QUINNOVATION

480 x 320 is the New 1024 x 768

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One of the biggest challenges for those who want to play in the m-Learning arena is simply knowing how to deliver interactivity. We have a plethora of competing devices, operating systems, and screen sizes, and no clear winners. The answer may be simpler than you think, as this week's column illustrates. – from the editor

I have been on the stump for mobile learning almost as long as I have been for games for learning. I watched games finally become mainstream in just the past year or so (after expecting it for much longer), and have been wondering when mobile will finally make the transition (again, much later than I thought).

However, I believe that within 18 to 24 months there will finally be many mobile examples. I finally realized that it's not about having niche tools, but really about having mainstream tools produce mobile output. And that's happening; at two recent conferences I went around to the vendors and asked where they are. Most all of them have prototype projects underway, and I know there'll be some announcements over the coming months just on this issue. But there are barriers…

The problem with mobile devices is the variety of ways of delivering interactivity, and the lack of any one of them having sufficient penetration to allow it to stand alone as a solution. Note that the growth area in handhelds is the so-called "converged" devices: smartphones or wireless-enabled PDAs, and that's what I'm talking about here. Moreover, I'm not talking about OS-specific solutions, such as PalmOS or Windows Mobile applications, but cross-device approaches. As solutions, then, we have Java Mobile Edition (J2ME), FlashLite, and the mobile Web.

J2ME has perhaps the broadest flexibility and penetration, with the one barrier being a provider in the U.S. who won't allow downloaded Java applications without a financially onerous relationship with the provider. That's supposed to change, but it's a barrier in a major market.

FlashLite has promise, particularly as Flash is a widely used e-Learning tool. As of now, FlashLite penetration is spotty. This will change, as Adobe is working hard to make it more accessible, but I'm looking for a broader solution.

So how do we achieve a balanced solution for mobile content and applications? The iPhone has really raised the bar for mobile Web browsing, and most mobile devices will soon have high quality browsing even if the screen remains small. Consequently, I propose it will be a plausible approach to start thinking of Web apps as a delivery vehicle for mLearning.

When we first started developing for the Web, we were looking for guidelines to develop to. Standards for screen size started at 640 x 480, and have ranged through 800 x 600, to 1024 x 768. The iPhone has established a significant enough market presence to drive a variety of sites to create a version that accommodates the iPhone's resolution of 480 x 320. Phones can go down to as low as 96 x 64, and there is a wide variety of resolutions, but a reasonable lowest common denominator is probably 128 x 128. I believe a safe bet could be 176 x 208, or 240 x 160, which is common on a variety of devices. Is one of these the new 800 x 600?
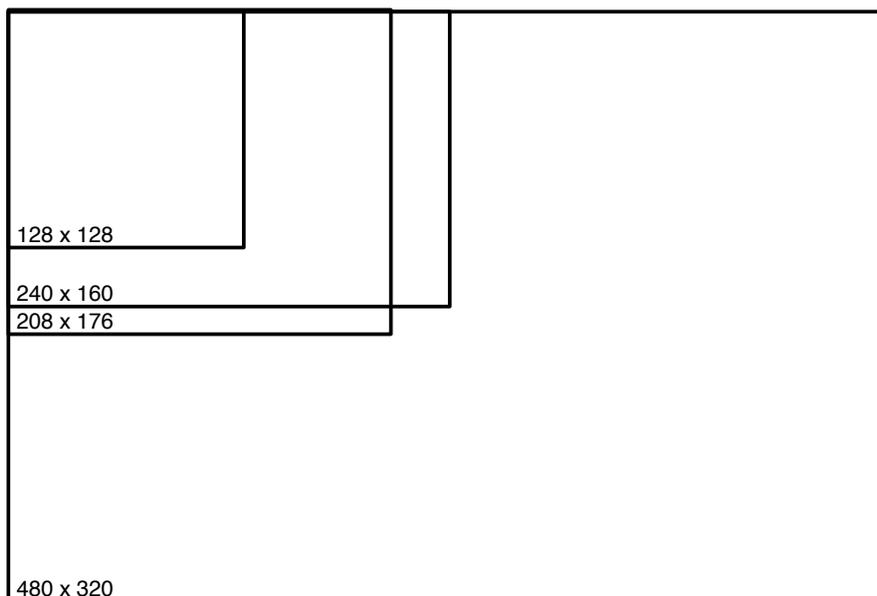
The point being, that thinking about small Web apps may be the cost-effective and logical approach to provide mobile access to content. There are already blogging tools for phones and mobile devices, and wikis are just Web pages, to name a couple of examples. Web 1.0 is likely to be a viable solution, and the convergence of Web 2.0 and mobile is a promising place to play.

Anyone game?

About Quinnovation

Quinnovation works with organizations looking to move up the eLearning 'value chain', strategically using IT to deliver performance improvement results. Quinnovation combines a deep cognitive background, strong technology experience, and sound business understanding to deliver innovative thinking, with a track record of insightful strategic analysis and pragmatic and successful solutions. Quinnovation services include eLearning 'makeovers' and ongoing strategic partnerships. Recognized as a thought leader through presentation publication, and results, Quinnovation has delivered cutting-edge designs for Fortune 500 companies, business, government, education, and not-for-profits.