

A. General Issues

ISSUE	SPEC SOLUTION
<p>We originally wanted to sell a fixed placement (where a user's ad would appear on every pageview) where a maximum of 6 ads would show on each page. However, we planned to run these ads on over a million pageviews a day, and 166,667 ads a day gives too much promotion to each user.</p>	<p>I decided to rotate the ads, so up to 100 ads would run in 6 ad slots. This translates into a minimum of 10,000 ad impressions a day.</p>

Screenshot of Xanga Plugz on the right: Note that six ads appear on the right side in the third column of a liquid three-column layout

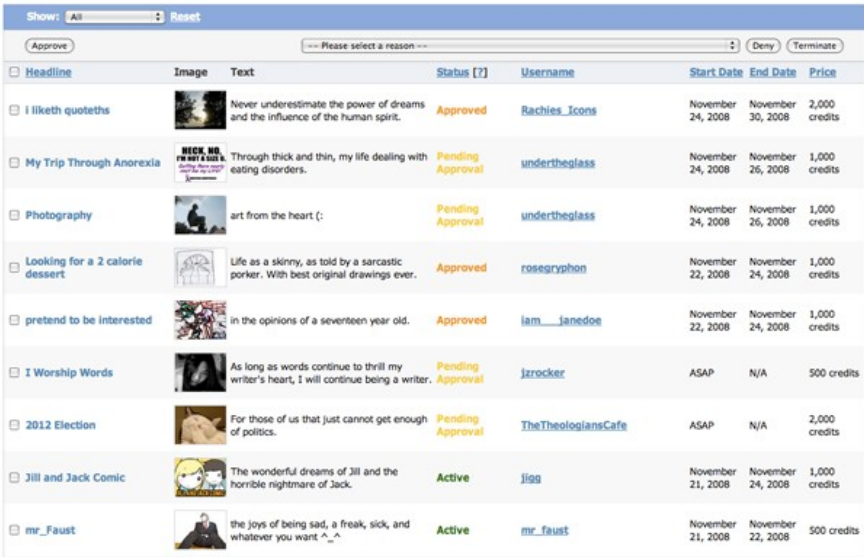
The screenshot shows a web browser displaying a Xanga user profile page. The layout is a liquid three-column design. The left column contains navigation and site statistics. The middle column features a 'Universal Inbox' with various user-generated content. The right column, highlighted by a vertical line, contains six 'Xanga Plugz' advertisements stacked vertically. Each ad includes a small image and a short text snippet. The browser's address bar shows the URL 'http://www.xanga.com/private/homemain.aspx'.

<p>If we allow too many ads to run in a small fixed number of slots, the user would not see his/her own ad on each pageview, and might think their ad isn't running at all.</p>	<p>I decided to have the ad show more frequently to the user who bought it, while showing "proportionately" to others. Thus, the user won't think he or she is being ripped off when their ad is not displayed immediately upon purchasing the ad.</p>
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B. Spam Issues

ISSUES	SPEC SOLUTIONS
<p>Users want to see the ads right away, but we want to avoid showing profane ads.</p>	<p>Despite users' desire to see the ad immediately, I decided to display ads only after they are approved by an admin because of the danger of spam and obscenity. This has the drawback of making things slower if an admin doesn't approve the ad. As a workaround, I had the system email the admin as soon as an ad is added, so the admin knows there's a ad waiting to be approved.</p> <p>Another solution would be to auto approve all ads, and then remove ads from the pool later if they are flagged as explicit, spam, etc. However, these ads are shown to all Xanga users, making this exposed to profane or spam ads. Thus, I went with the first solution.</p>

Screenshot of Xanga Plugz Admin: Each ad can be approved individually, or you can use the checkboxes to batch approve or deny certain ads.

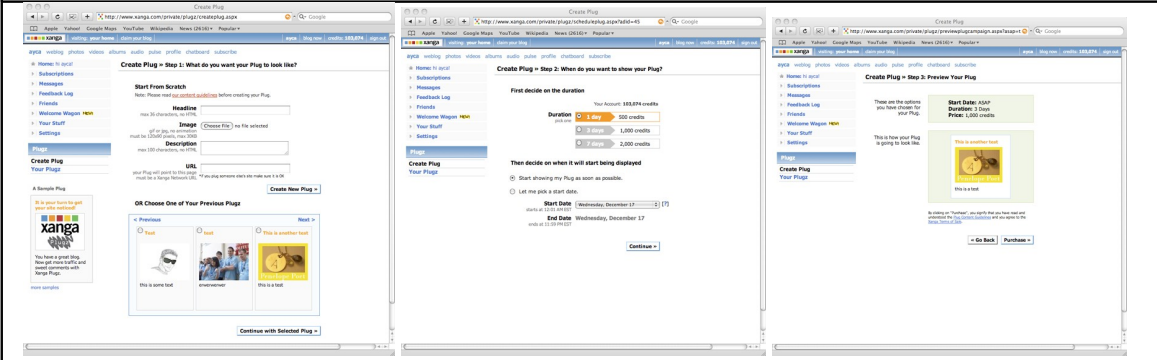


Headline	Image	Text	Status [?]	Username	Start Date	End Date	Price
<input type="checkbox"/> I liketh quoteths		Never underestimate the power of dreams and the influence of the human spirit.	Approved	Rachies_Icons	November 24, 2008	November 30, 2008	2,000 credits
<input type="checkbox"/> My Trip Through Anorexia		Through thick and thin, my life dealing with eating disorders.	Pending Approval	undertheglass	November 24, 2008	November 26, 2008	1,000 credits
<input type="checkbox"/> Photography		art from the heart (:	Pending Approval	undertheglass	November 24, 2008	November 26, 2008	1,000 credits
<input type="checkbox"/> Looking for a 2 calorie dessert		Life as a skinny, as told by a sarcastic porker. With best original drawings ever.	Approved	rosegrypnon	November 22, 2008	November 24, 2008	1,000 credits
<input type="checkbox"/> pretend to be interested		in the opinions of a seventeen year old.	Approved	iam__janedoe	November 22, 2008	November 24, 2008	1,000 credits
<input type="checkbox"/> I Worship Words		As long as words continue to thrill my writer's heart, I will continue being a writer.	Pending Approval	jzrockr	ASAP	N/A	500 credits
<input type="checkbox"/> 2012 Election		For those of us that just cannot get enough of politics.	Pending Approval	TheTheologiansCafe	ASAP	N/A	2,000 credits
<input type="checkbox"/> Jill and Jack Comic		The wonderful dreams of Jill and the horrible nightmare of Jack.	Active	jigg	November 21, 2008	November 24, 2008	1,000 credits
<input type="checkbox"/> mr_faust		the joys of being sad, a freak, sick, and whatever you want ^_^	Active	mr_faust	November 21, 2008	November 22, 2008	500 credits

(Spam Issues continued on next page)

<p>Users may want to advertise outside sites, but those wouldn't be Xanga sites and might be spam or profane.</p>	<p>I decided not to allow external sites to be advertised using this system for several reasons. First, for the initial launch of the product, I wanted to focus on Xanga users promoting their own Xanga sites. Second, not linking to outside sites would mitigate issues around spam and profane content.</p>
<p>Users may want to create multiple ads, but multiple ads from the same Xanga users may be annoying to other Xanga users.</p>	<p>I decided not to put a limit on the number of ads a particular user could create because this problem is mitigated by the admin tool used to approve/deny ads. If a particular user creates multiple ads, the admin could simply approve a limited number of them. Secondly, the ads will not be for free and it is to be seen if this problem really occurs. It may be early to program the limit mentioned.</p>

C. Issues With Creating Ads

ISSUES	SPEC SOLUTIONS
<p>Some users may not have an image suitable for making a 120x90 image ad. Those users might want to use a text-only ad.</p>	<p>Ads with images are more compelling. Moreover, displaying text-only ads would look weird among image ads. Finally, supporting both text-only and image-with-text ads would complicate the UI. I decided to support only ads-with-images.</p>
<p>Creating an ad may be a complicated process for some users because it involves designing, scheduling and purchasing the ad.</p>	<p>I simplified the process of creating an ad by using a wizard with 3 steps:</p> <ol style="list-style-type: none"> 1. Design ad: Users provide a headline, a jpeg/gif image, a description text and an URL. 2. Schedule ad: Users decide on the duration and the start date of their ad. We will check if users have enough credits for the options they choose when they want to move to the next step. 3. Preview ad: Users check their ad for accuracy and purchase if it looks OK. We will deduct the credits from their account after they click on "Purchase". After this step, the users will be taken to their list of ads.
<p>Screenshots of Xanga Plugz Creation Wizard (3 Steps)</p>	
<p>Step 1: Enter Headline, Description, Image, and URL. Step 2: Schedule Ad. Step 3: Preview Ad and Confirm Purchase</p>	
	
<p>Users may want to run the same ad multiple times.</p>	<p>In addition to being able to create a new ad from scratch by providing all the necessary fields, users can pick a previously created ad and continue to the second step with it.</p>
<p>Users may upload images that are different sizes.</p>	<p>Letting users upload images that are different sizes would create irregularity in the user interface. I decided to require that users upload images that are 120x90px. Also to limit the file size for users without broadband, I required that the images be 30K or smaller.</p>

(Issues With Creating Ads continued on next page)

<p>Ad creators may want to use animated gifs as images, but that's annoying to users (particularly if all six ads were animated).</p>	<p>When the images are uploaded, I decided to check them for frame count and then throw an error if the images are animated gifs.</p>
<p>Some users may enter HTML code to the description field to make text bold or italic and to link to a web page.</p>	<p>I decided not to let users enter HTML codes to make the ads that are displayed uniform and to control the URL they link to. Entering HTML throws an error.</p>
<p>Users may use profane words in their ads.</p>	<p>I decided to add a profanity filter. Use of profanity triggers an error and gives the user an opportunity to rephrase his ad. Profane text that is missed by this filter (e.g. if a user replaces an "a" with the @ symbol) will be picked up by the admin when approving ads.</p>
<p>Users want to specify how long their ad will run.</p>	<p>I decided to give users 3 days and 7 days options based on my research of similar systems. After surveying users, I decided to add a 1 day only option.</p>
<p>Users may not know how many credits they have when they schedule their ads.</p>	<p>I decided to display the number of credits on the schedule ad screen. Accessing to that information easily would help users choose the duration for their ads.</p>
<p>Some users may want to see their ad right away whereas others may want to schedule their ad to start later.</p>	<p>I decided to have two types of scheduling in order to be flexible. Users can either choose to start showing their ad ASAP or they can choose from available start dates. Available start date changes based on the number of ads already scheduled (whether all the slots are full) and the number of days we can sell ads into the future.</p> <p>End date of the ad is not editable, as it changes automatically based on the start date and the duration of the ad</p>

D. Pricing Issues

ISSUES	SPEC SOLUTIONS
We wanted to charge a relatively high price/day for the ad, but the average Xanga user has less than 4,500 credits (which could be purchased for \$4.50).	To avoid "sticker shock", I created a 1-day option so that even users with few credits could try the Plugz system.
The initial prices we launch the ads with may be too low.	We wanted to avoid a situation whereby a rich user "locked in" too-low prices on day one by buying (say) 1,000 days of ads at that price, and then we were contractually obligated to deliver those ads. Thus, I decided to only let users buy ads to run over the next 14 days. Thus, if we changed the price in the future, the price change would take effect within at least 14 days.
Some users may have insufficient credits at the time they create the ad.	Users need to have enough credits to schedule their ads but they don't need credits to design an ad. In that case the ad will simply show up in their list of ads as 'unscheduled'.

E. Ad Display Issues

ISSUES	SPEC SOLUTIONS
Ideally, these user-to-user ads would show up on a lot of pages, but users would object to these ads showing up on their own blogs, as that might imply that these ads are endorsed by the user.	I decided to display ads on the new private home, subscriptions and feedback pages since these Xanga admin pages don't imply that the user is endorsing these ads.
Xanga has a substantial user base in Hong Kong as well as the US. Our users in Hong Kong and US may not be interested in ads from the other group of users.	I decided to have separate pools of ads for Hong Kong and US. HK ads would only be displayed to users whose IP indicate they are located in HK. This way, users from each group would see ads that are relevant.
The old two column layout of the private home does not have enough space for displaying ads.	Right now the page has a liquid layout. The left column has a fixed width. So, the column on the right ends up being very wide. I decided to make give these pages a centered, fixed width layout and display the ads as a third column.
Some users may prefer not to see the ads, particularly those who have purchased Xanga Premium which removes ad on their public pages.	I decided to create an opt-out for seeing the ads for users who have purchased Xanga Premium. This opt-out was activated for Xanga Premium users by default. However, if a user purchased a Xanga Plugz, I decided to deactivate the opt-out so that this user could see his or her ad. For Xanga Classic members (who have not paid for Xanga Premium), I decided not to have an opt-out.
Browsers may cache the ads causing the same ads to be displayed over and over again.	I added randomization query strings (e.g. random=5732348234) to the image URLs to prevent caching by the browser or proxy servers. Moreover, whenever an ad is added or removed, the cache will be refreshed.
An ad in the first ad slow performs better than an ad in the bottom slot. It isn't fair to one user that his ad appears in the top slot while another user has her ad appear in the bottom slot.	I decided to show the ads in a random order, so that an ad will not persistently be displayed in the top ad slot or the bottom ad slot. It will have an equal chance of appearing in every ad slot.

F. Ad Management Issues

ISSUES	SPEC SOLUTIONS
Users want to know if their ads are approved or denied.	When an ad is approved or denied, users will get an email about it. The email letting the user his or her ad is denied will contain the reason why the ad is denied.
Some ads may not comply with the Plugz Content Guidelines (http://info.xanga.com/wiki/Plugz#Content_Guidelines_for_Plugz)	Created a list of reasons to deny a particular ad. When denying an ad, the admin can select the reason and it will be emailed to the user. If we deny an ad, the credits used to purchase that ad will be refunded to the user.
The admin tool to approve/deny ads shows all the ads that are created including the ones that are to yet be approved and the ones that are active or denied. It may be difficult for the admin to see particular types of ads.	The admin tool will have filtering by status and sorting (by different fields) capabilities to make it easy for the admin to find particular types of ads.
A user may create an ad (pay for it) but decide that s/he does not want to display it. Users may change their minds after the ad starts being displayed too.	Users will be able to cancel their ads before the ad's start date. In that case, they will get their credits back. Users will also be able to stop displaying their active ads. However, they will not get a refund in the second case.

G. Tracking Statistics Issues

ISSUES	SPEC SOLUTIONS
Users want to see information about the performance of their ads.	I created a page where a user can see the impressions and clicks by date (including the calculated Click Through Rate) for a particular ad. So we could track overall stats, I also created an admin page for overall stats.

Screenshot of Xanga Plugz Stats Page

The screenshot shows a web browser window displaying the 'Your Plugz' page for a campaign titled 'Talkin' 'bout issues'. The browser address bar shows the URL: <http://www.xanga.com/private/plugz/campaigndetails.aspx?cid>. The page header includes navigation links like 'Home: hi Plugz!', 'Subscriptions', 'Messages (1)', 'Feedback Log', 'Friends (9 invites)', 'Welcome Wagon', 'Your Stuff', and 'Settings'. Below the navigation, there are links for 'Plugz', 'Create Plug', 'Your Plugz', and 'This Plug'. The main content area features a table with the following data:

Start Date	Duration	Price	Status [?]
September 23, 2008	3 Days	1,000 credits	Completed

Date	Plug Hits [?]	Clicks	Click Through Rate [?]
Total	205,970	125	0.06 %
Sep 23, 2008	55,106	31	0.06 %
Sep 24, 2008	79,333	59	0.07 %
Sep 25, 2008	71,531	35	0.05 %

Below the table, there is a 'Reschedule' button and a promotional graphic for 'Talkin' 'bout issues' featuring a cartoon robot holding a heart. The text in the graphic reads: 'Dating issues? You've come to the right place. We're your source for advice, stories and discussion.'

Users may want to look at a particular ad they created in the past.	I created a page that looks similar to step 3 of the wizard (see above).
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H. Other Issues

ISSUES	SPEC SOLUTIONS
Users may be confused.	I created a wiki-based help page that you can see here: http://info.xanga.com/wiki/Plugz
We need terms of use to cover the purchase of an ad	I worked with a lawyer who determined our existing contract for the purchase of Xanga Credits covered this issue (http://help.xanga.com/about/termsofsale.htm).
We need ads to show up even if users don't submit ads.	I created some filler ads that run even if there are no user ads.
Users may want to see a Plugz, but not know how to create one of their own.	I linked to Xanga Plugz at the top of the Plugz that appear with the text "Plug your site". See the first screenshot.