

# CASE STUDY

**Next Gen Micro Services Solution  
for Payroll Processing Application**

**softserve**

## Client Background

Our client is a public corporation that helps families find child care, senior care, special needs care, tutoring, pet care, housekeeping, etc. The company has its own marketplace with different solutions. Its website has 32.9 million members across 20 countries, and attracts 6.4 million unique visitors a month, with a new job posted every 30 seconds.

## Business Challenge

Our client made a strategic acquisition of a company owning a website that enriches and improves our client's value proposition. The websites had to be merged, upgraded, and many new features had to be developed. The challenge that our client faced was to deliver all tasks in the most effective way that ensured decreased time to market and increased the number of customers.

Our client was looking for a partner that could help it achieve its goals, and also provide ongoing support and maintenance.

## Project Description

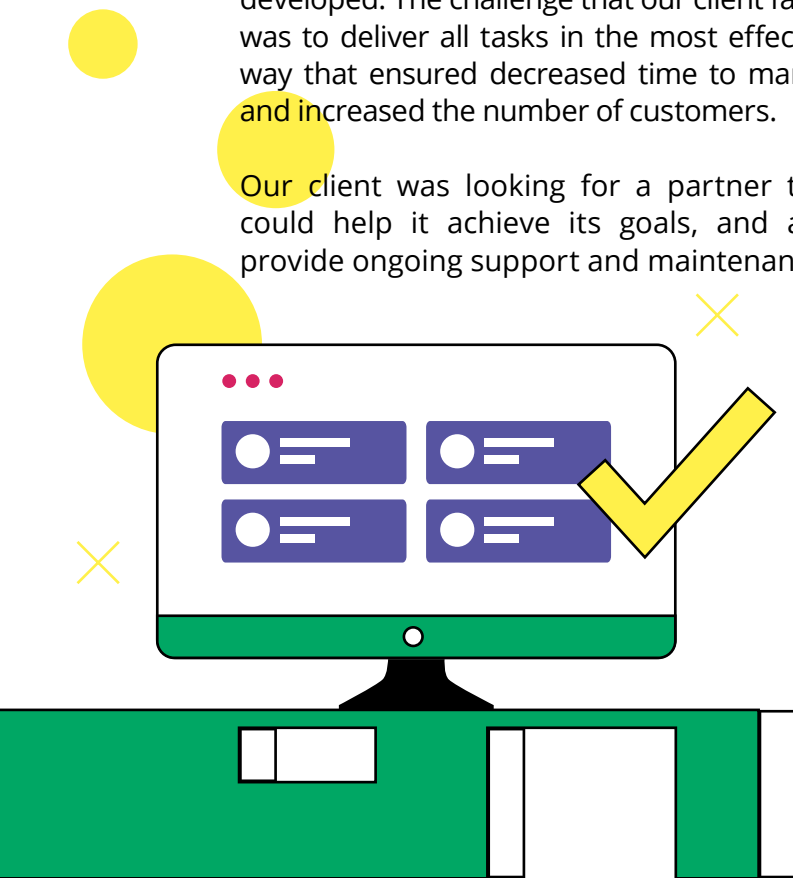
Our client's web application delivers recruitment solutions for its customers. This web application stores different job vacancies and users can post or find any jobs that are related to the workplace or care spheres.

The web application that was integrated provides the customer with the following services:

- Payroll—providing payroll solutions in a simple and easy online format
- Tax filings—preparing federal and state taxes, timely and accurately
- Guidance—available experts for advice and support
- Workers' compensation—establishing policies with trusted partners

SoftServe conducted the project in a few phases which were mainly devoted to migrations, integrations, and product support. One of the phases involved support, administration, and maintenance of the recruitment web application.

SoftServe had a technical ownership of the newly integrated web application product and was responsible for the development of payroll calculations and tax charge features. The team was also involved in the design and development of the microservices architecture of the product. SoftServe analyzed bottlenecks in the system and improved the performance of the product.



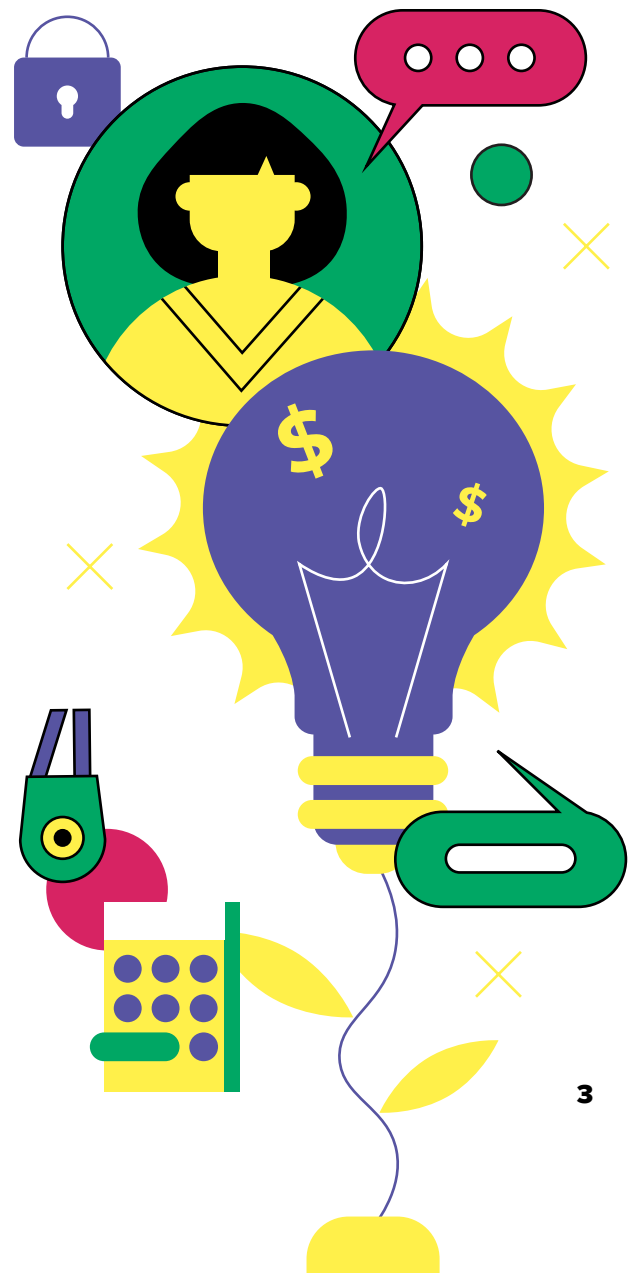
SoftServe covered a few integrations during the project:

- Integration of the payroll platform with recruitment platform. In the first stage of registration, users can choose where to register (both platforms store users information after registration)
- Integration of the payroll platform with Electronic Fund Transfer for banks and credit cards
- Integration of the web application with a trusted partner that provides information about users of the product which is entered into the system to calculate paycheck, run these into a tracking system, and finally, re-send final data to the recruiting application
- Integration with paycheck and tax calculators based on a Symmetry Tax Engine system (users can see all taxes they pay)
- Integration with Microsoft Azure to encrypt data (encryption keys are stored there)
- Integration of the web application with GitHub Enterprise, BitBucket, and CodeCommit (a part of AWS cloud)
- Integration of SilverPop reporting system with Iterable reporting system for providing user statistics

SoftServe's security team delivered a PCI Awareness training required for people working for organizations that must comply with the PCI Data Security Standard. Aimed at promoting employee awareness of security, this standard drives organizations to improve their security posture and reduce risks to cardholder data.

SoftServe covered several migrations during the product:

- Migration of the software from Monolith with ASP.Net to Microservices with .Net Core, GoLand, and Docker
- Migration of the software from Microsoft Azure to AWS cloud solutions
- Migration of the software from Web Form to Web API
- Migration of the software from GitHub to BitBucket



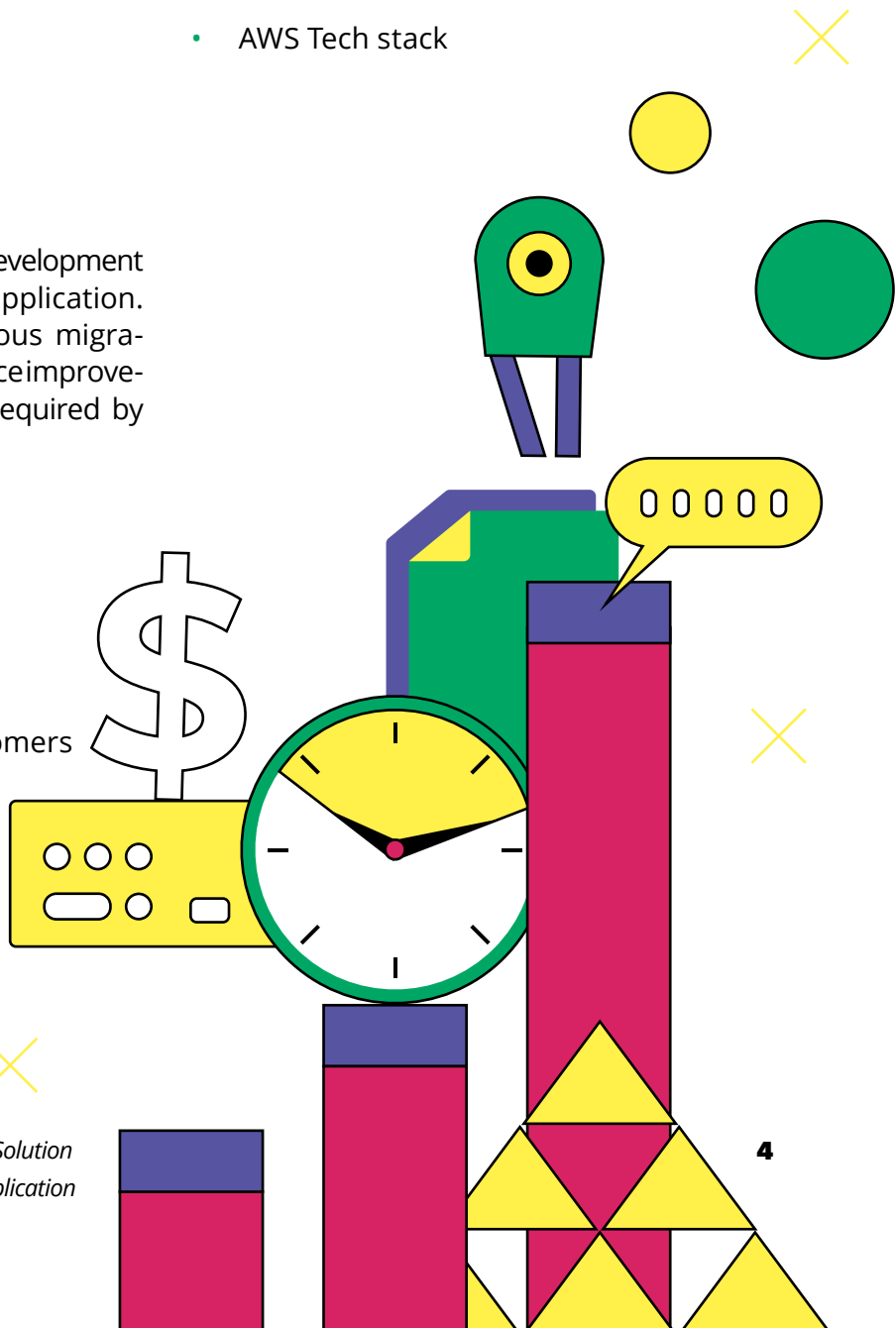
## Technology Stack

- C#
- Go
- MS SQL Server
- N1QL
- .net 4.61
- .net Core 2.0
- ASP.NET Web Forms
- ASP.NET MVC
- EF 6
- EF Core
- ADO.NET
- Microservices
- Docker
- Hashicorp stack
- Azure Cloud Services
- AWS Tech stack

## Value Delivered

SoftServe delivered efficient development solutions for the payroll application. The team provided numerous migrations, integrations, and performance improvements to the product that were required by the client. As the result, our client:

- Decreased time to market
- Improved payroll features
- Increased income
- Expanded its number of customers



## ABOUT US

SoftServe is a digital authority that advises and provides at the cutting-edge of technology. We reveal, transform, accelerate, and optimize the way enterprises and software companies do business. With expertise across healthcare, retail, energy, financial services, and more, we implement end-to-end solutions to deliver the innovation, quality, and speed that our clients' users expect.

SoftServe delivers open innovation, from generating compelling new ideas, to developing and implementing transformational products and services.

Our work and client experience is built on a foundation of empathetic, human-focused experience design that ensures continuity from concept to release.

We empower enterprises and software companies to (re)identify differentiation, accelerate solution development, and vigorously compete in today's digital economy. No matter where you are in your journey.

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