In today’s rapidly evolving technological landscape, organizations often find themselves grappling with legacy systems that are outdated, inefficient, and unable to keep pace with modern demands. However, embarking on a reengineering project can breathe new life into these systems, unlocking untapped potential and driving significant business value.

In 2020, Yamaha achieved a record market share, with consistent growth of +18%. This has increased the complexity of the ecosystem, resulting in additional obstacles and bottlenecks. Since then, it has grown at a rate of roughly 20% per year, outpacing the market average and gradually increasing its market share in comparison to its primary competition. In terms of production output, Yamaha Brasil produced approximately 150,000 motorcycles per year prior to the epidemic, and by 2023, the company was producing more than 300,000 motorcycles annually.

With the reengineering project, T-Systems is supporting the customer in transforming their outdated legacy systems into a streamlined and agile digital infrastructure.

“A very important point that was critical for us is the experience that T-Systems has in this environment, it has years, decades of experience in the automotive industry and when we talk about application modernization, we are not just talking about applications, we are talking about business processes. So, we looked for a partner who had experience in these functional areas of manufacturing, logistics, HR in our industry. So, T-Systems not only helped us understand the difficulties we were having in the systems, but also brought a new perspective to the business processes we have in our operations.”

Fernando Rostock, Former CIO, Yamaha Motor do Brasil

At a glance
- Reengineering project for Yamaha Motors to modernize the legacy systems
- Reengineers the most critical production systems combined with an agile review model
- Supporting operations, simplifying integrations, and increasing the usability of the systems
Reference in detail

The challenge

There was a repositioning of the Yamaha Motors Company, with a greater focus on a more connected and digital world. The journey started with the establishment of the e-commerce portal, through which allows the purchase of not only the manufacturer’s motorcycles, but also components, clothes, and marine engines.

Yamaha Motors conducted an environmental study, identifying existing assets as well as potential areas for development and modernization for round five months. This allowed the company to map both the IT environment and the business context in which it worked. The PDTI was formed from this, along with definitions of where Yamaha wanted to go in the coming years.

The objective was to modernize this application environment, integrating many of them and, in addition, making better use of data. One of the pillars of the master plan was to foster a data culture throughout the organization, with more integrated and intelligent applications across the most vital systems.

The solution

For the reengineering project, the customer wanted to modernize the legacy systems. To enable this, T-Systems designed a solution that reengineers the most critical motorcycle production systems and incorporates an agile review model for the processes that support operation, simplifying integrations, and boosting system usability for the business user.

T-Systems provided a new technological solution with the option of migrating to the cloud, as well as a framework that encourages creativity and innovation and allows the inclusion of other technologies, such as IoT. This is done with a focus on delivering value to the company while keeping it up-to-date technologically.

As the project began at the onset of the pandemic, T-Systems did an excellent job of governance and talent retention, allowing the project to be conceptualized remotely, and an efficient development pace ensured the success of numerous system installations. T-Systems managed the project using procedures, technology, and methodologies such as design sprints, which served as the foundation for this program. There were Design Thinking workshops to identify and direct the formulation of the strategic roadmap, as well as enhance the work model, which aided in the improvement of the governance framework.

T-Systems updated the technological stack to create inputs and set up the DevOps platform. Visual development was completed, using professionals specializing in UI/UX to create Yamaha’s identity while maintaining the standardization already in place. The project was carried out utilizing Scrum/KANBAN, which used manual and automated tests to create a unique, bespoke model for Yamaha.

Customer benefits

The successful completion of the reengineering project yielded a multitude of benefits with enhanced performance, faster response times and reduced downtime. This translated into enhanced productivity and efficiency across the organization. The modern architecture provided scalability, and flexibility, allowing the customer to adapt to changing business requirements and scale their operations seamlessly. According to Daniel Pelliciotti, the Project Manager at T-Systems do Brasil, “Carrying out the project during the pandemic was a challenge that we overcame thanks to the efficient management of remote teams and the commitment of all members. Customer satisfaction led us to win the ISG Paragon Awards™ - Excellence Category.”

Moreover, with a more agile and responsive system in place, Yamaha Motors was able to enhance the overall customer experience. Faster transaction processing, personalized services, and improved accessibility contributed to higher customer satisfaction levels. They gained a competitive edge in the market. The customer was able to innovate more rapidly, launch new products and services faster, and stay ahead of industry trends.