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### **Business Domain**

Geospatial sector,  
Agriculture

### **Project Type**

Client's portal: website,  
web application, mobile app

# **Intetics Developed a State-Related Big Data GIS Solution, Resulting in 70% Cost Savings**

## **Client**

The Client is a non-profit organization, engaged in research and development of custom data analytics for business entities in the one of the largest Asian countries.

## **Project**

Development of a web portal and mobile application to consolidate reports, quickly analyze the necessary for users data, collect various types of GIS data and transform it in user-friendly cadastral fields, statistics tables, dashboards, forms and templates.

## **Objective**

The Client required a single source of structured unified data to make decisions based on the retrieved analysis of large volumes of statistical data. The system must have document flow automation, dynamic system of permissions, custom directories, reports, forms, and templates.

## **Team Reinforcement**

Intetics assembled an Offshore Dedicated Team® (ODT®) of engineers (Front-End, Back-End, BA, QA, PM) specialized in GIS technologies and with a deep understanding of the domain.

# Challenge

Historical data was stored on different servers and computers, and it was neither registered nor indexed. So, users spent a lot of time collecting and compiling data. The Client wanted a custom solution for the organization, automation, and structuring of Big Data across various levels.

The Client lacked the resources to develop such a complex system while still maintaining a high level of security. Building an in-house team would increase the development time and cost by at least 30%, and it could have prevented the project goals from being met.

## Quick Facts

- ✓ Admin costs reduced by 70%
- ✓ Users get needed data 10 times faster
- ✓ Integration with the GIS module
- ✓ Web portal & mobile application

### Technologies

Angular9 / PostgreSQL12 / PostGIS3 / PHP8 / Laravel6 / Nginx / Redis / HTML5 / SPA / JavaScript / RESTful API / Swagger / primeNG

# Solution

## ★ 01

The solution allowed users to make decisions 10x faster, cut costs by 70%, and improve rendering services for their customers.

## ★ 02

The web portal automatically creates custom directories, dashboards, and reports based on users' responses, as well as from import/export form results.

## ★ 03

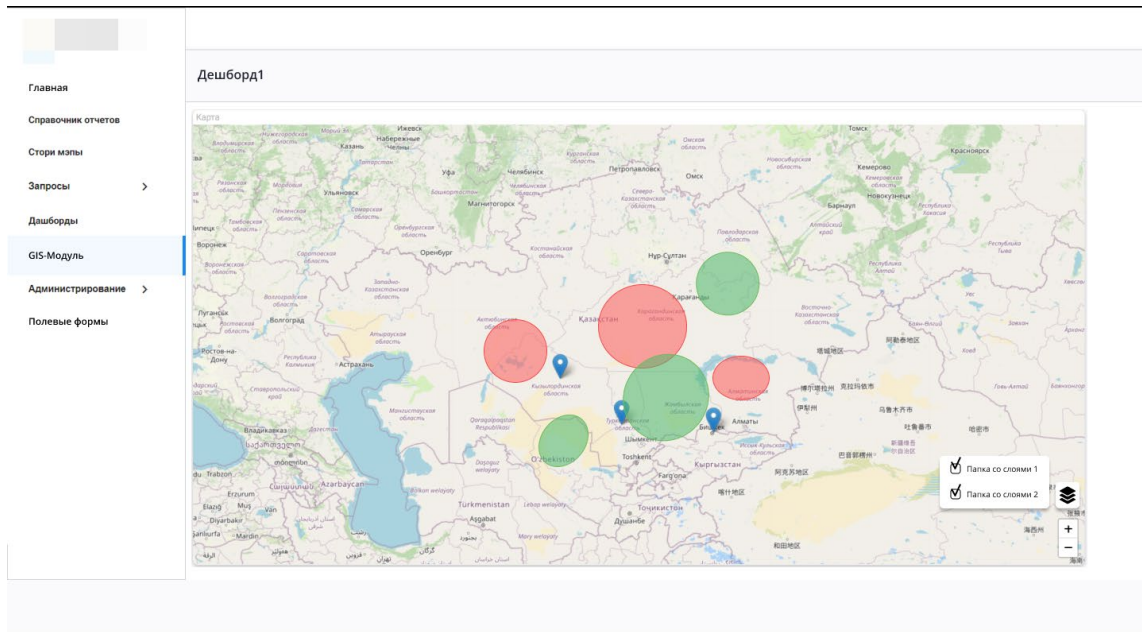
The mobile application features an offline mode for filling out forms and synchronization after connecting to the network.

## ★ 04

A high-level multifunctional web-service features dynamic reports, forms, templates, dashboards, etc., with horizontal and vertical hierarchy in permissions.

## ★ 05

Thanks to GIS professional developers and BA, Intetics' ODT® team has designed, successfully developed, and delivered the turnkey solution in the shortest possible timeframe.



## Client Reference



*The solution enabled a single data source, which improved data access 10x and resulted in a 70% personal cost reduction. Furthermore, improved data management was recorded 3 months after deployment.*

## Benefits and Results

- ★ The solution had 2 phases: 1) creation of the automation process and 2) visualization and analysis of these statistics, which allowed for improved visibility when building the first phase.
- ★ The web service and mobile application provide easy access to data anywhere, even without connection to the Internet.
- ★ The Client optimized personnel costs by 70%.
- ★ The solution has accelerated work with data by 30% within the first three months after the deployment. Now the indicator increases by 10-15% every quarter.