Mindtree
Welcome to possible

Accelerated software releases for a leading supplier of in-car navigation systems

Over the last few years, the demand for personal navigation devices has declined due to the onslaught of smart phones and in-dash navigation systems. In response, players have focused on improving their products' accuracy, relevance and ease of integration to enter fresh markets and reinforce positions in traditional markets.

Here is how Mindtree helped a leading supplier of in-car navigation products and services make an unprecedented six releases in a single year while adhering to high standards of quality by providing testing services.

The challenge
The customer required a testing partner that could help it rapidly make new releases, thereby enabling it to be more competitive with new entrants in its industry. For instance, it wished to add new functionality that would allow end users to enjoy better route planning, live traffic updates and points-of-interest information. Its key concerns were to:
- Shorten the time to market while maintaining high quality
- Improve processes to ensure predictable release timing
- Ensure 100% compliance with accuracy and performance standards

Our solution
Mindtree collaborated with the customer to achieve these goals and overcome challenges along the way, including a mismatch in defect find and fix rates that was leading to a large backlog of defects that required urgent attention.

Mindtree also determined that the customer needed to adopt a new scrum model to deliver consistent and predictable quality; develop coordination between testing and development teams; and improve the quality of test sets. The team proposed several process improvements that were adopted and implemented by the customer.

Key pillars of Mindtree's solution include our planning effort, technical quality improvement effort and testing strategy.

Business impact
- Supported six major releases in one year
- Enabled predictable release schedule
- Improved spec releases
- Improved product quality and end user experience
- Reduced test cycle time

Planning

- Conducted extensive pre-testing planning
- Included testing efforts while sizing and picking the stories
- Effectively addressed bugs by including all stakeholders for clearing the backlog of open and untested fixed defects
- Ensured visibility into project progress

Technical quality improvement

- Introduced separate code line for product releases and feature development
- Interlocked teams for better collaboration and sharing of expert thinking
- Brought globally dispersed teams together for demos and retrospectives to share best practices and implement improvements

Testing strategy

- Ensured signoff on the feature branch activities by test team before merging on to product branch
- Introduced "risk-based testing" on the product branch to shorten the product cycle
- Developed checklist and guidelines for test case development and usage of design techniques to cover feature and end-user scenarios
- Improved quality of test sets by updating the legacy test sets and covered scenarios for exploratory defects

Customer testimonial

'Great achievement for the team, who has worked so hard this year in delivering 6 successful releases & Q4.1 is widely regarded as the best quality release to date, as this is a testament to the hard work that the teams have invested, to deliver high quality features'.

About Mindtree

Mindtree is a global information technology solutions company with revenues of over USD 400 million. Our team of 11,000 experts engineer meaningful technology solutions to help businesses and societies flourish. We enable our customers achieve competitive advantage through flexible and global delivery models, agile methodologies and expert frameworks.