

OMNI-CHANNEL ECOMMERCE PLATFORM FOR RENTING HOUSEHOLD EQUIPMENT: A JOURNEY FROM A CONCEPT TO IMPLEMENTATION



OBJECTIVE

Create e-commerce web platform from scratch for mobile, laptop and desktop devices in the conditions of tight time frames and changeable requirements.

CHALLENGE

Intetics's Client is a US-based eCommerce company committed to delivering working families access to great brands in household appliances and electronics at affordable prices. Our Client helps its customers to rent items they may not have the credit to buy outright.

At a stage of the concept realization, the Client faced the challenge of developing a solution from scratch, turn their innovative concept into a commercially viable product and launch it to the market in 3-4 months. The Client was looking for a software vendor experienced in handling these challenges. They needed a vendor with a solid background in full-stack technologies and knowledge of development tools required for the system.

Having extensive experience and

portfolio including similar projects, Intetics offered the vision for platform development. The Client agreed to choose us to deliver the solution.

SOLUTION

The Intetics team started with requirements analysis, development of a strategy and a roadmap. Based on the Client's sprints program, our team created the iteration plan to meet Client's business objectives.

For successful implementation of the Client's idea, Intetics decided to follow Agile methodology. It was supplemented by communication infrastructure including daily status meetings, Slack tool and face-to-face meetings with the Client. To speed up the product launch, the Intetics team introduced the practice of every-day and/or in-a-day releases, that also ensured frequent feedback cycles. For improving the efficiency of the existing workflow, our team was divided into two groups: feature development and customer support. The first one was focused on the major scope of work and the second covered urgent tasks.

The following tools were

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proposed by the Client:

- Atlassian (Jira, Confluence and BitBucket) for planning, monitoring, control and cooperation during the project;
- G Suite and Slack for communication;
- DigitalOcean for application hosting.

Since the solution was implemented from scratch, many requirements were defined during the development process based on the Client's customers feedback. Thus, the established workflow was influenced by the Client's changeable concepts and suggestions for the improvement. The Intetics team created a task prioritization approach to adapt to last-minute changes and efficiently manage the development process.

The Client had several ideas of concepts realization. To choose the best, Intetics prepared the mock-ups, proof-of-concepts and made demos to visualize the work results, clarify the Client's requirements, get feedback and check the proper task understanding. Based on that, the team implemented changes and adjustments.

Visiting client's facilities gave us an opportunity to discuss challenging issues, update the backlog and establish interpersonal contact with the Client's in-house team and stakeholders. To handle time difference challenge, Intetics shifted its working hours to overlap with the Clients' working schedule and to enable at least 4-5 hours of concurrence.

Intetics integrated the pack of following tools to ensure system compliance to the top-notch industry technologies:

Integration with **BestBuy** was implemented to make it easier for Client's customers to go through all the stages of sales cycle easily: switch product categories, choose delivery options, calculate corresponding fees, monitor status of a purchase. According to the Client's feedback, it's one of the best integrations with BestBuy in the retail industry.

- **Recurly** was integrated into the solution in order to provide our Client with subscription and recurring billing management system.
- **Auth0** helped the Client to ensure data security and website authorization.
- **Emailage** and **Giact** were used by the Intetics team for fraud prevention.
- **Intercom** was implemented to track requests by Customer Support. Later Intercom was changed to **ZenDesk**.
- **Amplitude** was integrated to get comprehensive information about users' behavior on the website.

Switching **PostgreSQL** management system to **MongoDB** helped to efficiently scale database solution.

Integration with all these systems helped to create a unique solution and make it user-friendly, enhance user-experience and grow customers' loyalty. Maintaining open

communication with the client's in-house team throughout the project, Intetics engineers developed mobile and desktop extensions.

Technologies Utilized

- DigitalOcean
- Angular 6
- Angular powered Bootstrap
- NET Core
- NET Boilerplate
- Log4net
- MongoDB
- Docker

The project started with a team of four members, and in a half of a year the team was expanded to fifteen engineers.

RESULTS

In the result of the cooperation with Intetics, the Client received an innovative, unique for its industry solution. We managed to adjust to the Client's business goals, own domain expertise and cutting-edge technologies, adapt to varying requirements and address their challenges. Intetics delivered the platform within the initially estimated timeframe.

Our team created a task prioritization system, flexible development model, settled transparent communication approach and reliable technical expertise helped us to develop a platform that met Client's requirements.

Additionally, our innovative solution for Customer Support helped the Client to facilitate employees' work, save time and

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increase the overall productivity. Intetics organized a website support system to provide our Client with operative and innovative issues handling.

After the launch, this game-changing platform helps the Client to lead the way in the industry. Although their company is only partway through the

revolutionary journey, Intetics helped the Client to achieve significant success and will continue to deliver impressive results that set the standard for eCommerce of tomorrow.