

Taking your brand mobile

Liz Myers

Welcome to the new mobile marketplace

In the past two years we've seen revolutionary change in the way we distribute and consume mobile applications. The simultaneous advent of the Apple iPhone and iTunes App Store was like tearing down the Berlin wall surrounding the private garden that mobile operators had enjoyed for more than a decade. Suddenly, developers could publish directly to consumers and eliminate the middlemen, which meant both faster time to market and greater profitability.

The breakthroughs in distribution fueled a boom in application development. With more content readily available from their devices and desktops, consumers had unprecedented access to the channel. In addition to greater availability, periodic advertising campaigns reminded consumers that "there's an app for that" and further heightened awareness as well as boosting demand. Since 2008, mobile applications—once the purview of gadget geeks and mobile developers—had gone mainstream.

With more than 140,000 applications in the catalog¹ and over three billion downloads², the iTunes App Store has proven its success both as a consumer channel and as an online store. Parallel to this achievement is another triumph worthy of recognition—that of the consumer, who along the way has mastered the art of downloading and installing content to their phone, something that used to be foreign and cumbersome. The net effect of the iPhone and iTunes App Store is that it has opened up a direct pipeline to mass-market devices—"the only mass medium with a built-in payment plan."³

Still in the afterglow of what I call "app store mania," more online store and platform news arises almost daily. But when the novelty wears off and the dust settles, the App Store, the delivery channel, and the platform statistics will fade into the background. Soon the focus will come back to the consumer and the content they're most interested in downloading. This is where brand owners have a unique opportunity. As the saying goes, "Content is king!"

By taking your brand mobile and leveraging the unique properties of the medium, you have an opportunity to extend your brand's reach, deepen the customer relationship, build brand loyalty, and even create a new revenue stream. What's more, you can reap these benefits at minimal cost because you can reuse the same skills, tools, and code base you already have in-house. This paper is dedicated to helping you, your designers, and your developers get started publishing to this exciting new channel.

¹ Hora, Gundeep. [Apple App Store Hits 140,000 Apps](#). CoolTechZone.com (February 1, 2010)

² Apple. [Apple's App Store Downloads Top Three Billion](#). Press release (January 5, 2010).

³ Fling, Brian. *Mobile Design and Development* (Sebastopol, CA: O'Reilly, 2009), page 39.

Leveraging the mobile context

Mobile phones have properties that are different from other publishing platforms. Listed below are some of the most important characteristics to consider:

Mobile devices are deeply personal. The phone is something that belongs to just one individual. It's private, personal, and likely to be carried with you everywhere you go. We like to customize our phones and they have become a symbol of social status. The phone I carry, and the apps I have, become part of my personal brand.

Mobile devices are hyper-social. The phone holds all of your contacts and allows you to do much more with them. Basic communications include voice calling, text messaging (sending a message of 140 or fewer characters—Short Message Service, or SMS, preceded Twitter), multimedia messaging (sending video or photos along with text messages), and e-mail. Beyond the basics, you may want to consider online presence, physical proximity, or relationship strength to allow for more contextual communications.

Mobile devices are location-aware. Even if you don't know exactly where you are—your phone certainly does. It can also help you discover what is located nearby, get directions, or even interpret what is right in front of you. If your friends opt-in, you can display their present location. This is one of the most powerful aspects of mobile and one that has spawned a whole host of location-based services.

Mobile devices promote quick focused usage. Assuming that one is on the move, I will stop to check my phone when I need a vital bit of information like my shopping list, current traffic reports, flight arrival times, stock prices, or recent messages. The exception to this is entertainment. More and more, mobile devices fill those empty spaces when we're standing in line, waiting, or sitting for long idle periods. We reach for our phones to watch our favorite podcasts, scan tweets, listen to music, or immerse ourselves in a good film.

Mobile devices are sometimes connected. When planning your mobile offering, it's important to develop for both the online and offline scenarios. Sometimes your users will be riding the subway, on a plane, traveling abroad, or otherwise unable to connect to the Internet, their home network, or both. Although unlimited data plans do exist, they're not as prevalent as you may think. If you want to avoid costly phone bills, you need to consider how users will engage with your app when they're offline.

Mobile devices support a spontaneous lifestyle. Carrying all of your PIM (Personal Information Management) data means you can respond to events as they unfold and share new data in real time. For example, if traffic is blocked, I can meet my party at a different restaurant. If I'm standing in line at the cinema and tickets sell out, I can quickly locate an alternative and have my friends meet me there. You get the idea.

What can we make for mobile?

Until recently, mobile operators sold primarily personalization content: wallpapers, screen savers, ringtones, and casual games. While you can still produce these items, the new mobile marketplace is focused on the following content types:

Applications

Applications are self-contained programs that are installed and run natively on devices. Games are also included in this category. Popular examples include Red Laser⁴, CBS Sports⁵, and Flight Control⁶.

The advantages of building native applications include access to deeper phone functionality (location, camera, PIM data), better performance, and the ability to use the application when offline. However, native applications may be more costly to deploy across a wider spectrum of devices. This is due to the additional design/development time, testing, and customer support required for optimizing the content for each platform.

Conversely, web-based applications are much easier for developers to deploy and manage, as web browsers mitigate platform differences. When network connections improve, this may be the preferred approach for end users as well. However, until we have reliable and speedy 24/7 connections, native applications provide a better user experience on mobile devices.

Widgets

Widgets are small applications that serve a single purpose and usually live on the home screen where the user can access them easily. Widgets are useful on devices because they often extract a bit of fresh web data in a single click (saving the extra steps of launching the browser and then navigating to the right page). Typical examples include weather, stock quotes, and flight tracking information.

Websites

Mobile websites, as the name suggests, are *websites designed for use on mobile phones*. That is, they've been built from the ground up with screen size, bit-depth, font faces, page weight, and network latency in mind. They perform really well in the palm of your hand and they display the essentials for someone on the go. In other words, successful mobile websites are much more than miniature versions of their desktop cousins. Leading examples include Facebook, Google, BBC News, and Yahoo!⁷.

Beyond news and information delivery, websites can add vital back-end services that augment and extend mobile apps. For example, applications like Photoshop Mobile pack a 1–2 punch with a mobile application that focuses on image capture and editing, plus an online service for photo storage and sharing. This same strategy of using mobile devices as a data collection device, added to a web service for processing and storage, can be seen in other popular applications such as Amazon, Shazam, and What the Font?.

Leading-edge examples

As you begin to think about taking your brand mobile, it may be useful to view several leading examples. The following applications were chosen because a) they were highly successful with consumers in terms of number of downloads, revenue generation, or both; b) they were highly rated by popular trade journals, blogs, and this author's personal experience; and c) they are shining examples of a particular genre, business model, or design aesthetic. Above all, the samples listed here are meant to inform, inspire, and stimulate your own thinking.

⁴ Listed among "Top Paid Apps" in iTunes App Store/US for January 2010.

⁵ Listed among "Best Apps" in iTunes Rewind 2009.

⁶ Listed among "Top Sellers" in iTunes App Store/US for January 2010.

⁷ Top four mobile websites in the UK. [State of the Mobile Web Report](#), November 2009.



BBC iPlayer

Description

The BBC iPlayer provides “catch-up TV and radio” on the go. Users need only a Wi-Fi connection to stream video to their handset from anywhere in the UK. The BBC has done an excellent job of scaling the application to create a satisfying user experience on a wide range of popular handsets. This is one of the few third-party applications that I use as regularly as my address book or Google Maps.

Significance

Mobile is the new TiVo-to-go and is indicative of the trend away from prescribed times and dates for broadcast programming. Consuming content on a mobile device also allows one to interact with programs, if only at present, to share a link with a friend or comment via Twitter and Facebook. When it comes to dynamic television, this is just the tip of the iceberg. In the near future, we'll enjoy much greater flexibility and interactivity between television and mobile devices. (Live Talkback, listed later, is a good example.)



Wikitude

Description

Combining Google Android's GPS and internal compass, this application provides a real-time augmented reality. When a landmark is viewed through the camera, annotations are overlaid on the landscape image. Rather than limiting information overlays to Wikipedia data, this application enables users to tag the real world. Anyone can tag any image, anywhere, in real time.⁸

Significance

Wikitude provides access to digital information and social networks from any physical location. Travel brands and hospitality marketers are already publishing apps in this area. But I think there's enormous potential for the real estate market here as well. Imagine pointing your mobile device at a commercial building or "For Rent" sign, reviewing the relevant data, and calling the agent right there for a viewing.

⁸ Description taken from Razorfish, [Digital Outlook Report, 2009](#), page 69.



EA Sports – Madden Football

Description

With incredibly rich graphics, live commentary, and ambient crowd soundtrack, Madden Football puts lifelike NFL action right at your fingertips. But it's not only the computer graphics that impress; the game play and underlying database are equally solid. For example, after you select "Home" and "Away" teams, the game loads with all the relevant players. Later the commentators mention individuals by name and make relevant remarks about their performance. Users can also view statistics, trade, and sign team members, as well as save a "season" (comprised of multiple games).

Significance

Recently, The Wall Street Journal declared "Apple Emerges as Nintendo's Game Rival" (November 11, 2009) and there is [substantial evidence](#) that dedicated consoles like the Nintendo DS and Sony PSP sales have peaked, while the Apple iPhone and iPod touch continue to surge. With its solid platform and business model, Apple has attracted a significant developer community and has built a great deal of momentum in the games market. In terms of ROI, smart phone games are a solid bet for content publishers.



Disney – Fairies Fly

Description

Fairies Fly is a game for children based on familiar characters from the Disney film of the same name. Using the accelerometer and the large buttons on the bottom, Fairies Fly is designed to make it easy to play, even for young children. All of the Disney content translates beautifully to the iPhone, with captivating graphics, music, and event sounds to complete the signature Disney experience.

Significance

Until recently, most mobile content and applications appealed to men much more than women. Recent upticks in the numbers of women using mobile applications can be largely attributed to their children's use of their devices during car journeys or trips to the supermarket. In fact, 59% of all iPhone moms let their children use their phones and 41% download games specifically for their children.⁹ At the same time, the average age for children to get their own mobile device is now eight—I think this indicates a significant market both now and in future generations of “mobile babies.”

⁹ Lardinois, Frederic. [How Moms Use Their iPhones](#) (ReadWriteWeb, October 26, 2009).



Jamie Oliver – 20 Minute Meals

Description

Jamie Oliver's 20 Minute Meals is an application for busy cooks on the go. With a good selection of recipes, dynamic shopping list, video demonstrations, and detailed instructions, this app lives up to its promise of producing simple and delicious food efficiently.

What really stands out about this app are the high-quality graphics, consistent brand values, and interactive features. For example, the ability to gather ingredients from selected recipes and then e-mail the shopping list to your partner is a great way of leveraging the communicative and spontaneous aspects of mobile devices.

Significance

This is an excellent example of publishing branded content and creating a premium experience for mobile devices. As you may expect, the application also comes at a premium price of \$7.99. But it's more robust, useful, and satisfying than less expensive applications. Another lesson here is that achieving excellence of this kind involves much more than simply porting content to devices. It's about designing for the mobile context and taking advantage of the unique properties of the medium.

This application does an excellent job of using the medium to create an optimum brand experience across the multiple contexts of meal planning, food shopping, and preparation. In sum, it's an extremely sticky application that creates a much richer experience than one provided by an ordinary cookbook.



Live Talkback

Description

Live Talkback provides real-time voting during live TV or radio broadcasts. Imagine watching a program like *American Idol* (*X-factor* in UK) and using your mobile phone to vote for your favorite contestant. Alternatively, you could use this app to enter the “fastest finger” contest during *Who Wants to Be a Millionaire*. Although still in the early stages of adoption and deployment, Live Talkback will soon be ready for prime time—bringing scenarios like these straight to your living room.

Significance

Live Talkback is right “on trend” when it comes to extending social behaviors already exhibited on the web. This app adds value by turning passive Twitter and Facebook users into active participants, engaging them during live events. The ability to impact and help shape events as they unfold drives significantly higher participation and engagement levels, which in turn gives brand owners greater insight about their consumer audiences. Due to the convenience and deeply personal nature of mobile phones, I would expect to see additional applications like this that engage, and even democratize, television audiences.

[Live Talkback](#) is one of the 2009 [Open Screen Project Fund](#) winners. The application is available for iPhone, Nokia, and Blackberry devices.



BBC News

Description

The BBC News is an excellent example of a website that has been well tailored to display content on mobile devices. Indeed, this is a streamlined edition of the desktop version but without sacrificing any of the core functionality. Users can still customize the home page with their favorite news, weather, sports, and TV programming.

Significance

Mobile websites provide the most up-to-date, convenient, and economical way to get the news. In the future, we'll see more online news sites continue to offer expanded personalization features, as well as geo-location to show the most relevant local information for items such as weather forecasts, traffic reports, and entertainment news (local movie reviews, listings, theatre openings, and more).

By making their news content available on devices, the BBC has created a highly personalized and engaging experience. Due to the high-quality content, convenience, and ease of use, the mobile news site garners repeat visits and a loyal following. The net result is that BBC News builds substantial brand equity for the BBC as a whole.



Starbucks

Description

Here are two new applications from Starbucks, allowing you to find nearby stores, explore coffees, build your drink, and even pay with your iPhone. At the time of this writing, both apps are available from iTunes. (You'll need an iTunes account or a coffee card that is registered in the US to purchase it.)

Note: *The pay-by-phone app (distributed separately) works only within selected Seattle and Silicon Valley stores.*

Significance

Especially when you travel outside familiar territory, the ability to find Starbucks stores nearby is very handy. In the future, it will be even more convenient to pay for goods and services with mobile devices. The technology has been available in Asian markets for some time, but has been slow to appear in the West. The slow adoption is due to the limitations of existing technology as well as the expense of retrofitting stores with the proper scanning equipment. Just as cash was replaced with debit cards, mobile loyalty cards will trump existing payment options in the not-too-distant future.



Credit Card Terminal

Description

Credit Card Terminal makes it easy to run your small business from virtually anywhere! This is an application that specializes in fast, convenient, and very professional mobile payments. The application accepts all major credit cards (Visa, MasterCard, Discover, AmEx), and supports gratuities, signatures, and e-mail receipts (via PDF). Additionally, there's a transaction log and a hotline for rush approval requests.

Significance

Bringing payment to the point of purchase has obvious advantages for both buyer and seller. The buyer doesn't need to worry about carrying cash or having exact change. Sellers needn't worry about late payments, invoicing, or even details capture because things like name and billing address are captured during payment. From industrial nations to developing countries, this kind of convenience helps small business owners cut costs, increase profits, and minimize administrative tasks that usually take time and energy away from revenue-generating activities.

Mobile strategy basics

The key to success in the mobile space is carefully selecting what to publish and for whom. This can be tricky since we're not just talking about a market segment or a demographic here. What we're really asking is **who is the target audience for my content** and **what types of devices do they have?** Device fragmentation means that it's difficult to please everyone all of the time. So we need to target a collection of devices that have significant features in common (I usually look for screen size, 5-way vs. touch interaction, and Adobe Flash Player version) and use these as a reference set. Once you have a fully functional application or website project on wheels, it's relatively easy to adjust for different screen resolutions or navigation models and then grow your target list of devices from there.

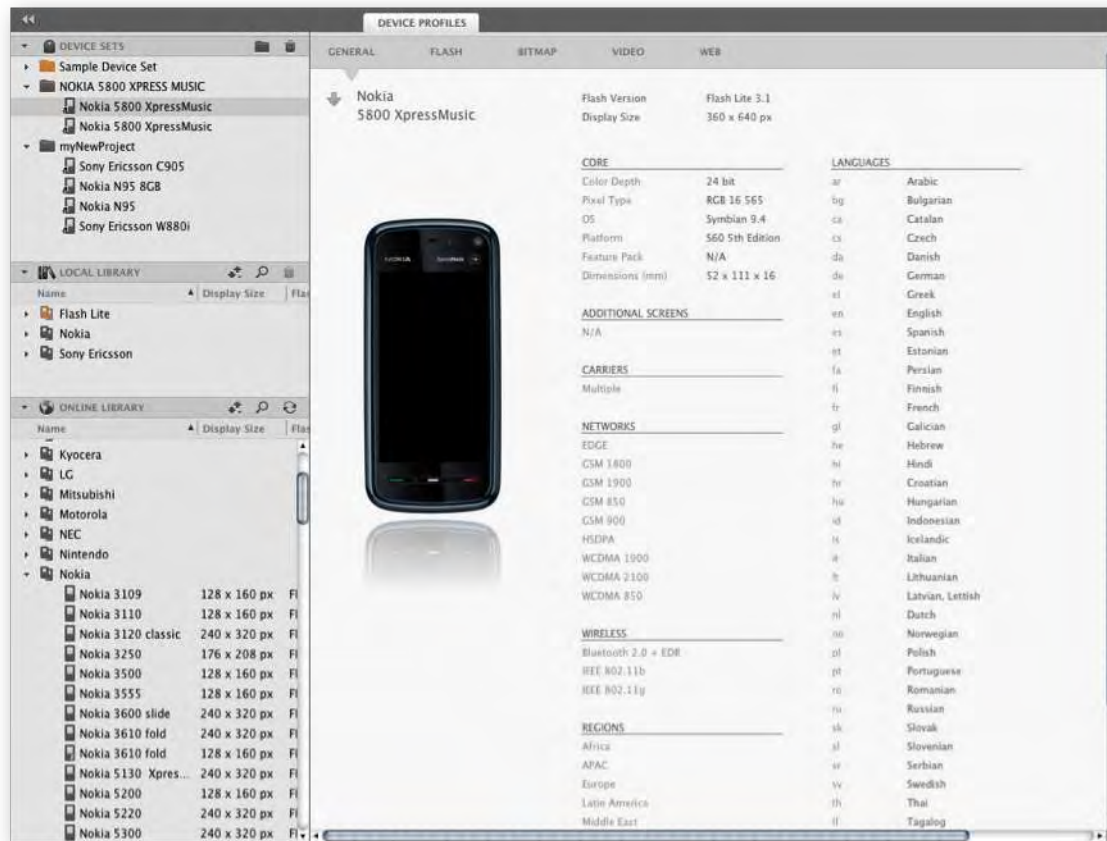
Actually, I recommend that **designers/developers who are new to mobile should target their own devices initially**. Although there are tools like Adobe Device Central that can emulate mobile projects on the desktop, it's best if they can test on an actual device right in the palm of their hand. In the early stages, it's vitally important that the **design and development teams should live with the project, carry it with them, review it in different locations, lighting conditions, and times of day**. Only in this way can you really explore and refine mobile projects in a way that will make sense for end users.

When you consider what to create for your customers, select a concept that adds value to their day. Your app may provide access to additional information or services, or it may offer a measure of convenience that they didn't have before. Whatever you decide to build, keep it extremely simple. Strip away all the features that aren't absolutely necessary to the core concept. Releasing an app with too many features at the onset can actually hurt you in the long run. Here are a few things to keep in mind:

- The more features you have, the more bugs you have to fix and the longer it takes to launch the application (time to market is important).
- The more features you have, the larger the overall application, which can lead to longer (costlier) download sessions, take up more memory on the device, and cause increased load times.
- A shorter release cycle promotes a user-centered design approach where users get the application early and have an opportunity to give feedback and participate in the ongoing development cycle. Part of your release strategy should include a website where users can post comments and get technical support.
- Shorter release cycles allow you to publish frequent updates. Since popular app stores like to promote what's new to the top of their "Featured Apps" lists, developers use more frequent releases to get their apps noticed, keep them visible to users, and ensure that they are displayed "above the fold."

Just as I recommend keeping the feature set streamlined, I also advocate simplicity in the visual design style. That doesn't mean I'm advocating a lower standard for mobile—if anything, the production values need to be higher if you want to keep your audience engaged. The sample applications listed previously illustrate this point. They feature well-crafted interfaces that are consistent with the established brand of their respective parent companies.

Getting started for designers








[Device Central](#) is a good resource for mobile designers and developers.

Adobe Device Central offers more than 700 device profiles—each with more than 650 data points. It is a hub for mobile project planning and can be the starting point for both designers and developers. You can search for devices by handset manufacturer, Flash Player version, display size, network operator, and more. Then you can further compare devices side-by-side, group them into working sets, and later test performance right from your desktop. To get a better sense of how it works, please see my [demo of the new features on Adobe TV](#).

Note: Adobe Device Central is available free of charge and is automatically included when installing any of the Creative Suite 4 products.

After selecting the target devices for a project, I use a variety of Adobe Creative Suite tools during the design process. The table on the next page lists which tools I use and how I use them, and includes some relevant tutorials to help you get started.

CS4 tools	Product use in mobile design workflows
	<p>Fireworks: Wireframing, visual design, basic click-throughs</p> <p>Due to its versatility as both a bitmap and vector graphics workhorse, as well as new features such as 9-slice scaling, global symbol updates, page states, and exporting options, Fireworks is the tool of choice for mobile designers. Check out this article about using Fireworks in mobile design by Kumar Vivek. The Workflow at Cooper Design video on Adobe TV highlights the role that Fireworks plays in the wireframing/visual design workflow. There's much more in the Fireworks Developer Center too.</p>
	<p>Photoshop: Visual design, tight mock-ups, app icons</p> <p>Photoshop is still my favorite design tool because it allows an unrivaled degree of control over every pixel. The array of filters and image manipulation tools (clone stamping) are most robust in this product—making it a must-have for serious designers. Beyond the Essentials Training (Lynda.com) and the Learn Photoshop CS4 series (Adobe TV), I recommend the iTunes podcast Killer Photoshop Tips by Matt Kloskowski. In mobile design, I also use Photoshop to export ICO files for Windows Mobile apps. To learn how to do this, please see my tutorial on Adobe TV: Icon Bootcamp.</p>
	<p>Illustrator: Visual design, Flash design, SVG icons</p> <p>Illustrator is the ultimate vector graphics and illustration tool. Because vectors scale perfectly, this is the first tool I reach for when creating detailed artwork that is destined for Flash. In Flash CS4, you can open AI files directly, preserving layers and editable text objects. To learn more about preparing artwork for Flash, see this tutorial from the Learn Illustrator CS4 series. Illustrator is also the best tool for making SVG icons for Symbian Series 40/60 devices. To learn how, watch my tutorial on Adobe TV: Icon Bootcamp.</p>
	<p>After Effects: High-fidelity prototyping, transitions</p> <p>Designers needn't shy away from After Effects because it is a fabulous tool for bringing your UI to life. Initially, there is a bit of a learning curve, so you need some good tutorials. I recommend: Basic Training by Andrew Kramer (VideoCoPilot.net), Essentials Training (Lynda.com), and Learn After Effects CS4 series (Adobe TV). When working with motion graphics, you'll want to complete the experience with royalty-free sound effects (Soundrangers). Note: <i>In After Effects, much of the magic is extended through plug-ins. A great source for these is: RedGiantSoftware.com.</i></p>
	<p>Flash Professional: Interactive design, high-fidelity prototyping</p> <p>When delivering a mobile app, I bring all of the assets into Flash and set up the presentation layer myself. I use my hand/eye skills to carefully position each of the elements before passing them to the development team. Another great use for Flash is high-fidelity prototyping. This is the most cost-effective way to live with your work (on a desktop and device) and refine details before implementation. In fact, some of my prototypes have been used in sales/marketing presentations to generate substantial business opportunities. Watch Flash CS4 Professional Essentials (Lynda.com) and Learn Flash CS4 (Adobe TV). Also visit the Flash Developer Center.</p>

Beyond leveraging the products I use to design mobile applications, there are several techniques I use to optimize graphics for display on handsets. [Optimizing content for Flash Lite 2.0](#) (PDF, 125 KB) by Josh Ulm is an excellent article that summarizes some of the most important strategies when preparing graphics for mobile devices.

There are also pattern libraries, stencils, and master graphics files emerging from the mobile design community. Using these templates will help ensure that your application is consistent with platform guidelines and user expectations.

In particular, check out these starter files for iPhone, Android, and Nokia S60 UI:

- [iPhone UI for Omnigraffle](#)
- [iPhone UI for Fireworks](#)
- [iPhone UI for Photoshop](#)
- [21 Tools for iPhone design](#) (includes sketch pads, notebooks, and metal stencils)
- [Android UI for Omnigraffle](#)
- [Android UI for Fireworks](#)
- [Android UI for Photoshop](#)
- [Nokia S60 Stencils](#)
- [Mobile Typography](#) (from [design4mobile.com](#))

Getting started for developers

Whether you are developing applications in-house or working with an agency, consider projects that allow you to leverage your existing code and assets across multiple devices—saving costs while reaching a wider audience. Visit the helpful online resources below, and see the table on the next page for a survey of my development toolbox that describes product usage:

[Adobe Mobile & Devices Developer Center](#): In addition to the tutorial sites I mentioned earlier, this is the first place to go to find technical articles, code snippets, and training.

[Gotoandlearn.com](#): Lee Brimelow, Flash Platform Evangelist at Adobe, is still my favorite source for practical Flash tutorials. Although it's not a mobile tutorial site per se, many of the lessons here apply directly to mobile development. If you're new to Flash, this is a great place to build foundational skills and have fun working through the sample projects at the same time. If you're working with video on the web, or Flash for the [Digital Home](#), I highly recommend the introductory tutorials on this site.




[Forum Nokia](#): Although this site is focused on development for Nokia devices, it also has a wealth of general information for Flash mobile designers/developers. Membership is free. This is a great place to connect with other developers in the Flash mobile community.

[Sony-Ericsson Project Capuchin \(Flash + Java\)](#): Project Capuchin provides an API which bridges Flash Lite (for the front end) and Java ME (for the back end), allowing developers to create more powerful applications for Sony-Ericsson devices.

[Android Developer Center](#): Resources for Android, including the SDK, forum, and videos.

[iPhone Developer Center](#): The Getting Started video tutorials on this site are excellent.

[Distimo Online](#): This is a free app store analytics tool that allows you to monitor sales of a given application across multiple app stores. Besides tracking revenue, it tracks the number of downloads—as well as reporting on how your competition is performing.

CS4 tools	Product use in mobile development workflows
	<p>Adobe Device Central: Project planning/management, testing</p> <p>Device Central is a good starting point when planning a mobile project. New features included in Device Central CS4—such as automated testing, screen shots, and video capture—make this tool very useful throughout the development cycle. To learn more, see: Introducing Adobe Device Central (Adobe TV).</p>
	<p>Flash Professional: Mobile application development</p> <p>At the time of this writing, you can deploy Flash mobile applications and games to more than 20 different platforms. If you're new to Flash, I recommend starting with Learn Flash CS4 (Adobe TV) or Flash CS4 Essential Training (Lynda.com). Also visit the Flash Developer Center. If you have some Flash experience but want to start developing for mobile and devices, watch this excellent video tutorial series by Dale Rankine: Adobe Flash Lite Training.</p>
	<p>Dreamweaver: Mobile websites, widgets</p> <p>When I make mobile websites or widgets, Dreamweaver is my tool of choice. For those just starting out, I recommend watching episodes of the Dreamweaver tutorials on Adobe TV or Lynda.com to learn how to use the main features. You can also create Web Runtime Widgets (WRT) for Nokia Series 60 devices. Here's a link to the plug-in for Dreamweaver on Forum Nokia that you'll need to create Nokia widgets with Dreamweaver.</p>

Summary

As you can see, many of the tools used in mobile publishing are the same as those used in web design and development. Due to the consistency of the Adobe Flash Platform, much of your existing code base can be reused for mobile as well. In fact, Flash is the most efficient and consistent development environment for mobile because it supports design, development, rapid prototyping, and final deployment all from the same file.

I've also found that the Creative Suite 4 tools are more closely integrated than ever before, and they include many new productivity features. Some of my favorites include [Share My Screen](#) (screen sharing and web collaboration), [online library of device profiles](#), and [automated testing in Device Central](#). These are just a few of the new features in CS4 that facilitate rapid development and increased productivity.

Additionally, there's a program supporting your foray into mobile: The [Open Screen Project](#) is a US\$10 million fund for new mobile (or multi-screen) projects. At the time of this writing, 35 projects have been funded in the past year, with further proposals being accepted through 2010.

We now have all the tools, technologies, and distribution channels in place to make mobile development a reality. With Adobe Flash Player supported on all leading platforms, brand owners have an unprecedented opportunity to deepen the customer relationship, extend their brand's reach, build greater brand loyalty, and create new revenue streams with the popular app stores. The mobile market place has really taken off and consumers are hungry for engaging new content, so *now is the time to take your brand mobile!*

Resources

Books and articles

Buxton, Bill. *Sketching User Experiences: Getting the Design Right and the Right Design*. San Francisco: Morgan Kaufmann, 2007.

Cartman, Joseph, and Richard Ting. *Strategic Mobile Design: Creating Engaging Experiences*. Berkeley, CA: New Riders, 2008.

Cooper, Alan, Robert Reimann, and David Cronin. *About Face 3: The Essentials of Interaction Design*. 3rd ed. Indianapolis: Wiley, 2007.

Elrom, Elad, Scott Janousek, and Thomas Joos. *Flash on Devices: Mobile Development with Flash Lite and Flash 10*. New York: Friends of Ed, 2009.

Fling, Brian. *Mobile Design and Development*. Sebastopol, CA: O'Reilly, 2009.

Goodwin, Kim; and Alan Cooper. *Designing for the Digital Age: How to Create Human-Centered Products and Services*. Indianapolis: Wiley, 2009.

Leggett, Richard, Weyert de Boer, and Scott Janousek. *Flash Applications for Mobile Devices*. New York: Springer-Verlag, 2006.

Saffer, Dan. *Designing for Interaction: Creating Innovative Applications and Devices (Voices that Matter)*. 2nd ed. Berkeley, CA: New Riders, 2009.

Constantinou, Andreas. [Mobile App Stores](#). VisionMobile blog. (October 30, 2009.)

Hora, Gundeep. [Apple App Store Hits 140,000 Apps](#). CoolTechZone.com (February 1, 2010)

Lardinois, Frederic. [How Moms Use Their iPhones](#). ReadWriteWeb. (October 26, 2009.)

Razorfish. [Digital Outlook Report, 2009](#).

Ulm, Josh. [Optimizing Content for Flash Lite 2.0](#). Adobe. (August 24, 2006.)

Blogs

[flashmobileblog.com](#): Mark Doherty, Adobe Platform evangelist, Mobile & Devices

[scottjanousek.com](#): Scott Janousek, author, developer, community expert

[i2fly.com](#): Vivek Kumar, UI/UX designer

[kuneri.net](#): Ugur Kaner, developer, entrepreneur

[biskero.org](#): Alessandro Pace, developer, community expert

[dalerankine.com](#): Dale Rankine, developer, community expert, instructor

[visionmobile.com/blog](#): Bookmark this site! Instead of technology articles, it provides valuable market insights and analysis. Think of it as The Wall Street Journal for mobile professionals.

App stores

Store	Launch Date	Supported Platforms	Revenue	App Count	Other Metrics
App Store	Jul 7, 2008	iOS	\$1.2B	100,000	...
Amazon Market	Oct 22, 2008	Android	\$0.5B	50,000	...
BlackBerry App World	Apr 1, 2009	BlackBerry OS	\$0.3B	30,000	...
Nokia	May 22, 2008	Symbian	\$0.4B	40,000	...
Ovi	Jun 1, 2008	Symbian	\$0.2B	20,000	...
Symbian	May 22, 2008	Symbian	\$0.3B	30,000	...
Sony Ericsson	May 6, 2008	Symbian	\$0.2B	20,000	...
All Application Store	Apr 15, 2008	Android	\$0.1B	10,000	...
Windows Marketplace	September 22, 2008	Windows Mobile	\$0.1B	10,000	...

As the market continues to take shape, trends will change. Visit the [Distimo Blog](#) to get the most current and comprehensive listing information.

[Android Market](#)

[Blackberry App World](#)

[iTunes App Store](#)

[GetJar](#) (aggregator of mobile apps, not an app store)

[Handango](#) (aggregator of mobile apps, not an app store)

[Ovi Stores](#) (by Nokia)

[Samsung App Store](#)

[Sony-Ericsson Marketplace](#)

[Symbian Horizon Directory](#)

[Verizon Go to Market](#)

[Vodafone App Store](#)

[Windows Mobile Market Place](#) (for widgets only, Flash apps not accepted)