The Story of NESTOR+, a connected food robot

Nestor+ is a new generation of food robot designed and engineered with Dassault Systèmes solutions to demonstrate the value of using an integrated 3D platform in the home and lifestyle industry. Driven by innovation and consumer insights, this project came to life thanks to working in the 3D digital world.
Our 3DEXPERIENCE® platform powers our brand applications, serving 12 industries, and provides a rich portfolio of industry solution experiences.

Dassault Systèmes, the 3DEXPERIENCE® Company, provides business and people with virtual universes to imagine sustainable innovations. Its world-leading solutions transform the way products are designed, produced, and supported. Dassault Systèmes’ collaborative solutions foster social innovation, expanding possibilities for the virtual world to improve the real world. The group brings value to over 220,000 customers of all sizes in all industries in more than 140 countries. For more information, visit www.3ds.com

A CONSUMER-DRIVEN PROJECT

Today’s consumers are looking for products and services that help them live better while saving their time. In the last five years, kitchen cooking habits have changed and cooking assistance has become a must-have.

Based upon consumer feedback, an opportunity was identified to create the next generation of food robot. Nestor+. The name “Nestor” means “house steward” and the “+” refers to an innovative, new product.

A COLLABORATIVE, INDUSTRIAL DESIGN WORKFLOW

From shape and mechanical design, to simulation, mold and high-end visualization, the 3DEXPERIENCE® platform was used to create a complete and integrated industrial design workflow for a kitchen robot.

Working in 3D, designers were able to easily imagine, create and model their ideas, transforming concepts into reality. To go further, simulation tools were used to help avoid manufacturing defects. Available in a single integrated platform, different stakeholders followed the project and interacted, and updates were made easily.

Dassault Systèmes provides the ultimate solutions to create faster and more efficiently, allowing the prediction of consumers’ needs, and thus shaping a new product from the ideation phase. In a time when all consumers are seeking ultra-configurable products, 3D experiences are increasingly essential and can even offer consumers products that are not even on the market.

For more information, visit our solution page.

A MULTI-DISCIPLINARY APPROACH

Different roles and solutions were involved in this innovative project. The real-time analysis from the market was done using NETVIBES®. The conception phase—including 3D design and realistic simulation—was done with CATIA® and SIMULIA®. This holistic approach with simulation enabled evaluating the performance and the safety of materials and products before committing to physical prototypes.

With 3DEXCITE® and its high-rendering capabilities, it was possible to visualize the details of the product and produce optimal marketing content.

Finally, ENOVIA® enabled the synchronization and collaboration of design and engineering teams to ensure consistency of the project.

SOLUTIONS TAILORED TO HOME AND LIFESTYLE COMPANIES

With Dassault Systèmes solutions, Home & Lifestyle companies can develop innovative products faster and cheaper, and deliver products consumers love. Everything is available in the same 3D environment, removing problems caused by having to import and export data. The free flow of ideas through social innovation provides multimedia dashboards to increase creativity and keep abreast of market needs. With Dassault Systèmes and the 3DEXPERIENCE platform, you can develop more design alternatives and make the right decisions to launch innovative and successful products.