Customized Experiences via Facebook Applications

When Facebook opened itself to third-party developers in May 2007, it ushered forth a new era in social application development. According to Facebook representatives, the company attracted more than 500,000 developers in the first year of its developer platform. That said, the early gold rush of Facebook application development has faded as Facebook has matured. Nonetheless, there are still opportunities that warrant the development of specialized applications with a marketing purpose.

8

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Facebook Applications: A Brief History

Think back a few years to the spring of 2007. Facebook was just emerging as a viable mainstream social network. It had been released to people outside of educational networks just six months prior in September 2006, and it boasted a user base of just 20 million people. Facebook's biggest competitor was MySpace, which had emerged as the world's most popular social network. A new social media application, Twitter, was all the rage of the South by Southwest Interactive trade show. Isn't it interesting how things change so rapidly in the world of the Internet?

Yet it was in this environment that Facebook announced its developer platform on May 24, 2007. In stark contrast to its chief rival MySpace, which was not friendly to third-party application developers, Facebook announced an application programming interface (API) that developers could use to tap into the social context of Facebook. Developers could now tap into the social graph of users and create applications of all types that would allow people to interact in new and interesting ways. In addition to the functionality provided by these apps, developers could integrate advertising and conduct financial transactions. But the key was the propagation of messages on users' News Feeds (sound familiar?). Any application that a user installed would kick off a message that would appear on their friends' News Feeds.

This viral feature of the first Facebook applications created a whirlwind of activity. Developers seeking to become part of "the next big thing" flocked to Facebook by the thousands. A wide range of applications were created—casual games, social utilities, personalization apps, nonprofit apps, and so on. Buzz grew so strong, a site called Adonomics.com emerged to measure the growth and even valuation of individual Facebook applications and the companies behind them! (Today you can see similar data at www.appdata.com.) It's probably no coincidence that Facebook achieved significant growth in its user base just after launching its developer platform.

As apps were released on Facebook, some opportunistic developers took more liberties than others to take advantage of the Facebook developer platform. In the early days, application "invites" were a key way to encourage viral adoption. A developer would simply require a user to invite an unlimited number of friends to use the application before unlocking desired functionality. If users didn't want to invite friends, they wouldn't be allowed to get the full benefits of the application. Further, developers could kick off News Feed items for the most casual use of their applications. So, clicking a button in an app would both perform a necessary or desired function and put a message on the user's News Feed. This was great for the developer but increasingly annoying for friends of Facebook users who ran these third-party applications, especially since Facebook provided little recourse to people who didn't want to see these messages. So, two things that were once interesting benefits of third-party applications became an annoyance to users.

Facebook responded in three ways. First, it no longer allowed applications to let users invite all of their friends for applications. Strict limits were placed that restricted the number of permitted invitations based on the popularity of the application and the rate at which users accepted invitations. Second, Facebook gradually added new controls that would allow individual users to "hide" News Feed messages from certain Facebook friends and applications. Later, Facebook would also place severe restrictions on the exact wording of calls to action that did make it to the News Feed; any apps that did not comply with the Facebook policy would not be "approved" and thus couldn't be discovered in search or propagate virally through the News Feed.

This had a few implications. The lack of limitations on invitations and News Feed messaging had allowed the earliest applications developers to grow their user bases tremendously. Viral messages sent out from a small number of users actually had the impact of reaching millions of second- and third-level friends. It was also uncommon for users to "uninstall" applications once they were used. So, the outcome was a few early application developers with large and rather sticky audiences. When the restrictions went in, it became much more difficult for new developers to build a similar user base—they actually needed a real viral idea! So, as a result, Facebook applications lost a bit of their luster. The "apps bubble" came and went in just months—a few winners stood, but a lot of other developers were left wondering how to create their own viral success on Facebook.

Featured Case: How Causes, Zombies, Werewolves, and Vampires Changed the Course of Facebook Applications

Blake Commagere is a social applications pioneer, working as a developer at Plaxo, a social network for businesspeople, and on his own building Facebook applications such as Causes, Zombies, Werewolves, Vampires, and others. We caught up with Blake to get his thoughts on Facebook applications—then and now.

- **Q:** Talk a little about the early days of developing applications on the Facebook platform.
- A: Causes was a beta partner on the platform, so at first we were just exchanging IMs with the platform team, sharing emails, testing new ideas like "mock Ajax," and giving them feedback. It was incredibly exciting—we all knew this was a new idea and game-changing event, and it was insanely busy and fun. Additionally, the growth potential of a product had been wildly underestimated, even by those of us with experience working on viral products like Plaxo. I remember having comments in my code for Causes that read things like "Oh, when this gets to 100,000 users, this has to be optimized." My optimistic estimates put us at hitting those numbers within a month, which would mean for an aggressive but reasonable pace at which to optimize portions of the product. I believe we hit 100,000 users on Facebook Causes within two days, and that meant some very aggressive scaling and optimization plans.

Continues

Featured Case: How Causes, Zombies, Werewolves, and Vampires Changed the Course of Facebook Applications (Continued)

- **Q:** You had a few huge viral hits. What do you think were the keys to your success?
- **A**: The keys to success were twofold: the ability to recognize potential for a particular application on the platform and the ability to rapidly adapt that concept as the platform changed. The platform history is littered with the corpses of products by people who could not or would not adapt their product as the platform evolved. The platform has changed dramatically and will continue to change dramatically, and you *must be* willing to adapt to it.
- **Q:** What happened to your applications?
- **A:** I was part of the Causes team; they still run and maintain the app, and it is doing extremely well. My other hits—the Zombies, Vampires, etc., games—are now owned and run by ohai, a company I cofounded.
- **Q:** How does the Facebook application development environment differ today from the early days?
- **A:** Initially, the platform changed much, much quicker. A platform like this was completely new, and the team at Facebook iterated at such a rapid pace that we developers had far less time to alter our applications to bring them into compliance with the API changes, and so on.
 - We now have much more detailed documentation, the capabilities of the platform have significantly expanded, and Facebook is communicating its product road map to developers. Initially it was this crazy experiment where we all—both Facebook and the developers—were learning together how a platform like theirs could and should work.
- **Q:** Where do you see the best marketing opportunities in social media today?
- **A:** It really depends on the brand being marketed. I think celebrities have really found a great way to market themselves on Twitter.
 - Celebrities like Dane Cook and Tila Tequila were really pioneers for that type of marketing on MySpace, but the design of Twitter better represents the asymmetrical relationships we have with celebrities.
 - For bands, MySpace is your strongest marketing opportunity. For location-focused service, the iPhone is a phenomenal platform because it has built-in location services available to developers. Facebook has grown to become such a huge service that for any brand it represents an extremely strong marketing opportunity.

Facebook Apps Today

Although Facebook placed a number of restrictions on applications, it also created a variety of other ways for marketers to get into the News Feed of consumers. We discussed a number of those tactics earlier in the book—fan pages, profiles, automatic News Feed updates, Highlights, Suggestions, and so on. Marketers have a wide range of options, and many of those options are not anywhere near as complicated as establishing a new Facebook application to support a marketing campaign. Furthermore, whereas applications aren't absolutely necessary to create a Facebook presence, a good application strategy is critical for a presence on mobile platforms such as the iPhone, Google Android, the Palm OS, and Windows Mobile. So, mind share when it comes to specific branded applications tends to be in favor of mobile devices over Facebook.

The one place where applications have been very successful on Facebook is in the casual games category. As of October 2009, a quick scan of the top applications on AppData.com reveals that 8 of the top 15 most installed applications are casual games. As the Facebook platform continues to mature and integrate more rich media content, expect these games to get gradually more advanced over time. This also means that the bar to create an interesting game will continue to rise over time.

All of that said, there are still a few cases where it may make sense for you to create a specialized Facebook application to enhance a marketing campaign:

Launch of a new product or service You can introduce a product through an application that shows off the value of your product in a creative manner.

Immersive branding Apps can provide a multimedia, interactive, or gaming experience that gives a user a positive and reinforcing experience with your brand or product.

Logical brand extension via the News Feed and/or profile Certain businesses have products or services that more naturally lend themselves to specialized applications that reinforce the overall value proposition.

In each of these circumstances, you're looking to use the application as a clever call to action that makes the user do something that reinforces your business or brand message. The applications themselves can serve an entirely different purpose, but at the end of the day, users of the application will be exposed to one of your marketing messages in a clever way—assuming you don't force the brand or the product onto the customer too aggressively. This is where creativity really comes into play as much as any other place in Facebook marketing. It is rare to find an application that succeeds virally without some humor or interesting angle on a product or service. You can't just overtly sell your product to consumers via a Facebook app and expect it to be a viral hit. The execution of a clever idea is a necessary success factor to create a successful marketing initiative through Facebook applications.

Featured Case: When Rabid Fans Build Viral Apps for You

One of the most impressive Facebook application marketing successes today didn't come from a corporation. It came from a rabid fan. The James Avery Charms application allowed users to send images of charms created by jeweler James Avery to one another as virtual gifts. As of October 2009, the James Avery Charms application had more than 87,000 active users and almost 4,700 fans. It was created by Michele Caldwell, a website developer and IT support specialist for adWhite, an advertising agency in The Woodlands, Texas. We took a few minutes to talk with Michele about the application and why she created it.

- **Q:** Tell us about the app you created, the James Avery Charms application.
- **A:** I created an app on Facebook that allows people to send images of James Avery charms to their friends. The app can be added to a person's Facebook page and shows all the charms people have sent them.
- **Q:** What made you create the James Avery Charms application?
- A: I was at home recovering from major surgery in January/February 2009, and I had just gotten my own Facebook account. Friends started sending me "gifts," so I got curious about how I could create my own app to send others "gifts." One of the gifts I had collected was made using Gift Creator on Facebook. I found out it was easy to create your own gift app.
- **Q:** How did you build the application?
- **A:** I just went to Gift Creator, and a wizard took me step-by-step through the process. I started out by adding a few images of charms from James Avery's website, and then I ended up adding a lot more, around 150 of them.
- **Q:** Did anyone from James Avery reach out to you after you created the application?
- **A**: Yes! I was really excited. Last month I got contacted by the general manager of direct channel. He said he wanted to talk to me about how we can work together and thanked me for being such a big fan, and we e-mailed back and forth a few times, but I have yet to talk to him in person.
- **Q:** Have you spoken with any other James Avery fans as a result of creating the application?
- **A**: I get Facebook messages from fans all the time, mostly asking me how to add the app to their sidebar or some other technical question. I've not spoken with any in person.
- **Q:** What are your future plans for the application or other applications? Has it been a fun experience?
- A: It has been a fun experience just to see how quickly it grew. More than 2.5 million charms have been sent as of this date! That totally amazes me. Unfortunately I don't have time to work on it, or even respond to most e-mails I get about it, because my day job keeps me so busy. I knew I would never get paid for doing it. I don't want fame or notoriety. I just did it as a fan of James Avery for the purpose of passing the time while I was home recovering from surgery.

The Consumer Experience of Facebook Apps

Before we get into common types of Facebook applications and the mechanics involved in building or integrating an app into your campaign, let's first examine the customer experience of applications—discovery and installation.

Discovery

Contrary to popular belief, it's actually somewhat difficult for Facebook users to find an app without a notification from a friend. Why is that the case? Well, for one, Facebook is fundamentally driven by the social context of the News Feed. Most communications in Facebook happen in the News Feed, which is good for all of us because that's what users see first upon every login. But it does mean that for an app to propagate and have a chance to be a viral success, it will need to send enticing yet useful messages through a user's profile, which alerts friends via the News Feed. In that sense, it is similar to a Facebook fan page or any other marketing tactic you'll use with success. Apps can also be found through search—either through Facebook's search or through a traditional search engine. But it is pretty rare for users to seek a Facebook app in this manner. Users may also find apps in four other ways:

- When friends become a fan of an application on Facebook. A message announcing this will appear in the News Feed.
- When a friend uses an app to post directly on their friends' Walls, as shown in Figure 8.1. (Depending on privacy settings, friends of friends or even everyone on Facebook can see the app Wall postings.)



Figure 8.1 Pillow Fight

- Via Facebook advertising, where you'll run an ad specifically to get people to look at your application.
- Through Facebook's app recommendations, which is found at www.facebook.
 com/apps/directory.php or by clicking the Applications button in the bottom
 left of the Facebook home page and then clicking Browse More Applications.
 Figure 8.2 shows the way Facebook presents application recommendations to
 a user.

But all told, the most common and most cost-effective means for an app to propagate on Facebook is via "app-driven" messages that are routed through a user's profile and then to their friends' News Feeds.

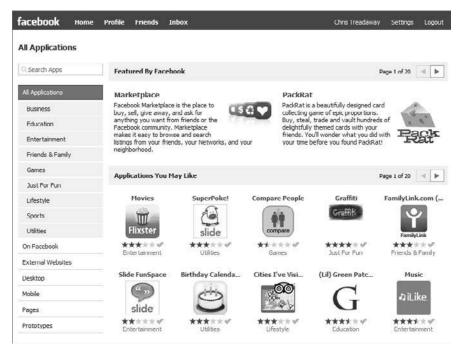


Figure 8.2 Facebook application recommendations

Keys to Getting Your App Discovered

So if discoverability isn't guaranteed, how should you build a consumer-facing Facebook app to make it as viral as it can be?

Get it right the first time If you have a novel concept, you have to be sure that the experience people have with the app is right and encourages viral behavior. If you fail to do it the right way, you'll miss an opportunity. Remember, people make knee-jerk reactions to things they see and experience on Facebook. Make sure the knee-jerk reaction is enjoyable and in your favor the first time because there really are no second chances.

Build an app that requires regular visits The more visits, the more opportunities you have to get on News Feeds, and the more opportunities people have to become a user of your app. Regular visits also breed loyalty among users.

Encourage sharing/announcing app events via the News Feed Engaging apps are typically at their best when friends install apps. That's why they're called *social apps*! You can kill two birds with one stone by adding notification features to your app that will get reminders on people's News Feeds. Just don't go overboard, because it's a fine line between annoying people and being informative.

Launch thoughtfully To make an app successful, it's critical that you seed the application with friendly users who understand that you're just getting started. People you don't

know may ignore the app if it doesn't have many users, so start strong with people who will test the app and give you feedback. Meanwhile, they'll count toward your active users metric, which will tell others that your app is worth investigating.

Monitor outcomes As with other Facebook marketing efforts, measuring success on an ongoing basis will help you learn quickly what is working and what is not working. If you find that you aren't adding users quickly or that people aren't using your app regularly, you may be able to make a tweak or two to optimize performance.

Finally, remember that poor execution works harder against you than good execution works for you. Do things the right way and the way that dovetails into your goals and objectives for the app, and you put yourself in a position to succeed.

Installation

Now let's review the installation process. Once users have discovered an application and the user clicks the View Application link, they're sent to the application's home page. Figure 8.3 is the home page for Red Bull's branded rock, paper, and scissors social game. This layout may look very familiar to you—it doubles as the fan page for the app so people can become fans, write on the Wall, rate the application with a review, and see other friends who are using the app. All of this information can indeed play a role in whether or not the user chooses to install the application.

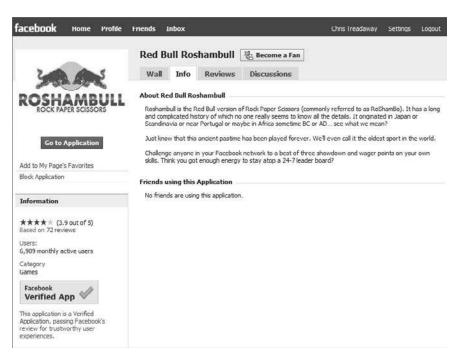


Figure 8.3 Red Bull Roshambull app home page

To view or install the app, the user must click the Go To Application link in the upper left of the screen. At this point in this particular application, the user then sees the home page of the app (Figure 8.4). Red Bull Roshambull also henceforth appears in the list of applications accessible from the Applications button in the bottom left of the screen (Figure 8.5). This is also the place where users can uninstall apps that they no longer use.



Figure 8.4 Roshambull Facebook game

acebook Home Profile Friends Inbox		Eric Ponder	Settings	Logou
Application Settings - Recently Used				
risplaying 9 applications you have used in the past month.	Show:	Recently Use	d	
II Events		Edit Settings	Profile	
₩ Gifts		Edit Settings	Profile	
≜ Groups		Edit Settings	Profile	
f Links		Edit Settings	Profile	
Mafia Wars		Edit Settings	Profile	×
Notes		Edit Settings	Profile	
Photos		Edit Settings	Profile	
Red Bull Roshambull		Edit Settings	Profile	×
♀ Video		Edit Settings	Profile	

Figure 8.5 List of applications

In the case of Red Bull Roshambull, this social game has very little utility without inviting another Facebook friend to play the game. This is unusual—Facebook has cracked down quite a bit on apps that require invitations to be functional. So don't get terribly excited, because you may not be able to get away with a similar scheme for your app. For a user to invite friends to play Roshambull, the app must first get permission from the user to access profile data and friend lists. Clicking the Allow Us To Access Your Profile link brings the user to Figure 8.6.

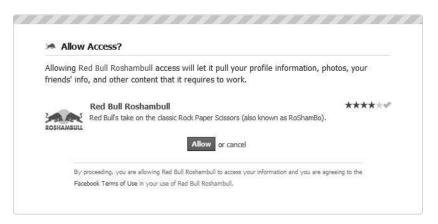


Figure 8.6 App requesting profile data

This seemingly draconian message in many cases appears to be a lot more severe than it really is. The app is requesting access to profile data that it may use in a variety of ways to make the app fully functional. The message is a bit of a catchall—it doesn't spell out exactly how profile data will be used. It doesn't say how/ if messages will be sent through a user's profile, which may then annoy friends. It doesn't suggest one way or another if messages will be sent through notifications and how regularly those messages may appear. So, it is fairly limited and somewhat scary for users to read.

Sadly, as an app developer, you don't have an opportunity here to share any further detail with concerned users. The screen is a standard setting for the Facebook development platform, and it can't be significantly altered. In this sense, uncertainty about how profile data will be used and how other apps in the past have misused Facebook are the biggest barrier to installation. In 2010, there is also a fair amount of "app fatigue" from users. Either they don't want the hassle of using a new app or they don't want to deal with the risk of offending friends with frivolous News Feed messages that benefit the app creator more than the actual user. So, keep all of that in mind as you balance the needs of having your app spread virally and also keeping people happy. There is a happy medium, and failure to hit that happy medium may affect the success of your app.

Types of Facebook Applications

So, what types of Facebook applications are most popular today? That certainly depends on who you ask. Some demographic groups respond to different types of applications, while others don't. The following are the different types of applications that currently have the highest number of users. This list is intended to give you some high-level ideas of the types of concepts that may resonate with your customers in case you are considering an application of your own.

Social games By far, the most Facebook applications today are social games. These are applications that intend to entertain the user first and foremost, not necessarily sell them anything. That said, the in-game experience is often enhanced through virtual goods, which are often sold to users for real money. This is the primary monetization scheme for social games on Facebook, although some also sell advertising. The top social game producers are currently Zynga, Playfish (acquired by Electronic Arts), and Playdom. Few "branded" social games have achieved significant popularity, although Red Bull had some modest success with the Roshambull application (http://apps.facebook.com/redbullroshambull), which is the branded rock, paper, and scissors game app we highlighted earlier in this chapter.

However, a few large companies have introduced branded elements into social games for marketing purposes. This is similar to paid placements in movies or television shows—a company interested in reaching a certain audience will pay to have a branded item placed into the game to enhance game play in some way. Expect to see more of this over time instead of actual fully developed and new social games that need to catch fire to meet marketing objectives.

Quiz apps Popularized in late 2008 and early 2009, a variety of quiz applications were designed by a wide range of companies to capture answers to simple questions from users and share those personal details with other friends on Facebook through the News Feed. It sounds too simple to warrant something as seemingly complex as an application, but there is no shortage of quiz apps on Facebook. Why would someone write a quiz app? Engaging quiz applications have occasionally generated a large audience, which the producer of the app could use either to monetize through advertising or to offer products and services to users of the app. One company, LivingSocial, created a huge user base with simple apps such as the Pick Your Five series that allowed users to pick their five favorite things (movies, celebrities, TV shows, sports teams, and so on) and share that information with other Facebook friends. Again, it sounds way too simple and perhaps sophomoric. But Living Social was able to tap into a user's desire to express themselves on their profiles and share information with friends in a systematic, predictable, and somewhat socially acceptable manner. There have been several attempts from companies to create branded quiz applications, but few have succeeded in creating a large and lasting user base.

If you want to avoid creating your own Facebook quiz, just build your own using a "quiz-building" application. Several of them are available for free on Facebook. Check out QuizPlanet!, Quiz Monster, QuizYourFriends.com, or a variety of others to see what meets your needs. But beware—if you don't write the app yourself, you're beholden to the specific limitations and rules by which those apps were created. You can save time, but you won't have ultimate control over how the app is used and the wording that propagates on users' News Feeds.



Personal/virtual gifts In the early years of Facebook gifts, Facebook controlled the gifts that were available for free and for purchase. Applications emerged to help developers and brand managers create their own gifts so people could give each other hugs, pats on the back, and other virtual gifts like the James Avery charms described earlier in this chapter. The same situation was the case for identifying family members—parents, siblings, cousins, and so on. Out of that need was borne the We're Related application (now FamilyLink), which had more than 20 million monthly active users in early November 2009. In both cases, Facebook has recognized the need these apps fill and has added new platform features for developers that make for a better consumer experience. Users can now just use Facebook's features, and they won't need to install or use an app if they want to identify cousins or siblings or share a virtual hug. In a sense, apps written by third-party developers have given Facebook ideas about product/platform enhancements, and it has responded with similar functionality.

Widgets Widgets are Facebook apps designed not to run as a consumer "app" experience but rather as part of a fan page to customize the look and feel for a consumer. There is no installation process for a consumer. These apps instead run inside a fan page automatically and are presented to the user via a tab of their own or the Boxes tab. Why would someone go to the effort of creating an app just to customize a fan page? The functions offered through Facebook fan pages are fairly limited and cover broad scenarios that are consistent with the rest of Facebook—posting photos, links, comments, and so on, and interacting with other people. If you need to do anything else in particular, such as creating a sign-up form, for instance, you'll need to use a Facebook app such as Facebook's own Static FBML. You don't necessarily have to build your own custom application for this. You can also look for apps that do what you need via a search engine or look at examples of other fan pages that do the things you need to do. You may just find that you don't have to build anything yourself—you can just reuse and/or modify something that has already been released for general use.

Conceptually it's also good to think about what you want to achieve with your application. Most folks are motivated by one of the following goals:

Building a viral hit You may want to create an engaging application that people will enjoy using repeatedly and will recommend to friends either directly or by allowing messages to propagate via the News Feed.

Introducing new functionality An app can offer an experience through Facebook that provides relatively unique new social features or provides similar benefits but with a unique distribution angle that makes more Facebook users more aware of it than competitor applications.

Extending the brand in a new way An app can also utilize brand assets in a slightly different way that is engaging or interesting to the target market.

Providing entertainment for the sake of brand/product loyalty Some apps help people enjoy themselves or pass time by interacting with your brand or with other consumers through games, interactive experiences, and so on.

Optimize Your Fan Page with Apps

In Chapter 5 we discussed all the basics of setting up your Facebook fan page. To make your fan page more compelling and engaging for your fans, you can add any number of third-party apps. All fan pages come with the default Facebook apps: Links, Photos, Videos, Notes, and Events. Often, new fan pages may not have other apps by Facebook like the Discussion tab or Reviews app added, and you'll need to manually add them.

To add apps to your fan page, look just below your image, and click Edit Page. Scroll to the foot of the page, click Browse More under Applications, and search for an app you want to add. You can also browse the Apps Directory at www.facebook .com/apps/directory.php and then click the Page button to go the section with apps that can be added to fan pages (which is the vast majority of apps!). Click the app you want to add, and you'll almost always go to that app's fan page; look for the Add To Page link.

Once you've added an app to your page, it's not always obvious what to do next. Go back to your main fan page, click the Edit Page link under your image, and you'll see all apps added to your page in alphabetical order. Click Edit App. Each app is different as to how you can configure the settings. Usually there is a help section or a simple tutorial. Be sure to also click and check the application settings for each app; this is where you have the option of adding a tab and publishing to your fan page Wall, and the News Feeds of your fans.

These are some of our favorite apps for fan pages that you'll get most mileage out of:

Static FBML We mentioned this app in the previous chapter; to reiterate, it is probably one of the most vital components of your fan page because you can add your own fully customizable content. FBML is Facebook's own version of HTML. This app allows you to simply paste in code and give the app your own name, which becomes the tab

title. One of the most popular uses of the Static FBML app is to create a *landing tab* (or *canvas page*) specifically for users who have not yet joined your fan page to land on. On that landing tab, you can also include rich media such as a video and perhaps an opt-in box for a free giveaway. Another benefit to the Static FBML app is you can install multiple iterations of the app. In other words, you might have one landing tab as a welcome message and another with details of your services. By way of example, see Gary Vaynerchuk's fan page (http://facebook.com/gary), the Oprah Winfrey Show (www.facebook.com/oprahwinfreyshow), Four Seasons Hotel and Resorts (www.facebook.com/FourSeasons), and RED (www.facebook.com/joinred).

Extended Info This app, shown in Figure 8.7, also allows you to insert custom HTML. The only drawback is you can't change the name of the app title. What we like about this app is it can be added to the Wall (the main page your fans see), and the app also automatically inserts a vertical scroll bar when you add more content. You can find the Extended Info app at http://apps.facebook.com/extendedinfo/.



Figure 8.7 Extended Info app

Networked Blog If you publish a blog, this app is exceptional for pulling in your blog feeds and allowing your fans to comment on those imported posts. The app can also be added to your personal profile, and any comments shown on your personal profile will also show on your fan page, and vice versa. Networked Blogs also provides the opportunity for even more "viral visibility" because Facebook users can join and follow your blog whether they are a fan on your fan page or not. You can find this app at http://apps.facebook.com/blognetworks.

YouTube Badge Many of the Facebook YouTube apps tend to be a bit buggy. However, we've found the YouTube Badge app (see Figure 8.8) to be most reliable and flexible. You can select from various types of video (Tag, User, Playlist, Favorites) and choose how many videos to display.



Figure 8.8 YouTube Badge app

Plus, when clicked, each of the videos opens in a new window and goes right to the YouTube page. You can find this app at http://apps.facebook.com/youtubebadge.

Facebook to Twitter As mentioned in Chapter 7, this is Facebook's own app that allows you to post to Twitter. There's huge power in using this app to bring your Twitter followers back to your fan page. You have 420 characters in the Facebook publisher to create content, and when you have this app applied to your fan page, your posts get truncated at about 120 characters and posted out as a tweet with a shortened (bit.ly) link to your fan page. You can find Facebook to Twitter at http://facebook.com/twitter.

Selective Tweets To reverse the process in the previous app (posting *from* Twitter *to* your Facebook fan page), this app works wonders because if your tweet volume is high, you don't need to clutter up your fan page with excess content. Rather, you can select which tweets get posted as your fan page status update. If you're also using the Facebook to Twitter app, you can temporarily adjust the settings so as not to double post. You can find the app at http://apps.facebook.com/selectivetwitter.

Posterous Posterous is an excellent, free, quick blogging platform that allows you to easily create various types of content posted via their website or by e-mail. This platform also gets great Google indexing, which is good news for your search engine optimization. If you're using Posterous anyway, you may as well add the Facebook app to your fan page and get additional viral visibility from your content. You can find the app at http://apps.facebook.com/posterous/facebook.

Notes Notes is a default Facebook app, but it bears mentioning that there are myriad uses for the app. Certainly you can create a rich-text note directly in the app, add images, and post. The Notes app also allows you to tag any of your friends. (As a respectful policy, we do recommend only tagging your friends provided they are

actually mentioned in the note.) But the power behind the Notes app is it allows you to import *any* RSS feed. You could import your regular blog feed here instead of using the Networked Blogs app if you wanted. Or, you could get creative and import the "likes" of your Twitter favorites RSS feed, as shown in Figure 8.9. This allows you to quickly and easily push content from Twitter (using a blend of your favorite content producers' tweets along with your own) and interact on the fly wherever you are, including on your mobile device.



Figure 8.9 Imported Twitter favorite with fan engagement

For additional Facebook fan page apps, you might like to check out Involver's suite of free and paid apps: http://involver.com.

What You'll Need to Build a Facebook Application

As we mentioned earlier, Facebook applications are built in Facebook Markup Language (FBML). It's the successor of Facebook Query Language (FQL) and works in conjunction with the Facebook API. It is similar to Hypertext Markup Language (HTML), the default programming language on the Internet. Rather than being used to write standard web pages, FBML is only used for building Facebook applications and performing other tasks on Facebook. To use FBML, you minimally need to have an application that allows you to use HTML/FBML for your profile. We'll talk more about that when we talk about hosting later in the chapter.

Some of the things you can do with FBML include sending e-mails to other Facebook users, embedding videos or images in pages, creating dashboards, building games, building forms, displaying headers, and other tasks. FBML is not a completely new language. It allows the use of regular HTML tags, making it extremely flexible for the programmer building the application or feature.

Speaking of programmers, we're going to assume you're not one. This book is targeted squarely at marketers, so we're assuming you have exactly zero experience writing code. With that being the case, we'll talk about how you get someone to build an application for you on Facebook. Rather than talking about building applications, markup language, specific server configuration settings, and PHP/MySQL thingamajigs, we'll focus on what you should expect when building a Facebook application, following best practices, hiring a programmer, and managing the project.



If you want to learn how to program FBML, we recommend any number of other books on the subject, such as Nick Gerakines' *Facebook Application Development* (Wrox, 2008), Richard Wagner's *Building Facebook Applications for Dummies* (Wiley, 2008), or Jesse Stay's *FBML Essentials* (O'Reilly, 2008).

Also, take a look through Facebook's handy "Get Started" app tutorial at http://developers.facebook.com/get_started.php?tab=tutorial. There, you'll see the step-by-step process for building an app, including a handy tutorial, the anatomy of an app, and an overview of the guiding principles.

Best Practices

Whether you get an internal team or a third-party vendor to build your Facebook application, you'll still need a solid understanding of best practices when it comes to designing, building, and deploying Facebook applications. After all, you can't possibly expect to effectively manage this project if you don't have a reasonable foundation when it comes to understanding the core tenets of what it takes to build a good Facebook application. We're going to briefly cover three major areas when it comes to this topic: speed, user experience, and terms.

Speed

It's important to make sure your application is built to run efficiently on the Facebook platform. As with any application that you build on the Internet, the speed at which a page loads into a user's browser is one of the single most critical elements of execution when it comes to the user's perception or enjoyment of your application. Because you're dealing with an application programming interface when building Facebook applications, paying special attention to the techniques used to cause your application to render quickly on a user's profile is especially important. You need to pay close attention to this aspect of your application, because the fact that you're going through an API

means the web browser has to wait twice as long to retrieve information and display it to your user than it would with an application that doesn't use an application programming interface.

Granted, in many cases we are dealing with seconds or even milliseconds when talking about transactions between applications. However, users have little to no patience on the Web, and the time adds up quickly when someone is waiting for their browser to render the web page they are waiting on. It's important that you take the most efficient path possible to grabbing data and processing information you need and bring it back to your web pages so your users are presented with the most responsive experience possible.

So, here are five of the most important tactics for producing lickety-split applications as recommended by Facebook:

- Use FQL instead of the API whenever possible. The reasoning here is that the API is nothing more than a wrapper on top of FQL. FQL gives you more direct access to the data you need.
- Make sure the application preloads the FQL queries. This is a smart technique
 when programming with any language. You never want your page to load partially, wait for data, then finish loading.
- Ajax, or asynchronous JavaScript and XML, is another technology that can be
 used to improve the perception that a page is loading quickly. On Facebook,
 Ajax is implemented as Facebook JavaScript (FBJS). It allows the programmer to
 load data and implement processes in the background of a web page while other
 parts of the page are loading.
- Stash what you can in the cache. Caching is the process of storing data or a file locally on a user's computer for easy access later. By doing this, your application does not have to continually reach out across the Internet to retrieve information that doesn't change during a user's session. Although there could be several things you can store temporarily in the cache, we recommend at a minimum that you store the CSS and external JavaScript files you use in your applications.
- Build smart navigation, and use pages effectively. Don't throw everything plus
 the kitchen sink on any page of your application. Learn how to use pagination
 so your user can move from relevant sections of your application with a minimal
 amount of page load on each window.

User Experience

User experience (UX) is defined as the quality of experience one has when interacting with the design of something. This is not limited to Facebook applications or even web pages. For example, a person has a bad user experience when sipping out of a leaky travel mug. You want to make sure your users have a good experience with your application.

When taking into account user experience as it relates to the design of your Facebook application, you must think about the needs of your user, any constraints your company has from a business or brand point of view, and any limitations or needs technically related to the application and your goals.

Generally you should always consider ease of use, information design (intuitiveness), the structure of the elements on your page, aesthetics, and overall functionality. When designing a Facebook application, there are several specific elements to ponder:

- Make sure your application doesn't require users to install third-party applications to use your application.
- Don't force users into logic loops if they opt out of performing a task that you deem valuable.
- Don't force users to spam their friends in order to enjoy the features of your application.
- Engage with your users.
- Allow users to engage with each other.
- Keep your application fresh by fixing UI issues that inevitably arise, and update the app on a regular basis to encourage repeated use.

Terms

Lastly, you need to make sure Facebook is happy with what you're doing with its platform. After all, we must remember that we are all guests in their house, so to speak, when we use the Facebook platform. As such, it's just good manners to understand the house rules and abide by them. After you've come up with a concept for your application, it is well advised that you read through the developer principles and policies (http://developers.facebook.com/policy), including the statement of rights and responsibilities listed at the top.

On a very high level, you need to know that Facebook takes user privacy, spamming, lying, cheating, copyright, pornography, hate speech, and intellectual property very seriously. Stray from any of these areas in a manner that is counter to Facebook's guidelines for acceptable use, and you should expect swift, unapologetic action from Facebook to correct the situation for their users and remove your application from Facebook altogether.

Hire a Programmer

Now that you have some understanding about what you need to be considering when designing and deploying your shiny-new Facebook application, let's talk about getting someone to build it for you. Hiring a really good programmer who specializes in any language is difficult process. We don't want to overwhelm you, but at the same time, this process needs to be taken seriously. There's a very high price to be paid for hiring

a low-quality programmer. Do your homework, check references, and be sure candidates can back up any claims they make in regard to success and experience.

Assess Your Candidates

Qualified developers should have the expertise and the experience to be able to discuss any aspect of the Facebook application development process covered in this chapter. Furthermore, they should be able to expand on any of these topics with relative ease. Now, we're not looking for perfection here. If a programmer doesn't define UX exactly as we do here but clearly shows that they understand that UX is the practice of designing something to the benefit of the user, you're probably in good shape.

The candidate needs to have a fairly deep understanding of these principles, which in turn will show their level of experience, and ideally success. Ask the programmer how she would enhance the performance of a Facebook application.

Next, you're looking for technical competence. Have the programmer show you at least three applications they have built in the past. The applications should be live on the Facebook platform. Use these applications, and let your gut tell you whether the performance is where it needs to be. Does the navigation make sense? Is there a logical progression in the data structures or the application's narrative?

On a more fundamental level, have some basic tests that you give to all applicants in order to consider them seriously for the position. These should include the following:

- Embed a live video feed in a Facebook profile.
- Allow comments on a live video feed.
- Pull some basic profile information (name, city, and ZIP code) from the Facebook friends of a logged-in user account.
- Connect to a third-party data source, pull data from it, and display data in a Facebook application.

If you have any peers or acquaintances with Facebook development experience, ask the candidate to give you some samples of the Facebook-related code they have written and have your friend review it. Although there are many "right" ways to skin a cat when it comes to programming, making it difficult to identify the "best" code, it is certainly easy for an experienced programmer to identify poor programming practices.

One more thing—ask the candidate questions that will give some insight into their work ethic and habits. Questions should be direct and clear such as "If you committed to a deadline and started to realize that hitting the goal would be a challenge, how would you react?" You are looking for a two-part answer here. First, the programmer needs to communicate to you and the rest of the team that the deadline is in jeopardy with some explanation about why the issues have arisen. Second, the programmer needs to indicate that, unless the situation is an impossible one, they will still work diligently to hit the original deadline. Change is inevitable, so communication is key.

Manage a Development Project

Best practices for project management have been written about in a dozen formats or more. But at the end of the day, it's not which project management method or project development method you choose that determines success. The management of the overall project life cycle, the work ethic of the team members involved, leadership, and discipline have a much greater impact on the success of a project than the project management philosophy that is employed.

If you don't have any project management background or experience, then you don't want to take this part lightly. As critical as the programmer's job is when it comes to building your Facebook application, the manager on the project arguably has a much larger impact on the overall success of your endeavor. If you're going to take on the role of project manager for your Facebook application projects, it's critical that you manage the crucial steps in the project life cycle.

Scope and Goals

Before you run off expecting to build an application that will solve all your company's problems, first come up with some tangible, realistic goals that you want the application to reach. These objectives will determine features that will direct the development of your app. Specifically, what technical features of your Facebook app support the business objectives you have? What is the minimum bar necessary to achieve those goals and to give users a good experience with your application? What can users do with the Facebook app and how? How will communication flow through the app, e-mail, Facebook notifications, and the Facebook News Feed?

It isn't an academic exercise to do all of this up front. It's a necessary task that you'll need to conduct to avoid building the wrong thing and then rebuilding it later. Every hour of a developer's time is costly, especially if you make a mistake and have to make changes. Start out with a good idea of what you want, and document those requirements. You may need to make a change or two as you go, but at least you'll cut out a lot of unnecessary time having your developer help scope your application and write your requirements.

Research as many apps as you can in the genre you're planning to build as well as apps with features you want to emulate. Make a list of such apps—with the URLs to the app pages—and a corresponding list of features you like so you can present this information to your developer.

As you consider what you're going to build, also remember to use the right tool for the right job. Facebook applications are great experiences inside the social network/social graph. So, you can succeed if your goals are about acquiring users or monetizing through virtual goods or third-party advertising inside your app. But Facebook apps won't solve all your problems, especially if you are looking to drive product sales,

extend the reach of e-mail marketing campaigns, or drive traffic to your website. You often will need a combination of Facebook and other social media tools or your own website to make your marketing campaign work as designed.

For example, let's say you have a mandate from your management team to create a Facebook application that will generate an additional 120 online sales of your product. That's a great idea, but if you're asked to do this exclusively through a Facebook application, you may have some trouble. One reason is that Facebook does not currently allow you to add a shopping cart to a person's profile. So, a goal of having your Facebook application drive the immediate sales of your product may be asking too much of the Facebook application, no matter how good it is. It makes more sense to use the Facebook application to drive traffic to a landing page on your website.

So, in this case, you actually need both your Facebook application and your landing page to work properly. The Facebook application can be measured for the effectiveness of pulling people into the website, while the landing page itself must be optimized separately with different copy and layout to ensure that customers convert at the highest rate possible. This difference is important to understand when defining goals and ensuring that the application *and* supporting cast members are scoped properly. Sometimes you need more than just a one-man band.

Additional Deliverables

In addition to the functions of your application, you will need to ask your developer for a number of other things to ensure that a new developer can take over the project in a worst-case scenario or in case you choose a different developer for the next version. Be sure to include the following as you define the scope of your project:

- A copy of any source code created to build the application
- The addition of one of your employees as a developer of the application so you can conduct administrator tasks
- Project files and documentation related to the project
- Hosting information for your application
- Database structures related to your project

Your developer should also perform any configurations necessary through the hosting provider to ensure that the app is up and running properly before finishing the project. Facebook requires all new apps to be approved before communications propagate across Facebook and before the app can be found in a search. Oftentimes, Facebook disallows apps from being approved because of the violations of the developer terms of service mentioned earlier in this chapter. Don't sign off on completion of your application until the approval process has been completed. Otherwise, you may build an application that never launches to its intended audience.

Project Planning

Project planning involves not just hiring people for tasks you can't complete but also securing necessary resources, assigning responsibilities, and defining and securing budget if it is necessary. Depending upon the size of your project, it is important that you define what specific tasks are required in order to produce the finished product. You should estimate the time and effort required for each task, identify dependencies between different activities, and map out a realistic schedule for the overall project. Make sure that you involve your team when estimating how long the different activities will take and the inconveniences associated with them. Define critical dates and associated milestones. Make sure all this information is written to the project plan, including any relevant budget information, and get sign-off for the overall project from your key stakeholders.

Communication and Project Tracking

After you've done all this work to determine the scope, define your deliverables, and create a project plan that all necessary parties agree to, you must have open and effective communication if your project is going to be successful. Transparency and leadership are critical. It doesn't do anyone any good if you have a well-defined project plan, the scope, and tasks assigned if no one on the team knows what those tasks are or when the milestones hit.

As the project plan is being executed, you must track the actual results of your team's efforts and the specific tasks completed by the different members of your team as they are mapped out on the project plan. Not only are you looking for individuals who are hitting their goals according to the project timeline, you are also herding cats. In more complex projects, there are many times when some tasks intersect with other tasks being completed by different team members. If someone on the team gets off track and falls behind, it can hold up the efforts of the entire team and create a negative impact across the entire team in a cascading manner. Not only does this cause the project to fall behind schedule, but this can also create monetary and morale issues. Your job is to motivate team members to stay on track. In the case that problems crop up, it's your job to mitigate the negative impact on the entire team by reassigning resources or making changes to the project plan.

Change and Risk Management

This brings up two other important responsibilities related to project management: change and risk management. Even when scope and project planning are conducted under the best of circumstances, stakeholders often change their mind about what they want out of an application. This could be because they see changes in the marketplace, because the underlying business changes, or because they had a barbecue at their cousin's house this weekend and Uncle Frank came up with some great ideas that the team hadn't considered.

Sometimes situations demand changes in your approach that may impact scope, timelines, or deliverables that you once thought you needed. Changes like this and other events can adversely affect the successful outcome of your project. When possible, it's critical the project manager identifies risks and notifies the appropriate stakeholders of the situation as soon as possible. Sometimes you're willing to take a risk to make a change, and other times you won't be willing. The project manager, more than any individual on the team, can have a great deal of impact over the ultimate success of the project. Communication is key to making it work.

Debug Your App

If you are relatively new to the software development business, you are probably not familiar with bugs—identifying them, classifying them, and prioritizing them. It's an art to find them, so if you have a talented tester nearby, you'll certainly want some help. Once you've found your bugs, two main concepts help to drive changes to applications: severity and priority.

Severity is assessed by determining what happens for a user, without making any qualifications about the veracity or importance of the bug. In other words, what does the user experience? A numerical scale is used to classify each bug, and numbers are assigned independently of and before priority is assigned. For example, we use the following broadly defined scale for our applications:

- Severity 1: Browser or app crash, data loss: a fatal bug that causes the app or browser to terminate or data in the application to be lost
- Severity 2: Usability problem: app too difficult to use and/or too little information given to the user
- Severity 3: Feature Loss: important feature from last version inadvertently left out in current version
- Severity 4: Inconvenience/layout problem: process in the app not streamlined, poor layout, too much information given to the user
- Severity 5: Personal preference: no apparent problem for the user, but someone on your team (or you) prefer(s) that the app behave differently

Once all bugs have been identified in a sweep of the app, you can sit down with your team to assign a *priority* to each of the bugs. Priority is a determination of how quickly you'd like to fix the bug, and it is usually assigned in a group setting where people with different opinions can share their thoughts on the importance of each bug. We use the following priority scale for our applications and websites:

- Priority 0: Urgent, must fix immediately
- Priority 1: Very important fix but not immediately urgent

Continues

Debug Your App (Continued)

- Priority 2: Important fix that should be completed in the current version before official release
- *Priority 3*: Not a necessary fix for this version. Fix it if we can get to it; otherwise, add to next version and reprioritize alongside other bugs
- Priority 4: Feature enhancement or change that should be part of the next version
- Priority 5: Feature enhancement or change to consider for a future version

One final point regarding debugging your app. If you are seeking the perfect application or website, you may be disappointed by just how long it takes to release. Most commercial websites have minor issues that the developers or business managers don't like on the site. The reality of the Web today is that there really is no such thing as the perfect app or website. Conventional wisdom in the software business is that if you've released an application or website without minor bugs, you've released it too late. So relax, but make sure you knock out major issues so you're happy with the outcome.

Monetize Your App

It's one thing to create a fun, popular, and viral app. It's another to create an app that actually makes you money. Of the 300,000+ Facebook apps, only a small percentage of them are currently being monetized. You may be happy with the viral visibility and user data your app provides. But we suspect you'd also like to know about ways to generate revenue from your app!

It should be noted your efforts may be better spent utilizing Facebook's primary features such as the fan page, social ads, Facebook Connect, and existing apps to further expand your reach and monetize your own products and services. However, if you do go the route of developing your own app, Facebook suggests five popular business models for monetizing your app, detailed at this web page: http://wiki.developers.facebook.com/index.php/Common Business Models for Facebook Applications.

In brief, the five models are as follows:

- *Advertising*: By optimizing the data that Facebook provides their app developers, you can serve highly targeted ads on the canvas page of your app.
- Freemium (by subscription): You provide the basic access to your app for free but offer an upgrade level that users need to pay for.
- Virtual credits/virtual goods: Users purchase or earn virtual credits.
- Affiliate fees: Earn a commission from items users buy via an affiliate link on your app. For example, the Virtual Bookshelf earns money when users purchase books linked to on Amazon.com.

• *Merchandising*: Offer items such as mouse mats, mugs, caps, T-shirts, and so on, with your brand/app/logo.

You can find articles about application monetization on the Facebook developers wiki here:

http://wiki.developers.facebook.com/index.php/Articles_About_Application_
Monetization.

In addition, third-party providers to help you monetize are listed here: http://wiki.developers.facebook.com/index.php/Third_Party_Providers_to_Help_You_Monetize

For some time, Facebook has been beta testing various payment systems inside the platform. Only a small number of apps have integrated the virtual currency system (Facebook credits) successfully, but this could be the way of the future for many apps.



The Future: Applications on Mobile Devices

We've covered the present of Facebook apps; certainly we're beyond the early days where there weren't many rules. Some of the opportunities for fast viral growth are gone. The bar is higher today than it was. But it doesn't mean that Facebook apps will necessarily fade into obscurity. In fact, they may enjoy a renaissance.

Remember that Facebook has more than 350 million users, and the social network continues to grow at a rapid pace. The installed base of the Facebook platform is rivaled only by the Web, by Windows, and by SMS today. No other platform comes close to the reach of Facebook. At the same time, smartphones are continuing to grow in popularity. Increasingly, consumers want a mobile web experience regardless of where they are.

The popularity of Apple's iTunes and the App Store tells us that there is already a huge market in third-party mobile applications. Google has created a similar applications marketplace for Android phones, and Microsoft is doing the same with Windows Mobile. When three industry giants all go after the same market, you have to think there is truly an opportunity! Many of these apps run outside the social context that Facebook so uniquely and comprehensively provides.

Similarly, a variety of third-party apps have attempted to build a social network around mobile applications such as location-based services. These applications allow the user to invite friends to join through the phone's contact list. It is a social network of sorts, but it isn't anywhere near as comprehensive. Many active Facebook users have far more Facebook friends than cell phone numbers.

Consider these Facebook mobile stats:

 More than 65 million active users are currently accessing Facebook through their mobile devices. 212

- People who use Facebook on their mobile devices are almost 50 percent more active on Facebook than nonmobile users.
- More than 180 mobile operators in 60 countries are working to deploy and promote Facebook mobile products.

There are a few possibilities for the evolution of mobile apps that utilize social graph data from Facebook:

Facebook Connect–enabled sites that behave like mobile apps There is nothing keeping developers today from building sites that are purposely optimized to run as apps on mobile devices. Facebook Connect (which was covered in Chapter 7) would pull in required social graph data and allow for communication with friends and across News Feeds.

App compatibility through Facebook Mobile Facebook Mobile runs on a wide range of mobile devices (iPhone, Blackberry, Palm, Android, Sidekick, Windows Mobile, and others). This app displays a wide range of data that is exposed on Facebook—the News Feed, status updates, profiles, and other friend activity. But Facebook Mobile does not allow third-party apps to run through Facebook Mobile and run on the mobile device as they run on Facebook. Should Facebook see an opportunity in extending the dev platform fully to mobile devices, we would expect future compatibility between third-party Facebook Apps and Facebook Mobile.

A Mobile Facebook app container Alternatively, Facebook could release a simple "app container" for each type of mobile device that taps into the user's social graph on Facebook. This container would be fully customizable to a particular brand or look and feel. It would act as a "platform" of its own but would allow for Facebook and mobile development with one simple, comprehensive effort. This would reduce the confusion and effort necessary to target different mobile devices, and it would also allow developers to focus on creating better apps that users will enjoy.

Facebook applications are a great way to extend your brand experience beyond the provided features of the Facebook platform. It just takes a little creativity and patience to navigate the rules and standards that have evolved after the first few years of third-party social application development. It is truly multidisciplinary—you'll need to scope an app properly, enforce a great customer experience, and manage a development effort to get it in the right place. If you don't, your time, money, and energy will be wasted, and you'll have to find a new Facebook tactic to engage with your audience.