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Consultation Proposal For Social Network Site Creation

Written on October 25, 2007 by Eric M. Scharf of Scharf Creative Services

It is arguable, in adhering to the concept of “what have you done for me lately,” that great successes like Dofus (Flash-based EverQuest-style MMO game) or Club Penguin are last-year's hits. Flash was never really meant to be an intense gaming platform, nor a 3D platform, though it has been contorted by a few good developers to accomplish something greater than its original goals. 3D Plug-ins do exist for Flash, however, I would recommend against using them in a gaming environment, even a low-intensity one. Latency issues (i.e. lag) play a major role in this, and you ultimately want custom code for 3D capabilities in an application like Flash.

\$25 per month appears to be the upper limit for online gaming. You are probably not going to see a lot of site visitors who are willing to pay \$30 for access to site activities, even if the product you are offering is acknowledged by experts as absolutely superb. Forgetting the target age group for a moment, there are online games that some people have played for 3+ years, and while the experience of those games eventually waned, the players never paid more than \$10 per month. A manageable monthly fee, in this case, may equal longer staying power for the initial user experience (i.e. the very first round of activities and games), allowing for slower turn-around on new material, which also provides for more time to better develop that new material into the next great user experience (i.e. round 2, 3, 4, etc.).

I took the liberty of putting together a little focus group of friends and their children (approximately eleven kids, with ages ranging from eight to fourteen, and the majority towards the higher end). The overriding theme among the parents was that they would never pay more than about \$5 per month for something like Club Penguin. Another shared response was that there was not enough content (in both games and more general activities), and most of the kids were able to play through the site, without forced encouragement, for at least 2 days. Most, unfortunately, appeared to become bored with the site beyond that time frame.

The isolated focus group experiment suggests that a loyal user base should not be expected unless new-and-potent material is delivered on a regular basis (more often than not) which keeps the kids coming back for more (just like the attraction of morning and afternoon episodes of favorite cartoons, of course). The need, however, for regularly-delivered new material does not throw water on my theory of making such a compelling-and-enjoyable, initial delivery that the playability lasts much longer than that of comparable first-stab development efforts put forth by similar studios.

While my questions to the parents and children went deeper than “get back to me in two or three days with your comments,” ultimately, based upon your design document and associated conversations, the focus group results may never apply due to the unique activities and games

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that will be available through your social network site. I can certainly imagine there being a thorough series of focus groups for social network site.

Let us now switch gears and get down to brass tacks with the topic of moderation, where the following figures are angled towards a larger-scale effort, as activity / game details of your social network site have yet to be fully established. You will have to find moderators who will work for about \$1,000 per month for 25 hours per week. You will need approximately 25 moderators per month working in shifts in order to enforce rules if you are going to be operating at a 24/7 clip. That will equal approximately \$25,000 per month for just the guarantee of one moderator online at a time. A compounding factor is that this data is really appropriate for a US-based site. The incredible number of localizations in which your social network site will be presented will most-likely force you to hire full-time moderators.

You will have to make approximately \$50,000 in profit each month in order to sustain the described stable of moderators, at a collective price tag of \$25,000 per month in salaries. This translates into a required user base of approximately 10,000 for each moderator, and this does not cover overhead expenses.

In order to recoup development costs and maintain a steady cash flow, aiming for as many subscribers as possible is an understatement. A minimum of 100,000 users per month would be a safe number, to be blunt. This translates into approximately \$500,000 per month which will also pay for server space, studio overhead, and salaries for artists, programmers, and moderators.

EVE Online, quite possibly the best MMORPG (Massive Multiplayer Online Role Playing Game) ever created, has approximately 250,000 subscribers. World of Warcraft (with a significantly pre-established fan base and series of prequel products) retains more than 7 million subscribers. Approximate figures on EverQuest (the first MMO) have been hard to come by, but it is apparent that the economics of a MMORPG (even as a small variation of this genre for your social network site, with a watered-down feature set) do not make sense unless you are seriously considering big subscriber numbers. In this vein, it will be increasingly hard to get and retain big subscriber numbers unless you are offering a product that is state-of-the-art. Commit fully to going all the way or step back and try your hand at a completely different product.

Regarding further details and equally important expenses, here are some estimates for developing virtual 2D (Read false 3D) "scenes" just like the material displayed at Club Penguin. One of my development resources could create a scene, from scratch-to-concept-to-completion, in approximately 40 hours (8 to 10 hours per day), at a rate of \$50 per hour. Each scene development effort would essentially add up to \$2,000. Subtle revisions of the initial formal delivery, involving fine-tuning, would be included in this cost. Major revisions of the initial formal delivery, involving significant changes to art assets and reprogramming of Flash-based underpinnings, will be completed at a rate of \$50 per hour. A solid and thorough game plan (no pun intended) is the very best "vaccine" you can have against revisions.

Creating the Flash "interactivity," however, would be more involved, including collisions and pathfinding (click-and-go movement) among other items. Again, assuming a similar environment to Club Penguin, the interactivity would require an additional 30 hours for an average scene, equaling another \$1,500, for a total of \$3,500 per scene.

There are further costs that involve building single-player games, with the *default* being where a player-character interacts with a flash game, obtains a score, and, then, the Flash remote player reports back with a "score" (exactly like Club Penguin). Single-player development is always much easier than multiplayer. Any of my development resources would have experience with advanced actionscript, online gaming, and familiarity with socket serves like SmartFox Server, with additional skills involving client-server Flash and Flash database interface capabilities.

The *programming* for every complete, single-player Flash game, depending upon complexity, would cost \$3,500 to \$8,000. If your goal is to create a game much like the "Coffee Bean Sack Toss" game from Club Penguin, then, that would be relatively simple and would cost approximately \$4000 to program. An average price, however, of \$6,000 for programming each stand-alone, single-player game would be reasonable.

Regarding site architecture, it should be optimized towards the end goal, which is multiple users attempting connections with a lot of back-and-forth traffic. This involves multiple load-balanced servers. Club Penguin appears to take after the World of Warcraft model, with several available servers to which users can choose to sign in. I would dissuade you from attempting to have a single persistent "world" to which everyone signs in. Such a system has proven unreliable with MMO's such as EVE-Online. Spreading your user base over multiple "worlds" (*Read servers*) means that no one outage ever affects 100% of your user base at once.

Regarding the development of art assets on a per area / category / section basis, a project like Club Penguin would cost approximately \$10,000 per area. Club Penguin, for example, contains approximately 17 unique areas which would equal \$170,000. At the end of the day, a solid infrastructure and detailed production plan *may* allow for sharing of code and art assets between multiple areas, leaving the unique assets specific to the big ticket items.

The animation (actions, emotions, ambient movement) of a character with a simple user-chosen attribute, like the penguin's color, would cost approximately \$25,000. Again, developing components that can be *shared* and still appear unique and robust is the key to cost-cutting. The interaction, storyboarding, and path-finding efforts would cost approximately \$20,000 per area. Coding those features may actually take the skills of four dedicated engineers (if one or two technical studs prove elusive) approximately six months to perform, which would equal another \$200,000. QA, being one of the most important elements to your project, may cost approximately \$100,000. While I abhor cost overruns and miscellaneous expenses, you may be looking at absorbing an additional \$200,000 in this vein. Bringing your social network site from ground level to launch, from concept to completion, would mean an initial investment of approximately \$1 million. Initial and ongoing maintenance cost will, of course, push this figure higher.

Regarding servers, load-balanced servers are the way to go, but, this, too, depends on the number of users. Server rental may cost approximately \$1,500 per month (technology changes so quickly that arranging for anything more than a lease of this equipment may prove undesirable). Furthermore, if you have poorly-written, non-optimized code, you will have to invest even more on hardware in order to handle the same amount of connections without latency.

There should be approximately three moderators per server, operating at a 24/7 clip, with a full-time supervisor responsible for every 20 moderators, in an attempt to keep the "Moderator/Guide-to-Player" ratio below 50 to 1. Assuming there will be approximately 1,000 active players at any one time, you will need 60 Moderators and 3 Supervisors, which would equal between \$1.5 and \$2 million in annual salary costs. Again, as suggested, the International requirements may push these figures further.

Regarding hosting requirements, they are totally dependent upon your user base. You will need a flexible host if you do not build the datacenter in-house. If you have 1,000 users online at one time, for example, that means you will at least need some rudimentary load-balancing, along with traffic routing methodologies.

In conclusion, from the perspective of a *large-scale* project, you should consider at least \$1 million for initial development, as well as an additional \$2 million per year for continuing operations (staff salaries and server costs). Family-friendly content (a given with your social network site) will require you to maintain a reliable group of heavy-handed moderators online in order to enforce rules. Online gamers, of course, love to exploit and find ways to circumvent the system. The sweet spot for content should be approximately \$5 - \$15 per month for accessing

and playing the activities and games on your social network site. This means you may have to recruit and retain a user base of approximately 200,000 paying users, which is not impossible, but you will have to balance the amount of moderators around, to, again, enforce the family-friendly rules with your user base. Again, with a solid-and-detailed production plan and a *well-defined* feature set, you *may* be able to manage these costs into a smaller investment. It is also important to remember that so much of this information is subjective and exposed to interpretations of *available* research data.

