Ebook reader testing

Customer

Russian OEM/ODM electronics manufacturer. The company is focused on creation of competitive electronic products on emerging markets.

Project

Testing and localization of the ebook reading device that is intended for the Russian market. The project was implemented on the basis of an existing device of South Korean production (but with limited functionality and poor quality software).

Objective

Perform an in-depth testing of the device:

- The product's software usability testing
- The product's graphic interface testing and localization testing
- Playability testing (the devices operation with different file formats: text, graphic, audio)

1. Create a complete set of the necessary documentation for the device.
2. Develop a specific test plan and verify consignment, received from manufacturer, to determine the number of marriage devices.
3. Perform a comparative analysis of similar devices in order to determine the competitive advantages of the resulting product.
4. Provide technical support and trainings for service centers.

Solution

1. All works to assure the quality of the device were conducted in two stages. The product was released with an updated software and documentation at the end of each stage. To ensure proper operation of all functions of the device and, consequently, the finished product quality, the following steps were performed:

- The first stage involved full testing of the reader's current functionality in order to obtain a stable firmware and start selling the product. As a result of testing, a report that contains all of the identified defects and recommendations for necessary improvements was drawn up
- On the second stage - drawing up a report containing recommendations to improve and expand the functionality of the device in order to enhance its competitiveness in the market. Our specialists performed market research and made recommendations to upgrade the user interface, process the audio player and to increase the number of supported formats and the quality of their display. Then

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our experts performed a full array of testing services to maximise final project quality
2. A set of required documentation has been defined and written: user manual, quick start guide, service manual, etc.
3. Consignment, received from manufacturer, was thoroughly checked by our experts. As the result the percentage of marriage products was determined, defective devices were removed from the party.
4. At the final stage of the project our experts performed a comparative analysis to determine the competitive advantages of the end product over other similar products on the market. Samples of devices, provided by the customer, have been extensively tested using the specially developed for this technique. Report on the results of this comparative test was presented to the customer for further promotion of the product.
5. In addition to providing guidance on maintenance and service, used by service centers to handle complaints of consumers, our experts, if necessary, advise on emerging issues and training of staff.

The specifics of the project

The project was implemented under the following conditions:

- Collective work of two teams, located in different countries: Promwad QA team and a team of developers, located in South Korea
- To build a successful collaboration model, different online bugtrackers, management systems and communication tools were used
- New assemblies were released each week
- Short project time

Promwad experts' high qualifications and extensive experience helped them achieve effective collaboration between the remote developer team and the customer. This interaction was based on the Redmine project management software platform, which was used to register all detected defects as well as suggestions for improvement. Also, this system was used for human resources management under the project. This strategy of cooperation made it possible to cut both the money and time needed for finding required solutions, which became the key to a timely completion of the project.

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Also the negotiations and discussions with the developer team were conducted daily using the VoIP system Skype as well as email. This strategy of cooperation made it

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Advantages

- An accurate and transparent quality assurance process was developed, which helped achieve the project objective in the shortest possible time
- An effective process of cooperation under the project between remote developers' team and the customer was set up. It resulted in reduced risks, time and money
- The customer received the device, equipped with a stable firmware, a complete set of documentation, which is ready for sale
- A large number of defects were fixed, new features were added, which allowed to improve the device competitiveness significantly. The detailed comparative analysis with similar devices was done
- The device has attracted media and users attention (news and reviews were published in the leading media devoted to IT and high-tech)

Operating systems	Windows XP Professional, Debian GNU/Linux
Error detection system	Redmine
Other technologies	TerraTermPro, Putty, Testlink
Labor costs	6 man-months
Project time	6 months

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