



ACCELERATING INNOVATION

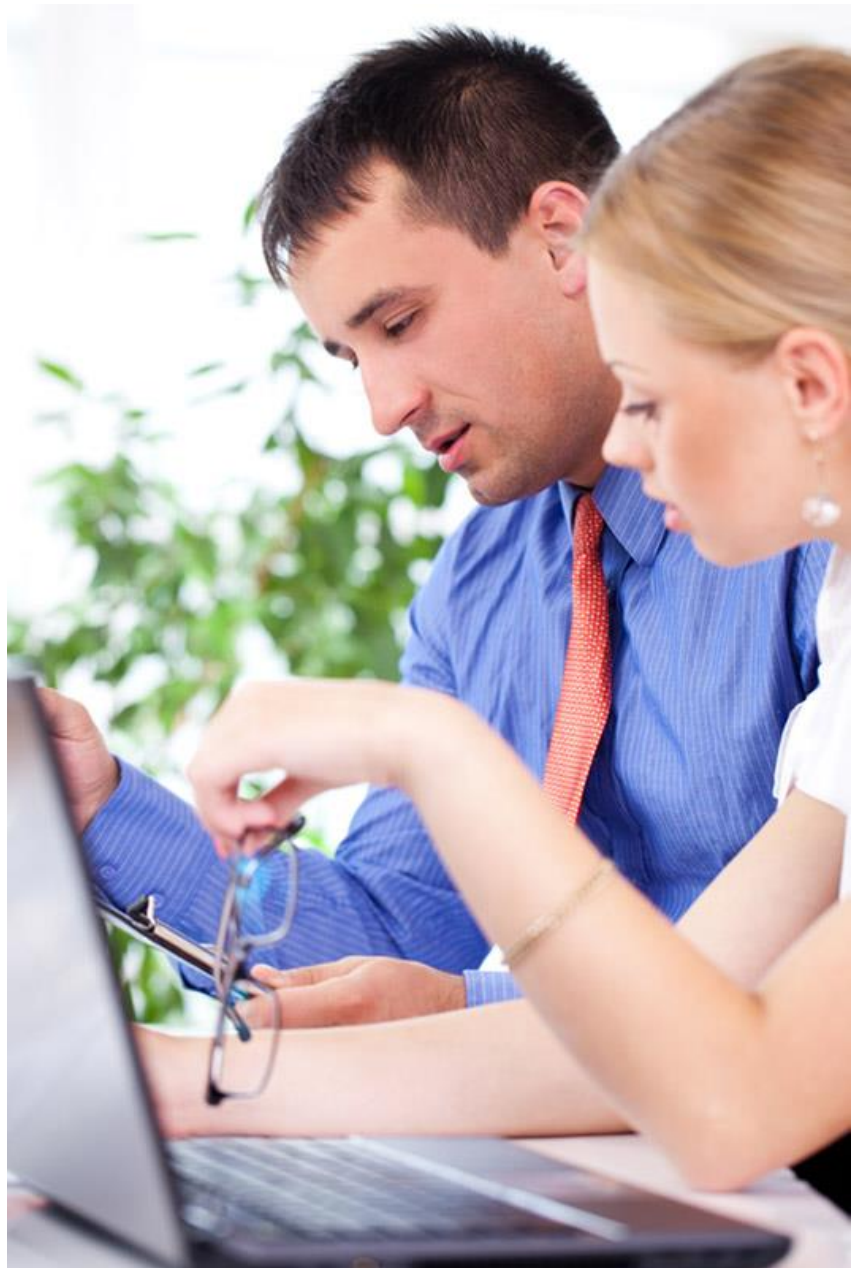
How Strategic Consulting
Empowers IT Companies in Software Development

AVS Solutions LTD
www.avssolutions.rs



About client

SEE Digital is a shared service provider for UNIQA insurance companies in the SEE region. Its main focus is on IT solutions, business analysis, project management, target operating business models, and insurance product modelling. The company was established in 2012 as a joint initiative to gather the best possible teams. With strong security policies and reliable infrastructure, SEE Digital cloud systems enable clients to focus completely on their business and achieve specific business ideas.



Project

Consultancy services

Understanding client's challenges

Even though UNIQA is not an IT company, it invests heavily in innovative IT solutions. That way they keep pace with the competition and provide the best possible quality for their clients. Over the years, UNIQA developed many interconnected applications that require constant updates. UNIQA faced the typical challenges associated with adopting a new code structure and transitioning to updated frameworks.

It was inevitable to separate the back end from the front end and they were looking for a very robust framework to be used as a long-term solution.

They decided to use Angular, but they didn't have enough experience working with it, and various challenges started to appear – how to set up architecture, organise the code, test the code, which library to use, and so on. Not to lose a lot of time, they had to seek the help of someone highly experienced who had already gone through all these challenges. This is how our cooperation began in April 2023 and is still ongoing.

Solution

UNIQA already has very well-organized development centres and several development teams. We got acquainted with their applications, people, and goals at the beginning of our cooperation. Recognising the challenges, we used our extensive experience to help them find the best solutions and practices. Our role was primarily focused on consulting services and not on developing code.

AVS Team's approach to technical project management focused on establishing robust practices that streamlined development workflows. We defined clear objectives, timelines, and deliverables for Angular projects while embracing Agile methodologies already defined to support iterative development and adaptability. To ensure efficient task tracking and collaboration, we leveraged tools such as Azure DevOps.

For architecture design, we created scalable and maintainable application frameworks. This included developing a modular architecture that simplified new features integration and implementing state management with libraries like NgRx to handle complex data flows effectively. The architecture was carefully aligned with the client's long-term technical objectives, ensuring its suitability for future growth and scalability.

To set up the development concept, we built a strong foundation for Angular development. This involved defining coding standards and conventions to maintain consistency across the team. We established a development environment with essential tools like Angular CLI, VS Code extensions, and debugging utilities. Additionally, we recommended best practices for code versioning and collaboration using Git, ensuring a seamless workflow for developers.

Further, we enhanced the client's development processes by creating standardised workflows to improve efficiency. Clear processes for feature development, code reviews, and deployment were introduced, along with detailed documentation to guide new developers during onboarding. Emphasis was placed on maintaining comprehensive internal documentation and promoting knowledge sharing.

In selecting suitable libraries and frameworks, we conducted an in-depth analysis of available Angular tools and third-party integrations. Based on this analysis, we recommended productivity-enhancing solutions, such as RxJS for reactive programming and PrimeNG for advanced widgets, evaluating each option for compatibility, community support, and scalability.

To optimize delivery pipelines we recommended Continuous Integration and Continuous Deployment (CI/CD) protocols. Tools like Jenkins and GitLab were used to automate building and testing code with each commit, while streamlined workflows facilitated efficient releases to staging and production environments. Training sessions ensured that the client's team could maintain and optimise these pipelines independently.

Finally, we provided extensive guidance on testing Angular applications. A comprehensive testing strategy was introduced to improve code quality, including the use of tools such as Jasmine and Karma for unit testing and Selenium for end-to-end testing. Workshops were conducted to enhance the team's ability to write and maintain effective test suits.

This multifaceted approach empowered the client to achieve higher productivity, scalability, and code quality in their Angular application development processes, ensuring both immediate improvements and long-term success.

By applying agile methodology and organising regular meetings, our consulting services enhanced the development quality for three key applications, involving a team of over a dozen developers.

Business value and benefits

Large companies experience challenging times when deciding on "rejuvenation" and transforming older solutions into modern technologies. The reasons for this are great complexity, the risk that some parts will not be well implemented, and the potential slowness in reaching the goal, which can lead to adverse consequences for the core company's business. Through this type of cooperation, UNIQA overcame all these threats by gaining access to expertise and specialised skills AVS Solution has. AVS Solutions brings deep technical knowledge and industry experience that was not available in-house. This expertise guided businesses through complex projects, helping avoid costly mistakes and ensuring best practices. We point out bad practices too, and by doing this we educate team members who record constant progress, which is also a form of investment in their teams and individuals. In this way, UNIQA achieved another great benefit from this cooperation. They reduced high hiring costs, and optimised technology processes to help reduce wasteful spending by ensuring efficient resource allocation.

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"The AVS Solutions team was very patient and open to sharing experiences. AVS Solutions achieved the project's objectives, and the client's stakeholders were satisfied with the outcome. AVS Solutions' collaborative approach fostered a dynamic exchange of ideas, maintaining a commitment to timely delivery."

*Milutin Stanković
Enterprise Architecture Manager, SEE Digital*