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# Developing and Managing an E-Business

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# Developing and Managing an E-Business

## Abstract

Papa Bear Acres created its first e-business in the fall of 1999. Stephanie TeKippe designed and currently manages the web sites, which are operational. Creating a successful e-business on the Internet is not an easy task, but a complicated and tedious one. Rudi, an Internet marketing specialist, stated ( 1999) "Over 94% of all online small businesses are currently losing money"(p.1-2). Papa Bear Acres was created to become a booming presence on the Internet. The process of making this a reality has been slower and more time consuming than anticipated. There are many various aspects to creating a successful e-business. Each area will be described and detailed at the intermediate level.

Developing and Managing an E-Business

A Graduate Research Paper

Submitted to the

Division of Educational Technology

Department of Curriculum and Instruction

In Partial Fulfillment

of the Requirements for the Degree

Master of Arts in Education

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By

Stephanie TeKippe

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This Research Paper by Stephanie TeKippe

Titled: Developing and Managing an E-Business

has been approved as meeting the research requirement for the

Degree of Master of Arts.

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Introduction

Papa Bear Acres created its first e-business in the fall of 1999. Stephanie TeKippe designed and currently manages the web sites, which are operational. Creating a successful e-business on the Internet is not an easy task, but a complicated and tedious one. Rudl, an Internet marketing specialist, stated (1999) "Over 94% of all online small businesses are currently losing money"(p.1-2). Papa Bear Acres was created to become a booming presence on the Internet. The process of making this a reality has been slower and more time consuming than anticipated.

There are many various aspects to creating a successful e-business. Each area will be described and detailed at the intermediate level.

The areas that will be discussed are as follows: 1) Website design covers the basic appearance of the website. 2) The design principles will explore alignment, proximity, repetition, and contrast. 3) Newsletters may be included in a website for various reasons. 4) Web site hosting creates reliability and a professional reputation for the e-business. 5) Search engine placement is key. 6) Complete automation is required for a 24-hour business. 7) Miscellaneous tips will complete a successful e-business.

Papa Bear Acres has developed two sites: www.papabearacres.com and a subsidiary, www.papabearacres.com/recipes There are a few more sites in progress that will be uploaded and operational at the beginning of next year. This

has been a learning experience with mistakes made, lessons learned, and knowledge gained. The following will state what has been most successful for Papa Bear Acres. Yet, the sites will never be formally done or finished, but constantly evaluated and improved due to the ever-changing Internet world.

<u>Website Design</u>

It is known among the Internet world to keep the web site well-organized and easy to use. The home page needs to be simple, including a table of contents. In the content, simple words and short paragraphs will keep the reader interested.

Simplicity works. Make sure customers know what is being offered and what the benefit is. LeBoeuf (1997), author of <u>The Perfect Business,</u> uses the KISS principle. "Keep It Short and Simple. The shorter and simpler your message, the greater its impact"(p. 77).

The back and forward buttons on the browser's toolbar should not have to be used when good navigation is implemented within a web site. The navigational design includes text links or icons on every sub page. This creates ease for clicking back and forth. The navigational design and each sub page need to follow the same design pattern for consistency.

Fast download time is important when trying to appeal to impatient Internet users. Graphics can be used for functionality or decoration but do not let graphics dominate the site. If large graphics are needed, utilize a little icon that

links to the big graphic. This will help with download time. Also warn visitors about the waiting time for larger graphics to load.

Stephanie has discovered a text alternative for each graphic link should be used. The reason for this is if the end-user turns the graphics option off on the browser or if the stop button is pressed before the page fully loads. In both cases, the text link will still be fully functional.

Many Internet business sites feel animated graphics should be avoided if possible. Content is more important than image. Internet people are information people. Spend time with quality content and not an overbearing image that distracts from the message.

Specify the graphical dimension using HTML coding and the web browser will draw out the size of page needed and where the images will go, display the text, and leave room for the graphics files to load in place. This helps the user to start reading the text or messages while the graphics are loading.

Proofread the text for errors. Have a friend or colleague proofread for spelling mistakes that might have been overlooked. Text with misspelled words throws credibility right out the window.

Before going live, test the site and navigation on several platforms. The site does not look the same on every browser because the coding will vary on different web browsers.

HTML coding knowledge will be needed to efficiently and effectively make changes when testing. A great HTML editor is HotDog, which can be found at http://www.sausage.com/ This program makes coding quite easy. http://www.davesite.com/webstation/html/ is a free site that teaches HTML. This is an effective HTML tutorial for beginners and novices.

<u>Design Principles</u>

The design principles are alignment, proximity, repetition, and contrast. Williams and Tollett (1998) stressed, "If you just remember these four principles, your web (or printed) pages will look clean, neat, and professional. They will communicate more clearly, people will enjoy them more, and you will be proud."

Williams and Tollett also detailed appropriate alignment and proximity which follows.

Within a web page, keep the alignment consistent. Line each item up with one another. Choose one alignment and stick to that alignment. For instance, with a left alignment the heading, graphics, text, buttons, etc. should be aligned left. In other words, alignments should not be mixed.

Even though a centered alignment is safe, symmetrical, and formal it does not give a neat, clean, or professional look. Another mistake is to line up items on the extreme left side. Tables with the borders turned off can help create a strong line of alignment.

Group items on a web page together based on relationship. This is called proximity. The headlines should be close in proximity to the related paragraph with one space between paragraphs. When correctly using close proximity the web page is easier to read and organized. Once again, items should be grouped together with effective alignment (Williams & Tollett, p. 106-112).

Not only does the web designer need to concentrate on alignment and proximity but repetition as well. The idea of repetition is to have a unified look throughout all web pages in a site. With good repetition, there are no orphan pages. Orphan pages do not follow the same design as the rest of the site.

"On a web site, your navigation buttons are a repetitive element. Colors, style, illustrations, format, layout, typography, and so on can all be part of the repetition that unifies the entire site"(Williams & Tollett, p.114). Using repetition is easier and saves time for the web designer and visitors when not having to search for the buttons on each page.

The last design principle, contrast creates a huge impact for a web site. "Contrasting elements guide your eyes around the page, create a hierarchy of information, and enable you to skim through the vast array of information and pick out what you need" (Williams & Tollett, p.118). Contrast can be created using colors, different type, graphics, and so on. When building contrast, a focal point needs to be present. The logo on a web site can become the focal point or the first component seen by making it large. If a web designer is going to use

contrast, it must be very strong. Contrast should not be two items being a little different, but a lot different. "To be effective, contrast must be strong-don't be a wimp" (Williams & Tollett, p. 118).

When using all four design principles web pages will become professional, clean, and user friendly. For maximum results, one principle should not be used alone.

Newsletters

Newsletters are powerful tools for an e-business. Building rapport over the Internet can be a difficult task made easy via newsletters. Newsletters allow the business to show credibility, honesty, and expertise. The Internet is an information-based medium. Customers surfing for information can sign up for a newsletter. In doing so, the merchant, or business owner, now has an e-mail address of a potential customer.

Furthermore, the customer is interacting with the site. Papa Bear Acres has a newsletter subscription form on the home page. Even if the customer moves on to another site, the merchant has a chance to sell a product every month a newsletter is sent out to customers who sign up for the service. "Once someone has left your site -- even if they bookmark your URL -- they're likely to forget about you. That's where a newsletter comes in. It regularly brings your business to the front of their mind. Every time they hear from you, the chances increase that they'll remember to come back to your site" (Wilson, 1998, p.1). In other words,

when a newsletter is sent to a customer's e-mail account on a monthly basis, the customer will be reminded of the site without having to search.

The newsletter should be mainly informative, but product plugs, special subscriber offers, updates, and so on can be included. The best way to run a newsletter is to automate the subscription form using a CGI script incorporating an autoresponder.

Mailloop is a piece of software designed for newsletter management. This software has the ability to automatically subscribe, unsubscribe, and send out newsletters no matter how big the subscriber list gets. Mailloop individually sends the newsletter to each subscriber. This avoids sending bulk mail. Bulk mail can easily be filtered by a customer.

Electronic newsletters avoid printing costs, mailing hassles, and mailing costs. If the merchant chooses to charge for a newsletter service the money made is pure profit. For example, Rudl(1999), a successful web developer, described one netprenuer who sells an electronic newsletter for only $3.00 per year. The orders are taken online with a real-time credit card processing system and the customer's e-mail is automatically added to the subscriber list. For the $3.00 a year a "tip of the day" e-mail is sent every day to each customer. One day a month is set aside to write 30 of them and uploads them to a newsletter server which emails them out everyday on time for the entire month. This merchant has over 240,000 subscribes and makes over $500,000 per year (p. 8-15).

Another strategy to make money with newsletters is selling advertising space. The usual fee is $.03-$.05 per reader for a subscription list under 5,000. The more subscribers achieved more advertising can be sold at higher rates.

<u>Website Hosting</u>

From experience, getting a reliable web host is extremely important to running a successful Internet business for many reasons. One of the most important reasons is to have good service from the people supporting the business. There are a number of different tasks the web-host can do. For instance, creating and installing a program designed for specific needs, providing good security, and reliable connection times. People will not wait long for download times. A web host has to download fast. Wood(2000) emphasizes the importance of immediacy that our technological society expects from on-line sources (p. 248).

Rudl(1999) describes the necessity for a web host to have a connection to the East Coast backbone and the West Coast backbone of the Internet. Most web hosts do not have this feature. A connection like this is needed if a fiber optic cable gets cut on the West Coast and all web sites and hosts on the West Coast of the continent go down the East Coast is still fully operational.

Also, the host should have a minimum of a T1 line going to both East Coast and West Coast backbones. Virtualis, a web host, has proven to be an asset

to any e-business as all elements described above are present. The address is www.virtualis.com (p. 2-17).

Free web hosting has serious drawbacks. Credibility is lost when customers see a free URL or free web site. Customers do not see a real business if a small web-hosting fee cannot be afforded.

Another major problem is when the free web hosting has its name in the URL address. Customers know the business as that address. If the hosting company goes out of business, kicks the site off, or starts charging a fee it might be necessary to find another host, which means a different address. Customers will be lost when a URL is changed.

Spending $25-$45 a month will provide 24 hour tech. support, back ups, help in taking care of secure servers and credit card processing, etc. A good rule is to host with reliable and service oriented companies.

In much research Stephanie has found online malls promise a lot and deliver very little. An online mall is not like a local mall. In local malls customers walk past stores on the way to a destination and window shop creating impulse buying for other stores. In an online mall, it is very possible and easy for customers to come to an e-business and leave without viewing any other store in the mall. Therefore, "impulse buys are reduced to a minimum"(Gielgun, 1998, p. 44).

A mall package, which consists of web hosting, customer service, autoresponders, secure servers, and other features can be worth the money for some e-business sites. Yet, few customers enter the mall through the front door but instead by individual sites. A mall is very profitable for the owner, not the merchant.

Search Engine Secrets

Search engine placement is by far the biggest challenge for an e-business. With over 100,000,000 web pages on the Internet, it is critical to be placed in the top 20 of the search results. "Search engines are a very powerful tool if you are in the top 50 results, but are completely useless if you are listed further down"(Rudl, 1999, p. 16-1).

There are three types of search engines: directories, indexing search engines, and Meta search engines. The directory search engine lists web pages by category. An example of this is Yahoo. To become listed with a directory, the web site must be registered. Indexing search engines will automatically index your site using software or indexing robots. The indexing robots index may:

1. Index the web page registered.

2. Index every word of every page at a web site.

3. Visit external links to crawl through the web looking for new sites. This is done 24 hours a day, 7 days a week until all URLs have been found.

An example of indexing is HotBot. Meta search engines perform searches on more than one indexing search engine. In other words, Meta search engines do not have a registration process but use other major search engines' results. An example is MetaCrawler.

The top eight search engines are: AltaVista, Excite, HotBot, InfoSeek, Lycos, Northern Light, WebCrawler, and Yahoo.

Excite gets over 10 million searches a month, Infoseek gets over 9 million searches per month, AltaVista gets over 8 million searches a month, Lycos gets over 5 million searches a month, WebCrawler gets over 2.4 million searches a month, and HotBot gets over 1.4 million searches a month. (Rudl, 1999, p.16-4).

Concentrate on good placement at the top eight search engines to increase traffic. It is a waste of time and money to submit a site to 100 search engines. A customer survey asking what search engine is preferred helps narrow down what search engines should be focussed on.

Each search engine varies in how a site is listed, indexed, and ranked. Because of this, never use a free automated URL submission service. First, find out the differences between search engines and enter the information by hand. Even though registering by hand is time consuming it is the most successful way to register at the most economical rate.

Web sites will get ranked higher if great keywords are used; keywords are used in the title of a page, used in the Meta tags, and in the body text. There are a couple of ways to pick the best keywords for a web site. Of course, the keywords should be the ones that are getting used the most. The following site will allow you to type in a keyword and show you how many times that keyword was searched for the previous month, as well as related keywords; http://inventory.go2.com/inventory/Search_Suggestion.jhtml This uses the database for GoTo.com. Another way to pick keywords is to visit the competition's site, look at the HTML code by clicking on View and then on Source. Take note of what keywords are being used in each Meta tag and titles. Winters(2000) stated, "Achieving top 10 rankings are worthless if you target a keyword that nobody is searching for. Make sure you do your homework before spending the time to gain that top ranking!"(p.1)

Once your keywords are chosen, place them correctly in the titles. The title shows up at the top of a browser screen. The title is the bookmark name and some search engines look at the title tag first for higher ranking. Add an "s" to the end of every keyword to double the response rate. When the keyword has an "s" at the end, the search engine will recognize either the singular or plural form.

Most search engines use Meta tags. Meta tags are HTML code messages hidden within a web page for search engines that index. Meta tags include an index of the title, a description of the site, and keywords. "Meta tags are the most

basic tools for manipulating the search engines. Some search engines will use these meta tags to index web content and give this more weight than the actual content of the page" (Joyner, 1999, p.1).

An overlooked mistake is to have a logo first on a web page with text following. Since search engines do not index or catalogue images, search engine positioning will be lost if text is not the first item on the web page. In fact, many search engines select the first 10 to 20 words of the page as the description.

The images on a web page can be used to hide keywords. The alternative text should be used for images to gain more keywords and in case browsers have the images turned off as mentioned before.

Some techniques used to gain higher positioning are catch and point pages, automatic redirect pages, JavaScript redirects, Now You See Me-Now You Don't, and CGI scripting. The following is a brief description of each technique. Catch and point pages use a few keywords to get good ratings with search engines. Other than a few visible words and graphics everything is hidden in the coding. Automatic redirect pages are used to automatically send the browser to another page without the browser seeing the page chosen. The redirecting page is stuffed with keywords, which is designed to score high. A JavaScript redirect is used when a search engine will not index a page with the META refresh tag. Now You See Me, Now You Don't is when a page is submitted to optimize the results for a specific search engine. Once the search engine has indexed the site, the page

used to get a high ranking is replaced with the real page. The CGI scripting is complicated and not used by many. When a search engine presents itself at a site the script in the CGI bin recognizes the IP number of the search engine and presents a specially designed page to the robot.

Even if the website only has one page a number of doors can be created. For instance, all four of the following addresses or doors go to the same exact page.

1. http://www.papabearacres.com

2. http://papabearacres.com(no www.)

3. http://www.papabearacres.com/index

4. http://papabearacres.com/index(no www.)

A few search engines will index all four doors. Each door should be registered at different times.

Frames should be avoided because some search engines have indexing software, which cannot interpret frames, and will result in poor ranking. For a business that already has name recognition and a large client list, frames may be used since search engines will not be a main source of traffic. If frames are used a <noframes> HTML tag should be added. The search engines are adapting to frames but will it take some time before all search engines can read framed pages. Currently, AltaVista, HotBot, Infoseek, Lycos, Northern Light, and WebCrawler do not support frames.

Two good pieces of software available to help with search engine placement are The Site Promoter and WebPosition. The Site Promoter submits a site to the search engines just the way each particular search engine wants it, and WebPosition monitors the position in order to improve ranking. WebPosition costs $147.00 and The Site Promoter costs $129.95.

<u>Complete Automation</u>

The Internet is open 24 hours a day, which means an e-business also needs to be open and running 24 hours a day. The only way to successfully manage this is to have complete automation. It takes more set up time and money to fully automate a business. Yet, the professionalism and ability to handle sales quickly and smoothly depend on full automation.

The order process should be simple, secure, and the payment option convenient for the customer. "Online businesses must offer consumers secure ways to process credit card orders, the future of Internet business transactions depends on it"(Gielgun, p. 66).

A confirmation e-mail sent to the customer for reassurance is a must. Another important but overlooked aspect is sending an electronic thank you. If using an automated ordering system, the confirmation and thank you is automatically sent to the customer moments after ordering via e-mail.

When using a secure server the ordering process should include the following five steps during each transaction.

1. The credit card is approved in "real time" with minimum wait time.

2. The money is deposited in the merchant's bank account.

3. The order is e-mailed to the merchant or fulfillment house that ships the product.

4. The customer is sent a confirmation of the order by e-mail.

5. The customer is sent a thank you.

"Every Internet business should accept credit cards on a secure server. If you can't you will lose over 60% of your business"(Rudl, 1999, p. 2-25).

Customers on the net are impulsive and want everything NOW. If they have to get off the net to phone you OR, if they have to write a check, fill out an order form, address an envelope and put it in the mail... you can forget about doing any kind of volume. You have to make it easy for them to order. Furthermore, credit cards give the business credibility. Having a merchant account and accepting credit cards will allow transactions to be deposited automatically, create easier paper-trails for records, eliminate bounced checks, and much more.

A merchant account can be set up through a broker. There is a $125 application fee and it costs approximately $30 a month. The discount rate is usually 2-3%. A software product to process credit cards can be leased for about $30 a month. An on-line service to process credit cards, such as CyberCash, costs approximately $20 a month with set up fees.

## Tips for Setting up an E-business

Test ideas out on live customers. Once an approach is found that pulls the best, orders will increase.

Also, create credibility for the business and let customers know what is to be gained before trying to sell the product.

Once traffic is established do not forget to ask for the order. Ask for the order and then ask for it again.

Continually promote the site by using classifieds, newsgroups, mailing lists, registering with search engines, using reciprocal links, banners, online libraries, and conventional methods.

The site should be simple, nicely laid out and easy to read. Also, be conscious of the HTML coding which applies differently in the various web browsers. When keeping the site simple, content will look the same through an Explorer browser as the site would if viewed using an AOL or Netscape browser.

Automate from the beginning. Spend time marketing and promoting instead of doing paper work, sending e-mails, and filling orders.

## Closing

As mentioned earlier, a lot has been learned and achieved. Papa Bear Acres is just beginning to build some business by incorporating all the elements of an e-business. An e-business has been an exciting venture with relatively low overhead.

The website design and principles were the starting point. This was also the most natural and smooth element of the process. The newsletter portion of the site has been successful, but was difficult setting up using the CGI script in order for the process to be automated.

Virtualis has been the right choice for website hosting. Virtualis has excellent tech. support with guaranteed up time due to their backbone system.

The search engine placement has been the biggest challenge. A few times high placement has been achieved. This is an ongoing process that will eventually prove worthwhile.

Having Papa Bear Acres completely automated has been ideal. The site is operational 24 hours a day with immediate feedback to customers. The business will continuously run without constant attention from the merchant.

The Internet world is constantly changing and Papa Bear Acres will continue to change in order to stay competitive. LeBoeuf(1997) wrote, " Like it or not, we live in an era of unprecedented, rapid, accelerating change. As my friend Dan Burrus wrote in his book, *Technotrends*, "If it works, it's obsolete."(p. 204).

Papa Bear Acres is just beginning to see results and anxious to continue applying elements of a successful e-business. Running an e-business is a difficult task with great rewards if done properly.

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