Strategic Test Planning for International Websites

International websites, sites that support a multitude of languages and have a user audience that spans numerous countries and continents, introduce unique testing challenges. Based on different projects for different clients, I've needed to strategically plan testing for websites and mobile usage where the user base was large and spanned across the globe.

Mobile Device Planning

How do I know what mobile devices are popular in other countries when I don't see those devices or get exposure to them? I've learned to use web log analytics to see the trends and usage in different countries. I don't review aggregated data but instead look at each country since the providers and devices vary. I also use trending analytics from organizations like W3C to see overall trends across the globe. By looking at the trends in general and then reviewing the specific website statistics, I can see what's in use and strategically align testing accordingly. On one project, we used Device Anywhere to gain access to devices in other countries. Professional and personal travel has given me some first-hand experiences with other mobile devices too. And at other times, reaching out to end users in different countries has helped gain access to devices and enabled us to complete testing.

Performance & Maintenance Planning

Performance statistics and understanding your website's "busy" times gets more challenging when you have a user community constantly logging in and dropping off. This distribution of user load can decrease website performance issues based on user load – although this same distribution may be a non-factor with other site performance concerns such as memory or caching. As the nighttime approaches North America and usage drops, the sun is rising somewhere else. The good news is that this dispersion of users across the globe distributes the traffic load on the website but on the other hand, it can mean a global site is always "busy." International websites might experience a more all-day dispersion based on a global audience, but that same dispersion can make choosing a suitable maintenance outage more challenging. Working with an international website can also mean handling support issues around the clock. Yes, we're a global community but gee, it can be exhausting.

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Multi-Locale Test Planning

The more wide-spread a user base, the more likely a website supports multiple languages. Languages introduce testing considerations like handling of right to left languages such as Arabic and Hebrew where testing ensures RTL handled correctly on text, lists and data entry fields. Also, languages such as Japanese and Chinese are more symbolic languages and testing may shift to focus on user interface alignment issues. And finally languages such as Romanian and Swedish may use more diacritic marks moving testing concerns to the exporting of data, screen presentation and search testing to ensure language markings are handled accurately.

Operating Systems & Browser Coverage Test Planning

In terms of operating systems and browsers, the usage variance across countries is not as dramatic as it is with mobile devices. I use website log analytics to determine test coverage of operating systems and browsers much like I do with mobile planning. Although, the landscape continues to shift – as you might expect. Browsers and operating systems do not get replaced overnight; instead there is a gradual shifting of the market. In offices as corporate rollouts upgrade and gradually as people replace and upgrade their personal laptops and devices. How does this usage shifting relate to test planning? Directly, since I plan test coverage based on user statistics – when the market shifts in usage, my test planning shifts in the test lab.

Build a Strategy Based on Real Data

A test strategy factors in the distinct statistics of a site and adjusts to the user audience by gradually shifting testing efforts by browser, operating system and mobile devices as the audience shifts. Test planning is not just "interested" in the analytics; strategic planning is about using the analytics to map out what is needed, what is most at stake and then crafting a test plan that can be executed with that knowledge and awareness. Web analytics coupled with a risk analysis can turn an infinite testing challenge to a testing effort that has an achievable end and one that enables a product to get to market.

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