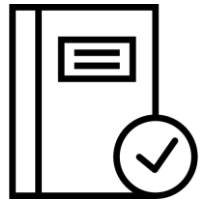
Reporting

01

Report of visits by ATM location

02

Report on the actual mileage and time of work



03

Reports on completed checklists

04

Statistics of the average duration of maintenance of the ATM, with the consideration of the type of work

05

Spare parts list for repair service

Offsite audit and line audit

Planning

The allocation of visits, taking into account:

- customer portfolio
- qualifications of specialists
- frequency of repeated audits

The composition of optimal routes based on:

- working hours of appraisers
- a floating lunch break

Planning routes using public transport and walking routes

Execution

Real time information on mobile device:

- list of planned visits
- information about clients and objects of pledge

Navigation to the audit location

Documenting the state of the security object on the checklist

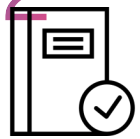
Documenting additional information on the collateral object on site and the ability to attach photos

Control and reporting

01

Control of employee visits

02



Composition of the consolidated ‘Plan-vs-actual’ report

03

Reports on time spent / route of movement for calculation of payment / reimbursement of fuel and lubricants

Field customer service

Planning

Planning meetings with legal entities and individuals on:

- Opening of settlement and cash services
- Loan
- Delivery of documents

Planning routes with:

- Time windows of customer availability depending on the type (legal / physical person)
- work schedule of employees

Planning routes using public transport and walking routes

Execution

01

Online navigation to the meeting place with the client

02

Providing customer information to the mobile device

03

Control of the visit

04

Recording results :

- Photo confirmation
- Checklists / questionnaires, etc.

Field sales

Planning

Job allocation between employees for several days, taking into account the portfolio of applications and skills of employees

Planning routes with :

- customer work time
- schedule of presence on customer territory
- home address of an employee

Execution and control

01

Sending detailed information on the task to an employee

02

Visit control and time spent on site

03

Collecting information on site (questionnaires / checklists / applications / ..)

04

Photo confirmation on jobs

05

Real time transfer of performance reports

Field service engineering

Planning

Allocation of jobs taking into account:

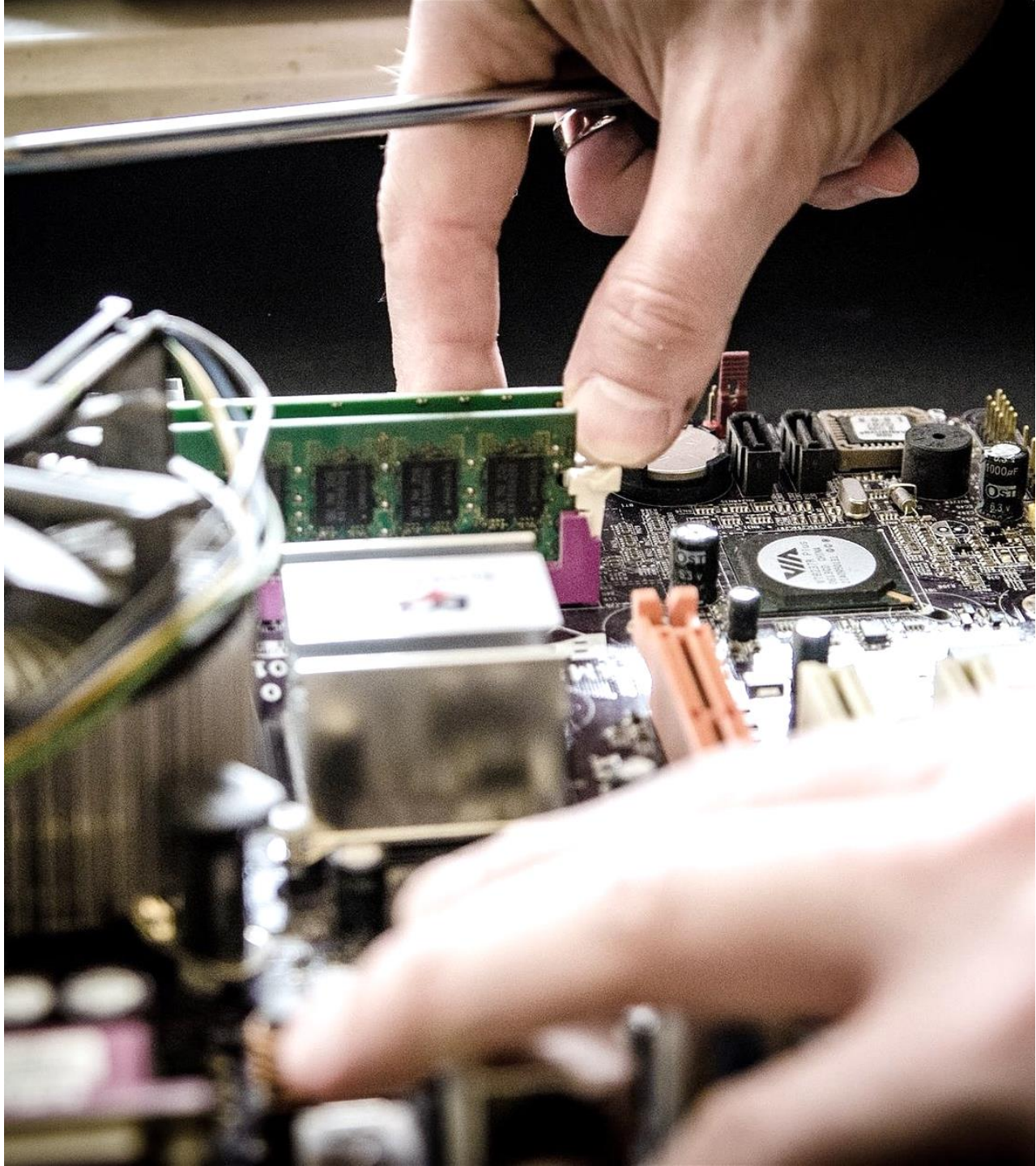
- schedule of technical maintenance
- skills of specialists
- priority of applications
- real-time adjustments to the planned route

Route planning based on:

- Available time
- work schedule of engineers
- priority of applications
- type of work

Execution

- Navigating to the destination point
- Detailed information about the place of work and a description of the problem
- Photo confirmation of performed and / or identified issues
- The ability to identify the service object by scanning a bar code
- Tools & spare parts list
- Checklist of works



Decision

Collection of information from backend systems

Mathematical scheduling algorithms

Optimal schedules and routes

Transferring information to the mobile devices

Integration to the backend system

Control on employees location and tasks

Reporting

Additional benefits

Reducing operating costs

Reducing the number of office workplaces

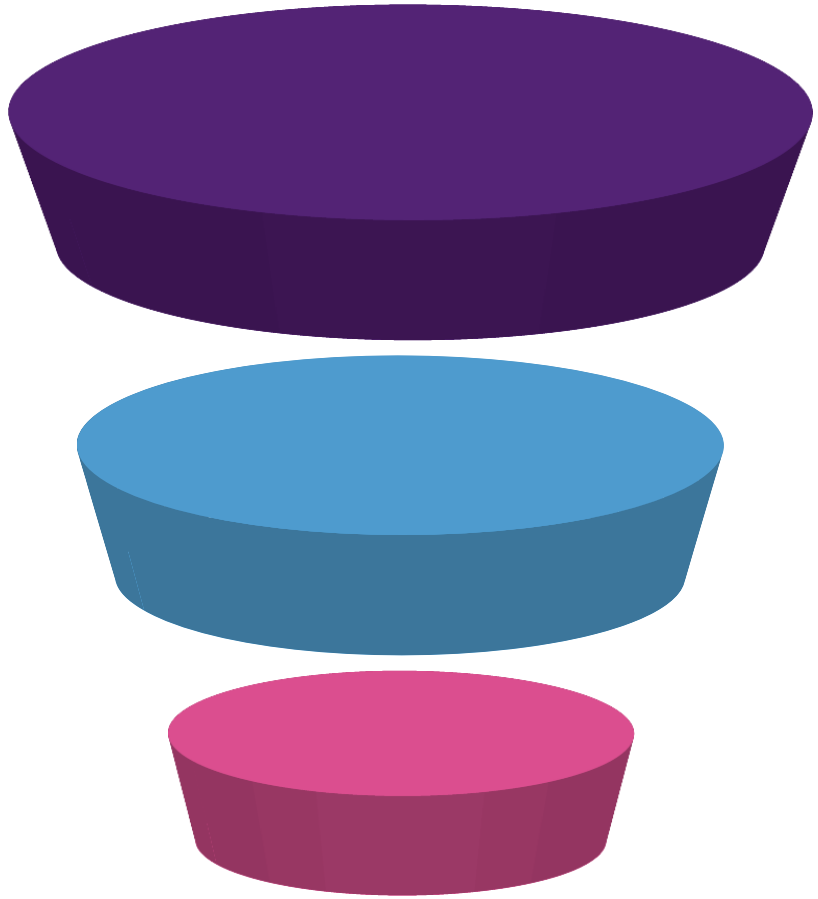
Increasing process transparency

Reduction of the human factor

Centralized management and control

Preventing confidential information leaks

KPIs



Up to 50 %

Increase of visits/jobs per day

Up to 20 %

cost savings

Up to 10 %

additional revenue

magenta technology

20
years of experience

21
patents on scheduling algorithms

170
employees

350 000
routes a day

250+
customers

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