



PROJECT

The business plan for Dadda was created back in 2007 by an American entrepreneur. For a long time he couldn't find the right team to help realize his idea in line with his expectations. Eventually, in 2016, when he decided to cooperate with us, his project was finally implemented. It was our first, big, international cooperation and we built everything from scratch.

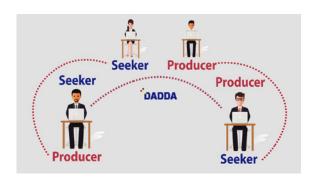
Dadda is a platform where users help each other find solutions in various areas of life in real time. The Searchers ask their queries on the portal and the Producers offer their help. The aim of the platform is to enable users to receive immediate answers and solutions to all kinds of problems. Anything from finding a recipe for a cake to information on how to unscrew the steering wheel in a Land Rover or improve website scripts. Each user can both ask as well as answer questions from others.

Dadda puts a strong emphasis on **social functions** and **real-time communication**. The site is focused on immediate responses to inquiries from people from all over the world.

A user's role on the site can be in 1 of 2 characters:

Seeker - a user who has a problem and requires assistance. He opens the "Case" so that other users (Producers) can apply to solve the problem.

Producer - a user who offers assistance. He contacts the Seeker in order to provide the answer to the question and receives credits for solving a problem. Then he can exchange credits for real money.



CHALLENGE

The challenge in this project was to create a fast, technologically advanced and real-time system. It was supposed to support communication, give users the opportunity to help each other and provide a secure on-line payment system.

A clear goal has been set for programmers - select the right technologies and use agile methodologies as much as possible. We decided to create a system that will meet the needs of end-users and ensure a high level of satisfaction from using the service. To meet the client's expectations we have chosen the latest, but fully tested and regularly developed technologies, like NodeJS and PHP-FPM 7.1.

It was crucial for our client to project a transparent administration panel that would fully enable the management of portal, user profiles, user cases and payments.

One of the big challenges that we managed to meet was to design an application that would run in real time and keep the user informed about all activities taking place in the system without reloading the page. It is based mainly on the internal communicator and messaging system with internal notifications.

IMPLEMENTATION



Bearing in mind the expectations of the client we performed the functional analysis of the application first. Next, we created mock-ups and process diagrams mapping the final product. After this a static version of the site was created which was constantly adapted to the needs of the current market.

Our client had conducted a series of tests to check the expectations of users for the product and its functionality, so that we could create a platform that would be easy and pleasant to use for the consumer.

Under the external layer (front end) - that is what the user sees on the site - there's a much more advanced internal layer (back end), which consists of business logic with support for all system actions. We had to create application scripts in such a way that would enable future development.

The technology stack used in the implementation of the project is based on one of the most popular backend frameworks in the world - Laravel - and a dozen libraries and tools that have helped the software development process.

After the development phase, the application has undergone a number of tests:

1) Performance tests:

- study of the response time of the system functions,
- comparison of response time for a single user and for multiple on-line users,

2) Load tests:

- checking the speed of pages loading with multiple on-line users performing resource consuming actions,
- checking the speed of database queries if a given query is sent dozens of times in a set unit of time, how will this affect database performance?



IMPLEMENTATION



3) Security tests:

 an external company has performed penetration tests for us followed by an audit. Based on the received report, we have implemented some necessary changes,

4) Usability tests:

• our UX specialists tested the application for usability issues.

In addition - in order to check the functionality of the application, we generated 1000 topics on the forum for 100 random users. A script would select one of every 100 users, who would create a separate thread, where 1 to 30 responses would be generated.

We also generated 100 "friends" and 50 "networks" for a hundred users. Each network received from 3 to 10 friends. Thanks to the conducted tests, we checked how the application actually works and what should be improved in it. After the audit, we analyzed what could be changed further in terms of optimization, and then we implemented the corrections.

The launch of the website was also a big challenge for us. We had to set up and optimize the server environment so that the application is secure and fast for a large number of active users on-line in real time.

RESULTS

The result of our work was creating an extensive website based on social networking features that are well known among Internet users.

We have built individual service modules:

Cases - when one Seeker works with one Producer.

Forum - where users open threads and publish content to build their reputation. Producers may receive applause from other users and, additionally, points, if their solution was satisfying for the Seeker.

Messages - where users can communicate with each other using the instant messenger.

Search engine - this makes it easy to search for cases, users or interesting topics on the forum.

User profiles - contain a lot of information about users that helps build their reputation.

Friends - the ability to add friends to one common list, which simplifies contact and future cooperation.

Networks - groups of friends that allow for easier communication or better matching of cases to appropriate Producers.

Payments and withdrawals - payments refer to Cases, where the Seekers pay Producers for solving their problems.

The modules we have implemented allow Users to solve each other's problems as simply as possible, in a transparent and friendly way.

From the point of view of the Producers, who have the ability to help the Seekers, the advantage is the ability to constantly increase the indicators of their reputation, and thus increase their commission earnings.



DOTINUM

REZULTATY

In addition to creating and maintaining the application, our company continuously supports the customer with management of the entire server environment, which currently consists of three separate servers with services responsible for:

- · delivering web content and storing all files,
- storage of databases,
- sending and receiving e-mails.

...after previous failing I was really after the technical skills with Michał (the owner of Dotinum) being really involving. He was asking the correct questions. He was making the correct suggestions. And even if I wanted things done, he was not afraid to tell me that what I am asking is not really ethical or it's not the right way of doing it or the best way of doing it, that there are other options. I like that we had that back-and-forth communication that's also a big factor why I decided to work with your company.

Alarick, owner of Dadda

