

Improving maintenance of the electricity network in the Middle East

Challenge

EPDC (Electric Power Development Company) is a subsidiary of Tavanir (electricity power generation, transmission, and distribution company in the Middle East) that provides low and medium voltage electricity networks across the country. 121, the emergency services department of the EPDC, is responsible for handling subscriber requests.

EPDC needed to improve the efficiency of the 121 department and asked our partner GGRCO, GPS fleet tracking provider, to develop a solution for that.

The main challenge was the manual radio dispatching. An emergency dispatcher had to get all information from subscribers via calls and dispatched the field team via radio.

Because of the manual process, there were many problems:

- retrieving the incorrect info about the accident;
- inadequate dispatches;
- delays;
- wrong accident locations;
- absence of the subscriber on the location;
- the system did not have any reports to check the productivity of the field teams;
- several telephone lines were needed;
- the subscriber waited a long time or had no opportunity to provide a report.

All these things needed to be fixed to provide subscribers with fast and effective maintenance services.

Solution

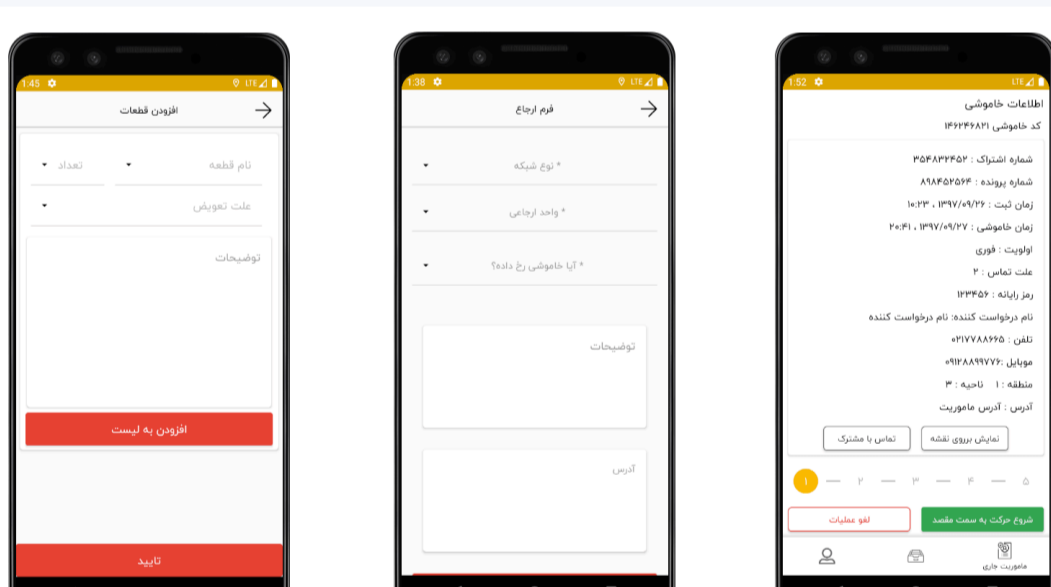
Just employing telematics products wasn't enough for the project and the whole system has been rebuilt to a digital dispatching platform.

- The manual phone-radio process was automated.** Now, the subscriber ID and all other request data including the location are automatically loaded, and a task is created.
- Then, the system checks the accident category, location, priority (based on predefined priorities for each category) and compares them with the field team parameters, and assigns it to the best-matched team.

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5	9920000018400	9899228522	16:25 1398/08/01	محمد علی نوزی زهی	حمیدرضا شهرن	زاهدان 2	روستای سفیرمینگ	منتظر پذیرش	منتظر پذیرش

The list of issues with the statuses and reports

- There are 500 field teams, and **each field team has a vehicle equipped with a tracker.** The location data of the team is transferred from the tracker to [Wialon system](#), as well as the route, speed, and many other parameters of the trip.
- All communications with field teams are done in their Android application** developed by GGRCO. There is also an application that communicates with the EPDC telephony system and the Wialon server.
- From task creating to completing, any field team activity is reflected in the system: detailed team reports, task reassignment, and other important parameters.
- [Teltonika](#) devices were used for the project.



This is how the mobile app used by field teams looks

Results

GGRCO, the Wialon partner, managed to rebuild the whole maintenance dispatching system to achieve such impressive results for the project with 1 million subscribers that it is now planned to use the solution across the whole country.

35% improvement

of the average time of each mission. The time from customer reports to solving decreased from 101 minutes to 66 minutes.

Up to 80% improvement

of the average time for the teams to reach the accident location. Before, it took 3-5 minutes to reach the site, and now it's 0-1 minutes.

Detailed reports

The managers can now receive monthly or daily reports from each team and identify each team's strengths and weaknesses, making correct business decisions.

Fewer mistakes

The solution allowed to improve field team productivity by reducing the number of wrong dispatches.

Company profile

Industry: Field workers

Solutions



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