Up to 2 million financing simulations daily on over 350 Renault and Nissan websites worldwide. The solution delivered, supported and hosted by MakoLab.

**Goal**

One of the most crucial factors influencing a client’s decision to purchase a car is the price of the monthly repayments. Car dealers are familiar with numerous situations in which a client withdraws from buying the car which they had already decided to purchase, once they learned of the regular financial burden their home or company budget would have to face.

The Renault-Nissan Alliance, in cooperation with their financial branch - RCI Banque, decided to provide a solution which would enable their clients to calculate the amount of their monthly payments directly on the website, on the basis of data updated in real-time. By being able to calculate the estimated amount of an instalment, many clients are now prepared for a projected level of expenses prior to visiting a dealership.
Solution

MakoLab's financial simulators can be fully adjusted to a brand’s corporate identity. The processing mechanisms of the simulators operate in two modes: the default setting (i.e. ‘Default Offer’) and an interactive simulation. In the default setting, information concerning the monthly instalment of a standard credit or leasing offer is provided automatically. In the interactive simulation mode, the user may freely adjust the calculation parameters (time of payment, accessory options, etc.) and test different installment variations. The capability of integrating the simulator with a car configurator enables the potential client to instantly evaluate their crediting options in detail, right after configuring a selected car offered by Renault-Nissan. In selected countries, the simulators are augmented with the capacity to send questions to a specified dealer or an RCI Banque representative. Completed documents can even be sent directly to the bank in order to submit a credit application.

Advanced technological solutions and functionalities have been effectively employed in Makolab’s financial simulators. HTML5 allows for easy configuration and adjustment of a simulator’s appearance to the local conditions. At the same time, the centralised method of managing the tool provides Renault-Nissan and RCI Banque with full control over the data used in the financial simulations. The centrally-fed financial engine allows for the processing of constantly up-to-date offers, with consideration for the actual financing conditions valid in any given country. It is possible to load data using correctly prepared files in popular formats, such as .xls. However, in order to automate this process data is loaded directly from other systems, including from the banking system used by RCI Banque. This significantly reduces the time required for data updates and facilitates the process of credit simulation as well.

The simulators are often updated visually to respond to the dynamically changing visual appearance of the websites which host them and for their constant optimization in regards to their usability.

Security and operational performance are ensured by the server infrastructure located in MakoLab’s Data Center. The cluster architecture with load balancing allows for continuous operation, even in the case of a failure of one of the processing servers. The application of caching mechanisms contributes to reducing the time required for calculations and providing results to the end-user. From both cache servers in central Poland and on other continents, and thanks to the GeoDNS service, we support the financial simulators used by RCI Banque worldwide.
Potential clients of Renault-Nissan directly benefit from the functionality and usability of these financial simulators. They are available on the websites of all the brands of the Renault-Nissan Alliance, in 20 countries around the world, including India. Collected data has shown that the users run 1.5 to 2 million operations in default settings, and more than 60,000 operations in the interactive simulation mode (with the average number of parameter changes on the level of 3-4 per instance) every day.

Another testimony to the success of our financial simulators resides in the future plans of the Renault-Nissan Alliance and RCI Banque. One of the directions of development for the financial simulators is not only to employ them in other areas of sales (e.g. electric car batteries), but also to merge them with tools such as Makolab’s car configurator – where after obtaining the price of a configured model, the user would instantly receive a calculated monthly instalment.

Another step that indicates the developmental trends of the tool is the switch to web services and merging the simulators with RCI Banque’s systems, thereby shortening the journey from completion of a form to applying for credit.