Viaweb's First Business Plan  
  
I recently found what I think is Viaweb's original business plan. I didn't know what a business plan was supposed to have in it, so I just wrote down what I thought was important (in plain text, to make it easy to send by email).  
  
The company was called "Webgen" at first. We thought we only needed $15,000 in startup capital; this proved to be an underestimate.  
  
Reading this, you can see that even we were still trying to grasp what a web-based application was. In the system description we listed the site generator and the web interface as separate components; now one would just think of them as a web-based site generator. And we still thought that some users would prefer to update their sites via email than via a browser, because using a web browser was such an esoteric skill.  
  
MarketplaceMCI was the big power in e-commerce at the time. They had a service bureau model, but they created nice looking sites. Our original page design imitated theirs.  
  
  
  
Sketch of a business plan for Webgen. 24 Aug 95.  
  
OVERVIEW  
  
Webgen allows clients to generate web catalogs remotely.  
  
There are several other companies that can generate and serve web catalogs. The best known site of this type is Marketplace MCI (www.internetmci.com). But while these other sites use their generators in-house to build catalogs from materials provided by clients, Webgen's generator can be used interactively by anyone with a modem and a copy of Netscape.  
  
This will lower the cost of putting a catalog online by, say, 90%. It also means that our volume is not limited by the number of clients we can serve personally. We would be a software company, not a service company.  
  
Anyone will be able to sign up to keep a catalog at our site for a flat monthly fee. And we have made Webgen so easy to use that any graphic designer or "web consultant" can generate catalogs with it. So instead of approaching catalog companies with an offer to put their catalog on the web, we will let them do it themselves.  
  
Suppose you are running a catalog company. Today, if you want to have an online catalog that people can order from, you have two options. You can have a company like MCI create and serve it for you, or you can set up your own server. Both options are expensive. When our service goes online for real, you will be able to do it in-house: anyone who can use Netscape can generate catalogs at Webgen.  
  
There are a large number of companies who would like to be able to market products on the web, if it were cheaper and easier. To our knowledge, Webgen is the \*only\* system that can tap this market.  
  
As the market matures, we would consider spinning off a standalone catalog generator/server as a commercial product.  
  
HOW BIG A DEAL IS WEBGEN?  
  
Even assuming it succeeds, what are the prospects for Webgen? How big a role in the future of the Internet will a company like Webgen play?  
  
The answer, perhaps surprisingly, seems to be: a very big role. Technical people and business people agree, the web is going to be important. A large part of the web's importance will come from online commerce. And Webgen could, in turn, be involved in a large part of the online commerce.  
  
Why? Forget about Webgen for a moment, and just ask: what will the future of online commerce look like? When someone wants to sell things on the Web, how will they do it? At the moment, they can either go to a company like MCI, or set up their own server. But what will they do a year or two from now? Ten years from now?  
  
If selling things online were like other software applications, the future of the market would be general-purpose software packages. You would eventually be able to buy a copy of Microsoft Catalog, and use that to put your catalog online.  
  
There are a couple reasons why this is not likely to happen anytime soon. The main problem is, an online catalog is not just something that happens on your own computer, like word-processing. It has to be on a web server, with encrypted transactions, a high-bandwidth network connection, 100% uptime, security, backups, order tracking, and so on. Setting up a server is expensive and difficult. On the East coast, the network connection alone costs about $2000/mo.  
  
So the next best solution is to have a general-purpose catalog generator, but have someone else handle the server part. \*And that's exactly what Webgen is.\* Webgen is Microsoft Catalog, or as close as anything's going to get. Don't be led astray by the fact that the software is going to run on our machines. With networks, it no longer matters whether the program you're using is running on your own computer or not. Using Webgen will be just like using any off-the- shelf software package, except that users won't have to install anything.  
  
What's more, our software will "run" on everyone's machine, updates will be free and instant, and the interface will be one the users already know (Netscape).  
  
The idea behind Webgen is a lot like the one that made Kodak. Before Kodak came along, if you took a photo, you had to develop it. If an ordinary person wanted to have his photo taken, he went to a photographer's studio, just as you might go to MCI to put your catalog online today.  
  
Eastman sold a camera everyone could use, plus the promise to handle the messy, capital-intensive part---developing the film.  
  
We sell a catalog generator everyone can use, plus the promise to handle the messy, capital-intensive part---serving the pages.  
  
Of course, really high-end customers will want to set up their own servers, just as high-end photography customers develop their own photos. We would not rule out setting up clones of Webgen for them. But we believe that we will be more successful if we think of ourselves as selling a product rather than a service. Webgen could be the Kodak of online commerce. Someone will be.  
  
THE SYSTEM  
  
Webgen's formula has three ingredients:  
  
1. A server (www.webgen.com) that can serve catalogs and support ordering.  
  
2. A generator that can generate catalogs to be served at the site.  
  
3. An interface that allows users anywhere on the web to modify and regenerate their catalogs interactively.  
  
The site is already up and running, though at present the only catalog on the server is one that we made for demos. All three ingredients already work. (The demo catalog can be seen by following the "Clients" link on our home page, which is at http://www.webgen.com)  
  
We are now polishing the software to make it faster and easier to use, but we believe it is already the most sophisticated web catalog generator available. Webgen can do several things that we do not believe any other generator can do:  
  
1. The big win, of course, is the interactive interface. It is this that makes it possible for Webgen to be a software company that sells its generator to everyone, instead of service company that uses it in-house.  
  
But even compared to the generators that companies like MCI use in-house, we believe Webgen is more sophisticated:  
  
2. Webgen generates all the buttons in a site automatically. Sophisticated web sites have buttons that are images instead of text links. Usually these button images are made by hand in a program like Photoshop. We believe our generator is the first to create all the buttons in a site automatically.  
  
This is a great advantage to users, because it means they will be able to control even the way the buttons in their site look via our remote interface. For example, if they want the text in buttons to be in Times instead of Helvetica (the default), they will be able to do this with a single menu choice on our remote interface. The next time they look at their site, all the button texts will be in Times.  
  
3. Webgen creates all the thumbnail images itself. The user only has to supply the original (big) images of the items in the catalog. Because the thumbnails are generated by the software, they can all be the same height, leading to a more consistent set of pages. (Compare our demo to existing online catalogs in this respect.)  
  
4. Webgen has a wide variety of page styles. Our default section style, for example, puts three thumbnails horizontally across each page. But there are already six other possible section styles. By making menu choices, clients will be able to have the section laid out instead with a single picture and lettered items, or with with thumbnails laid out vertically, or even diagonally. There will be a comparable number of options for the layout of the individual item pages and the home page.  
  
5. For each catalog, Webgen builds an index and creates a database that is used by a search script running on our server. Users will be able to find items in any catalog at our site either by looking in the index or doing a search by keyword.  
  
6. As well as an interactive interface, Webgen has a command language for batch updates to catalogs. Commands can be sent to the server by email and the catalogs regenerated automatically. This will be useful for clients who want to "attach" their catalog to an inventory control system. Because it takes only a minute or two at most to regenerate a large catalog, clients could make their online catalogs reflect minute-by-minute changes in inventory--- as simply as sending us email, and at no extra cost.  
  
HOW PEOPLE WILL USE IT  
  
We expect that we will have two kinds of users:  
  
(A) Sometimes the user will be the catalog company itself. Webgen is so easy to use that a catalog company could very well designate someone in-house to manage their online catalog.  
  
(B) Otherwise the user will be one of the growing army of "web consultants", acting on behalf of a catalog company. The consultant will pass on, and mark up, the flat fee that we charge. We expect that such VARs will work aggressively to sell the service to catalog companies. With Webgen, any web consultant will be able to approach a catalog company and propose to put its catalog online for much less than the current going rate, and still pocket a large markup.  
  
In either case, using Webgen will be the same:  
  
1. The client will contact us and set up a new account. We will assign them a username and a password, and also register a new domain name, if they want one. Every catalog on our site will be able to have its own direct URL of the form  
  
http://www.yourcompany.com  
  
if the client desires.  
  
2. To build a catalog, Webgen needs two things: images of the items contained in it, and text including the price, item number, description, and so on.  
  
There will be several ways for the user to send us these raw materials. They can type the text directly into our remote interface, or they can send it to our server by email in a prespecified format.  
  
They will be able to send us the images by logging into their account on our server and FTPing them to a designated directory, from which the generator will grab them automatically. (Any connection good enough for netscape can also support FTP.) When browsers support email with attached images (which they promise to do soon) sending images to Webgen will be trivial.  
  
3. After Webgen's server receives input through its remote interface, or via email, it will automatically regenerate the changed portions of the catalog. Changes will be visible to the user via Netscape, usually within seconds.  
  
4. When the user has made and inspected changes to a catalog, he or she will send the server a "commit" message, causing the changed catalog to be copied to its real URL. At this point the catalog will become visible to consumers visiting the site.  
  
For security, the commit command will use one-time passwords. This way, even if someone gets the ordinary password of a user, they can't modify the catalog that actually appears at the site.  
  
5. Clients that have a high-volume of orders will be given an account on our server that they can use to retrieve them. If they want, they can keep this connection open 24 hours per day, generating a live feed of orders.  
  
Smaller clients will have orders forwarded to them by fax---an attractive alternative, because it is secure and uses familiar technology.  
  
DETAILS  
  
The flat fee would include a certain amount of network bandwidth (that is, visitors) per month. After this is exceeded, there may be a usage charge.  
  
Netscape has recently announced that it will support Java. This may eventually allow us to shift some of the running of the generator onto the clients' CPUs.  
  
PEOPLE  
  
At the moment, Webgen consists of the following four people:  
  
Paul Graham (pg@webgen.com) is an expert on dynamic languages. He is the author of \_On Lisp\_ (Prentice Hall, 1993) and \_ANSI Common Lisp\_ (Prentice Hall, 1995). He has worked as a consultant to the US Department of Energy, DuPont (for whom he wrote one of the first parametric CAD programs), and Interleaf. He has an AB summa cum laude from Cornell, and a PhD in Computer Science from Harvard.  
  
Gino Lee (gino@webgen.com) is Tutor in Printing and Typography at Harvard University and is Director of the Bow & Arrow Press, Harvard's experimental typographic workshop; he teaches subjects including letterpress printing, design history, digital type design, and artist's books. He has been an independent digital type and graphic designer since 1989. In 1990 he won the Society of Printers' Award for Excellence.  
  
Robert Morris (rtm@webgen.com) is an expert on computer networks. He has published papers on high-speed networks, wireless communications, and computer security. While in high school he worked at Bell Labs, where he ported TCP/IP (the software on which the Internet is built) to Bell Labs' version of Unix. He later worked for Convex Computers, Thinking Machines, and DEC Systems Research Center. He has an AB in Computer Science from Harvard, and is currently a PhD candidate in Computer Science there.  
  
Julian Weber (jlw@webgen.com) has been practicing law in New York for over 30 years. From 1964 to 1979 he was a partner in the firm of Botein, Hays, and Sklar. From 1979 to 1984 he was the president of \_The National Lampoon\_. He holds a JD from Harvard Law School.  
  
Robert and Paul handle the software; Gino is in charge of graphic design; and Julian deals with corporate and legal questions. We are looking for one more person to manage business matters, especially dealing with the press, clients, and potential corporate partners.  
  
FINANCES  
  
Webgen has no capital. On the other hand, it costs very little to run it, at present. All our equipment is the personal property of the people involved, and the business has no other major expenses. No one has a salary.  
  
The company could be self-capitalizing, if necessary. That is, we could use income from initial clients to buy things that we could use to attract more clients.  
  
The business would grow a lot faster if we had about $15,000 to spend. This would get us:  
  
1. A computer on which to develop software ($3000).  
  
2. Secure server software ($5000). This does not seem to be an absolute necessity; there are a lot of sites on the web where you can send your credit card number unencrypted, and to date there have been no reports of the numbers being stolen. But catalog companies may \*believe\* that a secure link is necessary, and spending this $5000 would give Webgen a much more professional look.  
  
3. A high-bandwidth Internet connection ($3000 + $350/month). At present Webgen has only a 28.8kb connection. This will serve in the initial stages, when we have few clients. For $350 a month we can put a server at the site of an ISP and get a slice of their T1 line. This also means buying another server, which costs another $3000.  
  
Spending some money on advertising might also be a good idea.