SuccessStory

Mobile Performance

How Philips Lit Up Mobile Performance And Results

Royal Philips is a global leader in consumer lifestyle, lighting, and healthcare products, headquartered in the Netherlands. Last year, in response to research indicating the increasing dominance of mobile among its consumer audience, Hakim el Fartasi, business service management consultant at Philips, headed up a mobile performance improvement project to learn what the real impact of performance is on Philips' business: Can they attract more visitors? Can they make them stickier? And does it make a real bottom-line difference to revenue? The short answers are yes, yes, and yes. Among other performance improvements measured via Keynote/Dynatrace technology, **El Fartasi and the Philips team were able to shave 5.25 seconds off of the average load time for the landing page**, bringing it down to less than seven seconds, and that made for a happy marketing outcome. Keynote/Dynatrace spoke to El Fartasi to get the inside story of the Philips performance improvement project — what inspired it, how it worked, and what it means going forward.

Industry

Electronics

Challenge

Increasing the number of site visits on mobile platforms, as being a vital commercial channel.

Solution

A Performance Improvement project with Key Performance allowed to measure performance criteria like page load time and availability but also cached elements, backend systems, third-party suppliers, page weights, and conversions. Philips was then able to optimize its mobile site pages appropriately to reduce average page load time from 12 seconds to less than 7 seconds.

Keynote/Key-Performance: What is the Philips philosophy as an enterprise around mobile, and how does it fit into your business model?

Hakim el Fartasi: It's part of our business-to-consumer marketing strategy, in the omni-channel retailing mix. Basically from a marketing perspective, we want to present our products and our services through the various channels, mobile Web being one of them. It's basically part of the marketing strategy.

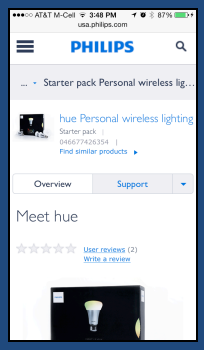
Key-Performance: As part of your overall omni-channel marketing strategy, did you have some indication via research or consumer input that mobile was a vital channel for you?

Hakim el Fartasi: Yes. We had several studies from Gartner and Forrester showing that traffic is increasing on the mobile platform, and those studies were basically the initiator of getting the focus on performance.

Key-Performance: Why did you take a focus on performance with your mobile platform?

Hakim el Fartasi: There were really two compelling drivers. First, we had a massive rollout of a new mobile Web environment in 2013, which made it imperative to get insight into the actual end-user experience. Second, when we released the new platform globally, the number of site visits was much lower than marketing's expectations. That's what really initiated this whole study and drove us to make a series of performance improvements to the site.

Key-Performance: Could you explain more about the visitor expectations for the mobile site?



Since last year, Philips has redesigned its mobile sites using responsive design techniques and the critical knowledge it gained from the mobile study. They have also embarked on a more app-focused strategy. Shown here is the current US mobile site..

Hakim el Fartasi: Yes, what we saw during the rollout was that the site's visitor count was lagging. Marketing would release a new Web page and then also a campaign for that Web page in order to drive traffic to it. But they didn't see the expected traffic.

Key-Performance: And that was one of the reasons you undertook this performance improvement project in the beginning?

Hakim el Fartasi: Yes. There were actually several reasons, especially when we saw the actual performance in China, because Philips is a global company. But what I want to emphasize is related directly to specific marketing goals. They expected visitors and needed to understand why this wasn't happening.

Key-Performance: Which performance characteristics were you looking at in the study?

Hakim el Fartasi: The elements that we included in the study were mainly the performance and availability as perceived by a first-time user, but also cached elements, backend systems, third-party suppliers, page weights, and conversions. These were some of the study's key criteria.

Key-Performance: Philips has a number of different websites. Which ones were included?

Hakim el Fartasi: The m.philips.com sites. That's the basic mobile URL but then, of course, we had specific versions by the consumer's country of origin. But these pages are no longer on that platform since we recently in 2014 moved to CQ5 [now Adobe Experience Manager] with responsive design, so those pages are no longer available.

Key-Performance: How did you go about conducting the study? How did you gather the measurements and data?

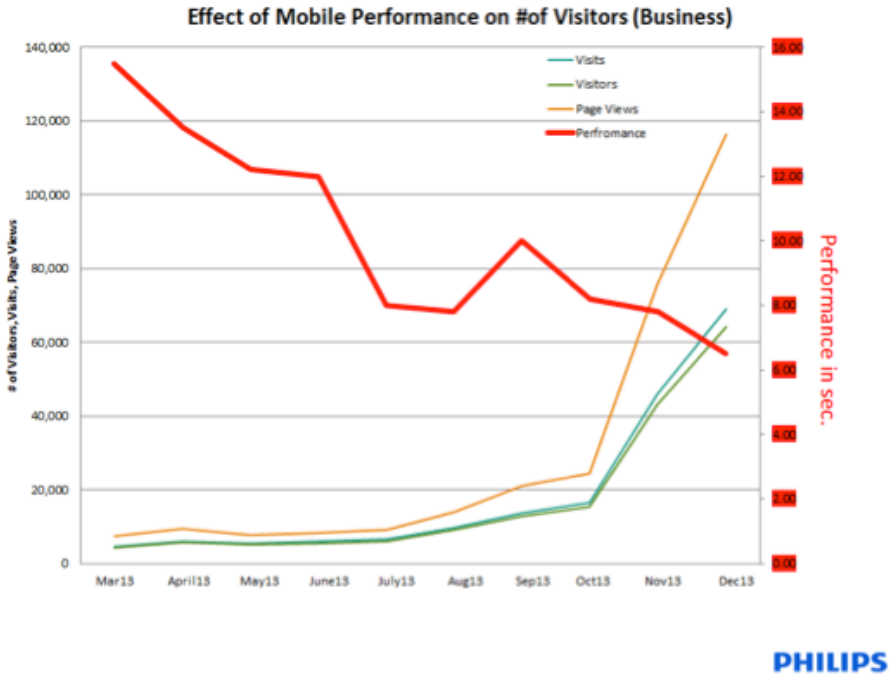
Hakim el Fartasi: Working with our partner Key Performance, we used numerous Keynote measurements to get insight into the various criteria we discussed previously, and we based it on the amount of conversion — the ability of people to actually reach the conversion goals, and we used analytics from our business intelligence to identify and interpret the data and then to go ahead with the improvements.

Key-Performance: How would you characterize the base state before you undertook to change things — performance, user experience, etc.?

Hakim el Fartasi: What we saw first of all was very poor performance across our pages, with page loads averaging 12 seconds. And then also we noticed the limited visitor count, so it was basically two-fold — performance and the marketing expectations.

Key-Performance: Did you specifically look at tablets or were you looking at smart phones or mobile in general?

Hakim el Fartasi: We actually focused on the iPhone device. It was done through a regular Keynote Web measurement system simulating an iPhone device. At that time, we did not have the real device monitoring service. We based our selection on phone market share studies from Gartner and Forrester. Plus, we also went to our analytics department and asked what devices were mainly used to visit the Philips pages. All this led us to the iPhone.



The graph makes it clear: As page load time goes down, particularly below the eight-second threshold, visits, visitors, and page views take off.

Key-Performance: So here's the big question: You reduced your page load time from 12 seconds at the beginning of the study to less than seven at the end. What types of things did you do in order to have such a dramatic reduction in the page load time?

Hakim el Fartasi: To keep it short, I would say that we optimized our mobile site pages. We identified that basically 80 percent of the page load was due to front-end elements, either scripting or content. What we initially did was reduce a lot of unnecessary JavaScript.

We found that, to save time when the mobile site was being built, certain files had just been copied from the desktop Web environment to the mobile environment.

We removed those unnecessary scripts, and we improved our scripting use. We also reduced the amount of content by actually introducing a new content addition process with a separate tollgate to ensure that all the content uploaded to the mobile pages is optimized for mobile use. These changes resulted in big performance gains.

So, reducing the weight of the page, and also improving script use.

Key-Performance: Making them specific to mobile.

Hakim el Fartasi: Exactly, yes. We also gained some insight into how our page was cached. What we saw was that a lot of content wasn't actually being cached effectively. So we also changed our caching policy for mobile and are actually now caching everything except when explicitly specified. In the past, we would only cache elements that were specified as needing to be cached. Now, with this project, we changed that around.

Key-Performance: You went from specifying what to cache to specifying what not to cache.

Hakim el Fartasi: Exactly. Yes.

Keynote: You had some variations between China and the US and other geographies. What are your thoughts as to why there was that variation?

Hakim el Fartasi: Yes. It actually is related to that cache policy. Our data center was located in the US, and what we saw was that in general, the US measurement would be faster than the other international locations. But when we actually started improving and looked at, for example, our UK location, we saw that an ISP can require several improvements specific to its locale. But what we saw in China was that the impact of the firewall was too much to overcome with front-end improvements, and we actually created a data center in mainland China to improve performance there.

Key-Performance: Overall then, looking back at the study and the performance improvements you were able to achieve, what's your number one takeaway?

Hakim el Fartasi: The main takeaway is basically the relevance of performance to meeting certain marketing goals. Just to clarify a little bit, performance in a lot of organizations is considered an IT issue. If there are any performance issues, then IT needs to resolve them and marketing just builds on that. The main takeaway that we got from this project was that marketing needs to have much more awareness of performance, and we need to have more buy-in from them in defining what the KPIs should be and what we are actually measuring.

Key-Performance: So going beyond the more or less abstraction of page load time, you're looking more specifically at number of visits and conversion rate. Is that correct?

Hakim el Fartasi: Those have been identified as being the most related to the performance. So if you have a good performing site, the expectation is that visitors will have a lower bounce rate; they won't stop their navigation at a given point because the site is too slow. We also believe that repeat visitors should increase because you have a good performing page.

Key-Performance: Those are the positive results that you actually saw as a result of the study — more visitors, and more repeat visitors?

Hakim el Fartasi: Exactly yes.

Key-Performance: Were you able to correlate conversion and revenue to the improved performance?

Hakim el Fartasi: That's a good question. It is very difficult to correlate any revenue to performance. If you look at the public research available, you have a lot of information stating that a page in general should be about three seconds. But there is no dollar amount associated with this metric because it just tells you that this is the best value to get the least drop-off.

What we did was go to analytics — analytics is a well-established process within Philips — and have them run a correlation between potential revenue and the visit counts. So there was already a value calculation done based on the visits. When we improved the site's performance, we saw that during that same time, the visit count and repeat visitors increased. So we were able to use that data to get the financial controller to state that indeed, with the decrease in the page load time, we realized the potential revenue increase of 5 times.

Key-Performance: Besides being interested in the positive revenue impact, another question is, how does it change the way you look at mobile? How does it change the way you do things moving forward?

Hakim el Fartasi: The way we have changed our way of working is not really specific to mobile, but actually an approach to performance management in general. We use Keynote across several Web measurements to monitor performance more broadly. The main take away from this project is that we want to embed performance management as much as possible within development, but also within the business units as basically a part of the online marketing philosophy — so not specifically for mobile, but for performance management in general, embedded in managed operations. That's the biggest lesson we learned.

Hakim el Fartasi is a business service management consultant at Philips Electronics Nederland B.V. in Eindhoven, the Netherlands. He started in 2008 as service delivery manager online B2C. During this time he defined the online monitoring service, made it a business priority, and helped set up several online improvement projects. He also introduced Keynote mobile web performance monitoring into the organization, setting up internal reporting services and related support processes.

Key-Performance is Keynote /Dynatrace partner/solution provider in the Benelux and helping companies to measure and improve the performance of their web, mobile and business applications.

www.key-performance.eu *Tel.: +32 10 23 56 90*