Theses

2004

The Usability of online payroll marketing websites.

Maria Stella Plutino

The Usability of Online Payroll Marketing Websites.

By:

Maria Stella Plutino

Thesis submitted in partial fulfillment of the requirements for the
degree of Master of Science in Information Technology

at the

Rochester Institute of Technology
B. Thomas Golisano College
of
Computing and Information Sciences

May 21, 2004

Rochester Institute of Technology

**B. Thomas Golisano College
of
Computing and Information Sciences**

Master of Science in Information Technology

Thesis Approval Form

Student Name: Maria Stella Plutino

Thesis Title: **The Usability of Online Payroll Marketing Websites.**

Thesis Committee

Name	Signature	Date

Sean Boyle
Sean Boyle   Chair

May 2 6, 2004

Rayno Niemi
Rayno Niemi   Committee Member

May 24, 2004

James Wesley
James Wesley   Committee Member

May 24, 2004

Thesis Reproduction Permission Form

Rochester Institute of Technology

B. Thomas Golisano College
of
Computing and Information Sciences

Master of Science in Information Technology

Title

The Usability of Online Payroll Marketing Websites

I, Maria Stella Plutino, hereby grant permission to the Wallace Library of the Rochester Institute of Technology to reproduce my thesis in whole or in part. Any reproduction must not be for commercial use or profit.

Date: May 21, 2004   Signature of Author: Maria Stella Plutino

Abstract

Payroll processing companies grow by acquiring new clients. Potential clients may base part of their decision on which company to use by evaluating the usability and functionality of its website. It is therefore important for these companies to design the marketing portion of their websites to attract new customers and give the potential customers the confidence that the site will provide a sufficient level of functionality and will have good attributes of usability. Once the customer engages the services of the company it is likely that the relationship will be based on the marketing portion of the site and likely will continue.

In retail-centric websites such as Amazon.com, there is a more equal balance between the importance of the marketing and the transaction portions of the websites in attracting new customers. This is true because there are very low switching costs for retail websites and if either portion is burdensome, customers will be lost to the competition. As Jakob Nielsen describes it, "If you don't find what you want, the competition is only a mouse-click away." (Nielsen, 2000).

The same is not as true for payroll processing. Once clients establish a relationship with a vendor, it can be costly and disruptive to switch providers. New systems must be learned, new software installed and the entire payroll must stop at one company and resume at the next immediately. Each employee's personal information will have to be input into the new system.

Additionally, the interface portion of the website will be used by those employees that frequently need to communicate data to the payroll company. If the interface has elements that are functional, if somewhat non-user friendly, the users will generally learn

the system through a longer learning curve. Once a comfort level with the system is reached, the burden of the learning curve may have the unintended advantage of creating the impression that switching could entail another learning curve. For these reasons a high percentage of business tends to remain with payroll service providers once the relationship is established.

This thesis examines the various websites of the online payroll companies that are operating in the U.S. and seeks to define objective criteria for determining the quality and usability of their marketing interfaces from the perspective of a potential customer. I have found that there are specific identifiable elements and heuristics (recognized usability principles) that should be incorporated into the websites of companies in this market segment. Examples of websites that adhere to or fail in the application of the heuristics will be illustrated.

I evaluated online payroll processors based on their product offerings (defined as customer goals) and the usability of their websites, applying the Ten Usability Heuristics developed by Jakob Nielsen. The methods I used to accomplish this are as follows.

An analysis was made of each website to determine whether the essential functions of a payroll service provider were available. The offering of essential services is the basic level of competence that a payroll processing company must have to be able to serve the needs of customers. Next, a summary of the non-essential services was reviewed. Businesses that properly make available both groups of services should be better able to obtain new customers.

After a need fulfillment analysis of the websites was completed, the study then employed a heuristic evaluation of the marketing interfaces of the companies. The

marketing interface generally begins with the company's homepage and provides information regarding services offered, news releases and resources relating to payroll. The client interface is distinguished from the marketing portion of the site in that it is only accessible by clients, usually with a password restricted login. This thesis has evaluated the usability attributes of the marketing portion of the website only.

Next, an email response study was conducted to test the responsiveness of the payroll companies to an email sent by a potential customer. Finally, a questionnaire was sent to a sample of the companies to better understand the perceived importance of their websites and the efforts expended on the sites.

The result of the procedures undertaken was to define criteria that can be used by a website designer who seeks to improve the marketing interface of a payroll company's website. The conclusions may also help guide a manager who has been made responsible for choosing a payroll provider.

Table of Contents

List of Tables and Illustrations

Acknowledgments

This thesis was completed thanks to the generous contributions of time, effort, guidance and support of my Committee Chairperson, Sean Boyle and Committee Members Rayno Niemi and James Wesley.

INTRODUCTION

The convergence of several factors since the introduction of the Internet has changed the Internet from an experimental vehicle into a powerful medium for the transaction of business of all forms. Certain types of businesses are better suited for the freedoms and constraints inherent in the Internet. Firms and industries that have existed for decades, or even centuries prior to the introduction of the Internet, must now decide whether their businesses are suited for the Internet and in what capacity. Small firms have been given a greater amount of power to compete with larger firms as a result of the leveling of the playing field that the Internet offers. Another change, which the Internet has brought about, is the differentiation in services offered by firms. On the one hand it has allowed companies to broaden their offerings; an example would be Amazon.com in the retail area. Amazon.com sells many products from its own shelves, but also uses the supplies from other retailers to supplement its offerings. This is a use of the Internet that allows for an expansion of offerings. A contrary use of the Internet is to differentiate by becoming more focused and narrow in a basket of offerings that a firm has.

Payroll services, the topic of this thesis, have seen tremendous Internet growth and the shifting of much of its business to the Internet. Payroll has several elements, each of which lends itself to the benefits and efficiencies available through the Internet. These elements include the following:

- Payroll is expensive to coordinate in-house.

- Payroll is information intensive.

- Every employee has different payroll and benefit criteria.

- The time value of money makes efficient transactions necessary.

- The regulations governing payroll taxes and reporting requirements are highly complicated and carry penalties for non-compliance.

- The regulations are constantly changing.

- It is necessary to have the ability to access information at anytime.

These elements form the rigid framework within which each of the payroll companies must operate. The data to be collected regarding each individual employee remains important and must be accurately calculated according to federal and local laws governing the withholding and remittance of taxes, which are constantly changing. These rules are not secret or proprietary and must be applied uniformly from company to company. One company cannot choose to collect less data or file only some of the required reports in order to find competitive efficiencies. Because of these inflexible industry attributes, these companies must find some other method of gaining a competitive advantage.

As will be shown, once a relationship is established with a payroll provider, the customer generally remains with that provider. It is therefore assumed that the marketing interfaces of the websites will only be effective to attract customers that are actively seeking to establish a new payroll service relationship. The methods used to attract customers to a website and the practices employed to make the site more usable is what differentiates the companies and is therefore the focus of this thesis. If the quality and usability of the marketing interface of the online payroll service website is good, the chances of establishing the business relationship are increased.

HISTORY

Payroll processing, in existence since before the Industrial Revolution in the United States, generally represents both a chore and expense for employers. There have been certain events in history that have increased this burden and have therefore created the opportunity for an industry to evolve to alleviate most of the work. The events described below have led to the creation of the payroll industry as it is today. (American Payroll Association, 2004).

In 1930, almost every pay transaction to employees was done by cash. Each week an envelope would be filled with the appropriate amount of money for each employee. In the 1930's this became a problem as thieves began to seize this opportunity by robbing companies on payday. Congress established a subcommittee and decided that pay by check or some other means would be safer for the public.

In 1935, President Roosevelt signed into law the Social Security Act which acts as a safety net for all Americans. As part of the Social Security Act, each employee had to have their employer report their name, address, social security number, occupation, total amount of pay, amount of pay subject to social security tax, amount of social security tax withheld, along with other withholdings. Any employer not keeping accurate records or making accurate disbursements to the government would be held responsible for the shortfall of money paid to the government and would also be subject to penalties and interest.

In 1937, the government required every employee to have a Social Security Number and the government kept all records in an indexing system which took up more than 24,000 square feet of floor space. This was prior to the invention of the computer and the

weight of the paper was so great that no building in Washington, D.C. was strong enough to provide storage. The records were therefore transferred to an out of commission Coca-Cola factory in Maryland. Although it was a massive undertaking for the government it was also a substantial undertaking for employers who were responsible for keeping track of each employee's wages. After this time the use of accountants and bookkeepers to perform the payroll function increased greatly.

During World War II the cost of funding the war by the U.S. Government had increased to a point that the Country needed a method of raising money. The Government therefore borrowed money through the issuance War Bonds. In order to facilitate the sale of war bonds, the government established a system of using payroll deductions for employees who wished to buy war bonds. The system was efficient and popular for employers, employees, and the government.

By 1942, the U.S. Treasury had set a goal of $500,000,000 per month in bond sales. By 1943, the goal had been met and each month greater than $500,000,000 worth of war bonds were sold to fund the war. Again, the increase in bookkeeping for the withholding deducted, increased the complexity of payroll.

Another effect of the need for money during World War II was the institution of the "Pay-As-You-Go Program", which mandated that each employer withhold an amount of money sufficient to pay the employee's tax at yearend. The increased bookkeeping necessary for the program created burdens for employers and more opportunities for accountants and bookkeepers.

By the 1970's, this had evolved into direct transfer and deposit of funds from the companies' banks into the accounts of employees.

The late 1980s brought wider use of computers in banking and increased connectivity through the use of Automatic Teller Machines (ATMs). These ATMs were linked by modem to the bank's mainframe and processed information from remote locations. The banks began to link ATM networks to other banks through the Automated Clearing House (ACH). The ACH was then able to facilitate the direct depositing of employee paychecks into the bank accounts of the employees. By the early 1990s nearly half of the payrolls processed utilized direct deposit. (American Payroll Association, 2004).

In the 1990's the Internal Revenue Service established a law requiring employers to use electronic payroll tax filing (EFTPS) for certain categories of employers. Employers that fell within the rules mandating this filing method, but that did not have the ability to comply with it, were forced to use payroll services that could.

Client-server software increased the efficiency with which employers could transmit payroll information to the payroll processors. Employers were able to update client personnel files, pay rates, tax exemptions and wage rates, all remotely. This information was processed locally at the employer's place of business and then sent by modem to the payroll service. According to the American Payroll Association, currently over 56% of the American workforce is paid via direct deposit. Direct deposit is perhaps one of the greatest advances which have allowed Internet payroll services to flourish. It is likely that the electronic transfer of money from user to user will continue to accelerate. It has been estimated that by 2010 over 75% of US spending will be electronic rather than with cash, thereby increasing the need for payroll to be direct deposited for immediate access. (Harper, 2004).

As can be seen, the largest shifts in the payroll industry have come about as a result of legislative changes with which companies must comply. Technological changes which increase efficiencies have not been substantial enough to create a paradigm shift. The history of payroll in this country shows that companies tend to want to manage the function in-house as demonstrated by the fact that between 80 and 85 percent of businesses do not use the services of payroll processing companies. (Paychex: Annual Report, 2003).

Additionally, for those business owners that use payroll companies, it is difficult to change their attitudes from reporting payroll wages manually to reporting electronically. This has been one of the obstacles to increasing the use of the Internet for payroll processing and has been reflected in the reluctance of companies to expend resources on their websites. As recently as the end of 2001, Inc. Magazine reported that Tom Golisano of Paychex did not, at that time, prioritize the building of a robust on-line presence. He stated, "People are sensitive to the security issues of sending data over the Internet, especially payroll." (Maxwell, p. 39). This has since changed as Paychex now offers Paychex Online PayrollSM, Internet Time Sheet, Internet Report Service and General Ledger Reporting Service. (Paychex: Annual Report 2003).

The industry for payroll and human resource services is highly competitive. There are in-house, local, regional and national providers of such services. Additionally, employers have software solutions available, consulting firms, accounting firms, and freelance bookkeepers, all of which make service offerings grow and prices for the services decline.

The majority of businesses in the US are small businesses which tend to manage the

payroll function in-house. The balance of the market utilizes the services of the above named payroll service providers and other outsource providers. The payroll processing companies that have the largest share of the market in the US are Automatic Data Processing, Inc., (ADP), followed by Paychex and Ceridian. ADP is by far the largest, with over $7 billion in annual revenue. In comparison, Paychex and Ceridian have annual revenue of over $1 billion each.

The principal competitive factors in the marketplace are: choice of services, customer service, leadership in technology, integrated platforms, performance, price, functionality, ease and flexibility of use, and expertise in human resource processes.

RESEARCH

There have been no studies which attempt to compare online payroll services in numbers greater than one service provider against another. The difficulty in quantifying such a small comparison is that there are no standards that govern the services that a payroll company can offer. Additionally, there are various companies that offer online payroll processing as a segment of their larger business. Banks are increasingly moving into this field as their industry becomes less and less regulated, although some have moved into and then out of this field. These multi-discipline companies have certain advantages over traditional single function companies; however this study will not explore them. The focus of this thesis will be on the portion of their business that is payroll related and will generally look at that segment in a vacuum.

The vast amount of relevant prior research is not specifically focused on the topic of payroll processing websites, but rather is written about the general topic of usability and

Human Centered Design (HCD). (Bevan, 1998).

The International Organization for Standardization (ISO) has formulated an International Standard for the ergonomic requirements for office work with visual display terminals (ISO 9241) which includes Part 11: Guidance on Usability. According to the Standard (ISO 9241-11) the definition of usability is: *"The extent to which a product can be used by specified users to achieve specified goals with effectiveness, efficiency and satisfaction in a specified context of use"*. (ISO 9241-11 (3.1)) Effectiveness in this context means *"the accuracy and completeness with which users achieve specified goals"*. (ISO 9241-11 (3.2)) Efficiency is a *"measure of the resources expended in relation to the accuracy and completeness achieved"*. (ISO 9241-11 (3.3)) Finally, satisfaction is a *"measure of the freedom from discomfort and positive attitudes towards the use of the product that are achieved"*. (ISO 9241-11 (3.4)).

The ISO standard makes for a good starting point for the outlining of a discussion on usability. Three elements are necessary for the measurement of usability. (5.1.3). First is a description of the intended goals. For the purposes of this thesis it is assumed that the payroll processing companies are seeking to acquire new clients and that the marketing interface of online payroll service websites will be a component of the decision making process of potential customers. Therefore the goal of these companies is to present information on the website in a comprehensive manner in a format that shows that payroll functions will be efficiently executed depending on the task that the potential customer chooses.

Second is a description of the components of the context of use including users, tasks, equipment and environment. The users will generally be management personnel of

the company responsible for decision making. Information gathered from a telephonic interview with Michael Miller, President of Payrollonline shows that management personnel responsible for the payroll decision generally have college degrees and have at least 2 to 3 years experience with their company. (Miller, 2004).

The third element necessary for the measurement of usability is the target or actual values of effectiveness, efficiency and satisfaction for the intended contexts. These values can be objective such as the number of clicks necessary to find the login interface on a website, or subjective measures based on the perception of the user. Choice of colors and size and style of fonts lend themselves to subjective analysis.

The Usability Framework part of ISO 9241-11 is set forth below and was documented by the International Organization for Standardization. Merely achieving the goal does not provide useful information to the testers unless the components are analyzed and measured.
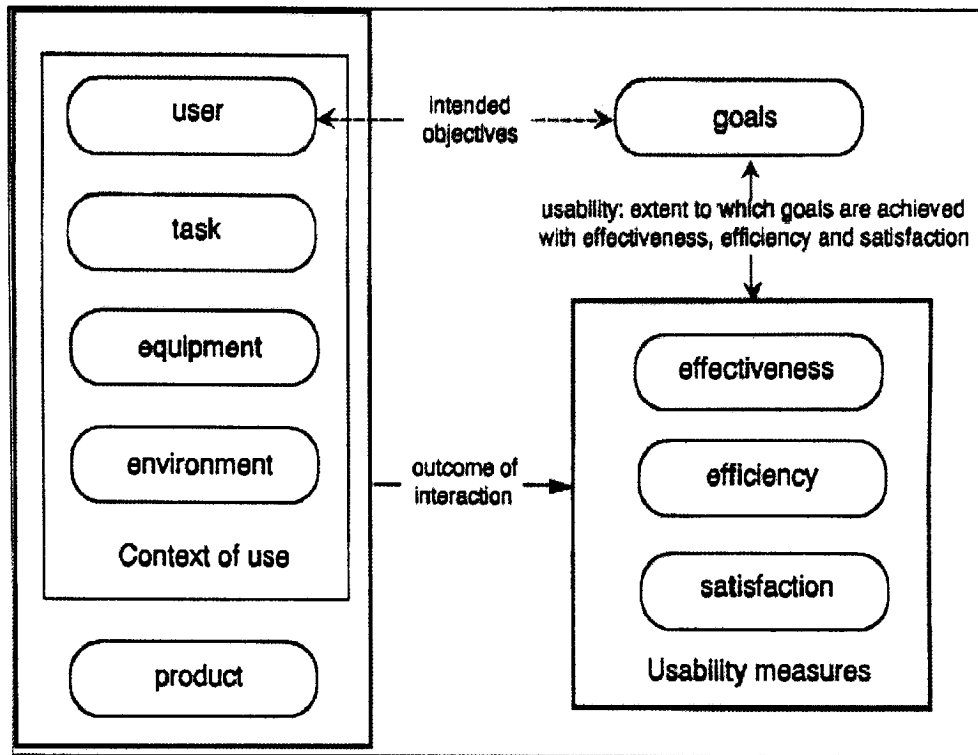
Figure 1: Usability framework

Usability Framework, © ISO - 1998

The goals, context and values approach to measuring usability will be considered in conjunction with the methods developed by Jakob Nielsen in the application of heuristic evaluation of websites. (Nielsen, 2000).

The services offered by the companies included within this thesis are used directly or indirectly by a large portion of the working public. Specifically, the employees receive wages and have withholdings and required tax filings completed whether it is conducted in-house or through a payroll service provider. Most companies that utilize payroll services make the determination of which company to use largely based upon the cost of the services or because of a referral and the personal service afforded to the decision maker. However, as consolidation in the payroll industry occurs and company offerings improve, it will be easier for companies with effective websites to draw a larger

segment of the business. (Boston Law, 2002).

METHODOLOGY

The usability of the websites was researched and tested in the following ways. An initial analysis of each site was made evaluating the professional and overall aesthetic presentation of the site. Next the site was studied to determine the existence of essential and non-essential functions. Finally, the usability of its design was assessed through a Heuristic Evaluation of certain elements of the marketing portion of the website.

The information regarding the inclusion of essential and non-essential functions is detailed on a spreadsheet (as appendix "A") to allow for easy comparison from company to company. Essential services are those services that are necessary to allow for the proper functioning of an online payroll service. Put another way, if any of these services were missing, a portion of the payroll processing function would have to be managed by the customer either in house or through some other form of outsourcing. This creates an impediment for the customer who has sought to outsource the entire payroll function from his/her organization. Some of the non-essential services include Administrative Services and Business Solutions. "Administrative Services" is a broad term meant to encompass the managing of payroll, human resources, employee benefits, and other employee service administration in a holistic way in order to completely remove the burden of employee administration from the employer. Under this type of arrangement all employee administration is handled by the payroll provider. This is contrasted with "Business Solutions". A Business Solution provider is a company offering the Administrative Services except that the employees actually work for the payroll

20

processing company and are merely working on the location of the client. The entire liability for payroll, compliance and reporting, falls on the payroll company in much the same way as a temporary employment agency works.

A summary of whether the essential elements of the payroll function are supported is presented as each site is evaluated. Each element represents a task that the user may need to complete and is therefore treated as a goal. The establishment of definable goals is the first step in the usability framework of ISO 9241-11. The information that will be gathered from each site shall list and explain the goals which may be required by the potential users of the website.

Next a heuristic analysis of each site will be made. Rather than applying and discussing all 10 Heuristics for each site, the analysis will discuss the strengths and weaknesses present for particular websites. Therefore, if a site is extremely good or poor in a particular Heuristic; that Heuristic will be analyzed. The marginal application of the Heuristics will not generally be discussed. (Neilsen, 2000)

The assessment criteria that was applied to each element and the website was based upon the Ten Usability Heuristics developed by Jakob Nielsen. (Nielsen, 2000). These general principles for user interface design are called "heuristics" as opposed to rules because there is no scientific way to determine the absolute best method of designing a web interface for usability. Nielsen describes these more as guidelines rather than rules. The Ten Heuristics of Nielsen are as follows:

1. Visibility of system status: The system should always keep users informed about what is going on, through appropriate feedback within reasonable time.

2. Match between system and the real world: The system should speak

the users' language, with words, phrases and concepts familiar to the user, rather than system-oriented terms. Follow real-world conventions, making information appear in a natural and logical order.

3.	User control and freedom: Users often choose system functions by mistake and will need a clearly marked "emergency exit" to leave the unwanted state without having to go through an extended dialogue. Therefore the site supports undo and redo.

4.	Consistency and standards: Users should not have to wonder whether different words, situations, or actions mean the same thing. This is also called following platform conventions. An example of this can be found in the Windows interface where the user can always find the "cut, copy and paste" functions under the "edit" menu.

5.	Error prevention: Even better than good error messages is a careful design which prevents a problem from occurring in the first place.

6.	Recognition rather than recall: Make objects, actions, and options visible. The user should not have to remember information from one part of the dialogue to another. Instructions for use of the system should be visible or easily retrievable whenever appropriate.

7.	Flexibility and efficiency of use: Accelerators -- unseen by the novice user -- may often speed up the interaction for the expert user such that the system can cater to both inexperienced and experienced users. Allow users to tailor frequent actions.

8.	Aesthetic and minimalist design: Dialogues should not contain information which is irrelevant or rarely needed. Every extra unit of information in a dialogue competes with the relevant units of information and diminishes their relative visibility.

9.	Help users recognize, diagnose, and recover from errors: Error messages should be expressed in plain language (no codes),

precisely indicate the problem, and constructively suggest a solution.

10. Help and documentation: Even though it is better if the system can be used without documentation, it may be necessary to provide help and documentation. Any such information should be easy to search, focused on the user's task, list concrete steps to be carried out, and not be too large.

It is important that companies incorporate each of Nielsen's Heuristics in the design of their websites. The analysis below attempts to analyze each website with an eye on finding the exceptional examples of the application or misapplication of the heuristics.

Next a Group Heuristic analysis of the websites was conducted in order to compile a usability ranking of the websites. This gives an overall impression of which companies are providing usable websites from the perspective of potential customers.

Next an email study was undertaken to measure the responsiveness of the companies to the inquiry of a potential customer. This important test indicates whether the task has been automated and the time interval between the communication and response from the company. (Rhodes, 2001).

Finally a questionnaire was developed to determine the amount of effort and resource that are devoted to the websites of a small sample of companies. The results of this test were unexpected and led to insightful conclusions.

COMPANY REVIEW AND HEURISTIC ANALYSIS

WWW.ADAPTASOFT.COM Adaptsoft is a software development company which writes programs for use by payroll service providers whether they are payroll

companies or in-house providers. Its site is analyzed both on its own and for the product offerings for its customers. The site readily explains that the company has two product offerings for its customers and is focused only in those two areas. The choices from the home page are primarily to link to the CyberPay page to learn about the software for payroll service bureaus or to link to FlexPay to learn about software for in-house software solutions.

The software provided clearly covers the essential functions of payroll processing, including online interfacing with clients, tax reporting and paying electronically, employee pay options, blended pay rates, over one hundred reports and restaurant payroll reporting. The company offers a pop-up reminder service for clients and employees. In the ancillary areas of human resource management the company falls short. Although there is a new hire report generated, the company does not have any offerings for handbook services, administrative services or business solutions.

The site is generally easy to navigate and well designed. The site does not function as a payroll service provider, but rather it is a software provider to companies needing in-house payroll software or out-source providers. The site has only a few links from the home page and most lead to descriptions of the extensive services and functions that its software provides. The WebDemo, Sample Reports and Trial Version links lead to a fill in form which allows a company representative to contact the user on a person to person basis. This could be improved by the site asking for the information that it deems necessary followed by the issuance of a time-limited demo, or at a minimum screen shots of the sample reports.

The failure of the website to provide links to referenced partners and accolades

makes it difficult for the user to find information about the references. The references to Microsoft Certified Partner and Member of the APA should have links to those sites so that the user can readily go to the site and have an understanding of what the certifications mean. A Google search for "APA" does not lead to the correct link until the 33rd result (after the American Poolplayers Association). These problems are easily cured by the insertion of a hypertext link connecting the Microsoft Certified Partner and APA logos to their respective sites. The APA certification is also misleading in that it seems to indicate that the company is a member of the APA when the APA site makes clear that only individuals and not companies can be members. Additionally, for $200.00, anyone is eligible for membership without the necessity of being related or employed in the payroll industry.

With regard to this website, the application of the following Heuristics are particularly illustrative of the usability of the site. The remaining Heuristics are unremarkable in their application to this site, but may be discussed elsewhere in the thesis.

Nielsen's Heuristic #2: Match between system and the real world

The language used in the description of the software solutions produced by the company and how a user can request a demonstration, are in a conversational tone and make the process seem logical and simple. This gives a high level of satisfaction to the user in the form of freedom from discomfort.

Nielsen's Heuristic #4: Consistency and standards

Unfortunately the company uses the word FlexPay for its in-house software and CyberPay for its payroll bureau software. Given that the names are similar and not

descriptive of their varying uses, the user must continually return to the homepage for the descriptions.

WWW.ADP.COM. Automatic Data Processing, Inc., has been in business for over fifty years and offers a full line of essential and non-essential payroll and human resource services. The home page for the site is the one of the best reviewed. The page is pleasing to view and has clear links to guide the user to the areas that are most important and most used. Approximately 40% of the page provides links to payroll and Human Resource areas. 25% of the page is devoted to corporate overview, and the balance is for other business segments. The page is continually refreshed (using Macromedia Flash Player) with stock photos of generic employees all of which look intelligent, productive and attractive. This adds greatly to the professional look of the site and gives the user the feeling that they want to be associated with such a company. See screenshot below.
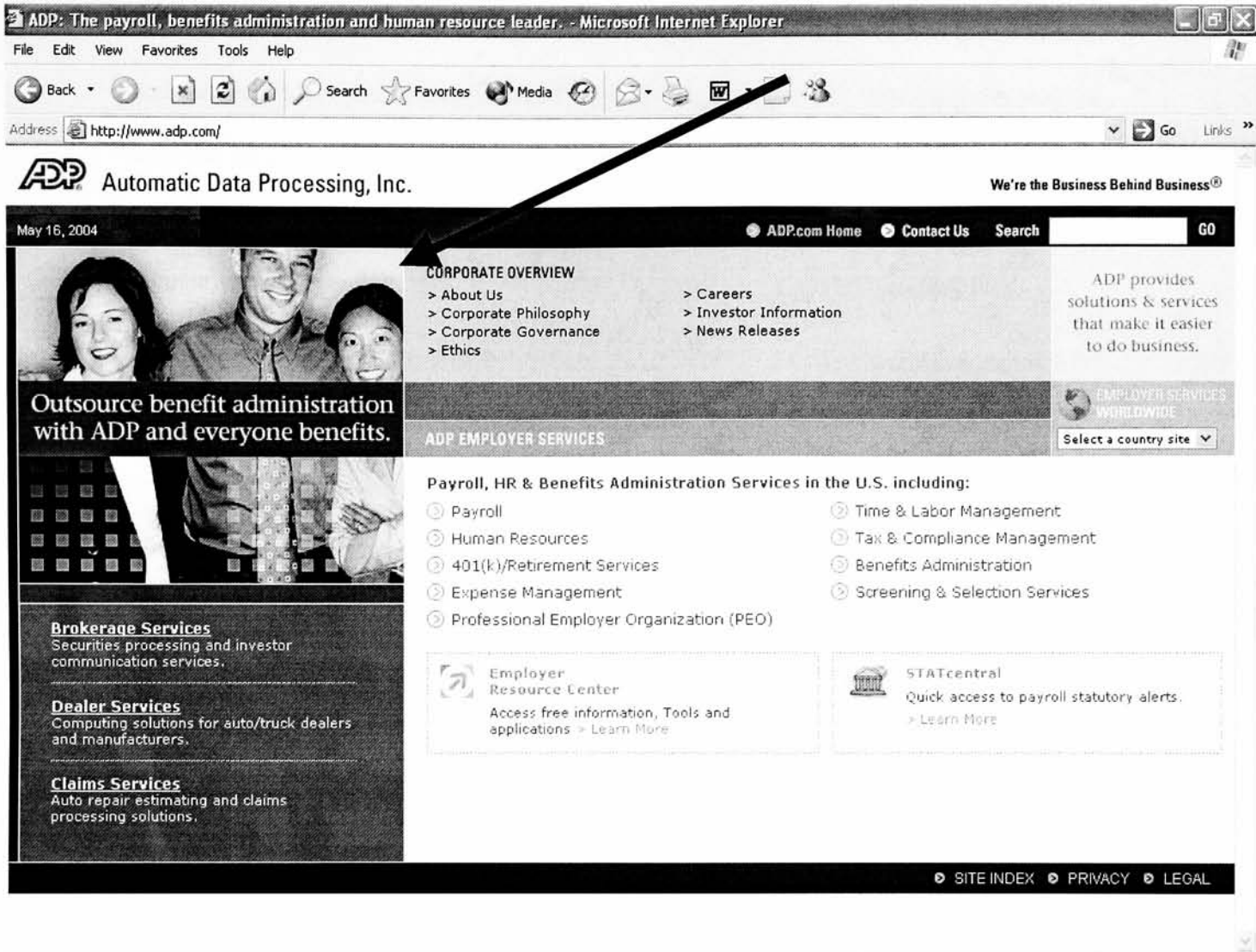
ADP Screenshot

As the largest payroll service company in the market, ADP offers all essential
payroll services and all non-essential services on an al la carte basis. It's breath of
payroll services allows it to effectively handle any size company, from one to thousands
of employees. The page also links to the ADP international sites in 25 different
countries.

Some of the non essential services that ADP offers are Administrative Services and
Business Solutions.

The usability of the site is high. As each page is explored the user is given simple and easy to understand instructions and options. Once the pricing quote is generated the user has the choice of talking with a live person, saving the quote or signing up for the service. The ease with which the site operates acts to demonstrate to the user that the company has focused on making the outsourcing of payroll services an easy task.

A "fill in form" asks a few questions such as number of employees, frequency of pay period, and other service required and then calculates a quote for the service. The quote is detailed and gives the cost per employee on a daily and pay period basis. The site then generates a hypertext link to the quote and emails it to the user.

With regard to this website, the application of the following Heuristics are particularly illustrative of the usability of the site. The remaining Heuristics are unremarkable in their application to this site, but may be discussed elsewhere in the thesis.

Nielsen's Heuristic #3: User control and freedom

This heuristic deals with the ability of a user to undo a command. The site has two attributes that assist users. The first is the browser back button which returns to the previous screen or screens. The second is the return to homepage prompt incorporated into the company logo and present on top of each page. These allow a user to explore more of a site with the confidence that returning to the homepage is always one move away, rather than back clicking several times.

Nielsen's Heuristic #10: Help and documentation

I tested the site's help function by typing the word "nanny" which led me directly to the annual threshold figure of $1,400 for the year 2003. However, the amount for 2004

was not available, even though it was released by the IRS in December 2003. This test represented a testament to the helpfulness of the search function of this site in that it provided an answer to the query, even if somewhat out of date. The other sites with search functions were given the same word to search and all failed to return a match.

Nielsen's Heuristic #5: Error prevention

No errors were detected on the site. It is likely that the company has many full time personnel working solely on the site.

WWW.ADVANTAGEPAYROLL.COM. Advantage Payroll Services is a full service on-line payroll processing service which has been in business since 1967. The company was recently purchased by Paychex. The home page makes simple and well placed use of Macro Media Flash to highlight the safety available with web based service. The professional looking page uses a photograph with eight different employees in different occupations, showing that the company services a broad range of businesses. The use of a photograph of people gives a welcoming impression of the site from a marketing perspective. The site has a list of 12 links to more specific subcategories which is appropriately placed (and remains) down the left side of the screen for easy viewing and access. These are repeated at the bottom of the page for additional assistance. The page is uncluttered and emphasizes that workers compensation and human resource issues can be outsourced to the company. These two areas are becoming more important as the competition from payroll companies grows and the customers desire more services.

The company offers all essential payroll functions and has additional nonessential

functions in the areas of human resources through its HR Counselor service. A free 30 day fully functioning program is available. The description of the benefits of the program is focused on the avoidance of lawsuits by disgruntled employees or employees that have been mistreated by management or other employees. This is a unique ancillary service for this company and may act as a selling tool. The program covers all aspects of applications, hiring, employee tracking of days off and termination with an included law library.

The site is easily navigable and intelligently has the name of the company at the top of each page which acts as a link to the home page. Additionally, each page has the "search", "sign up now", "site map", "contact us" and "login" links at the top along with the 12 general links along both the left and bottom. This avoids tedious back clicking to the home page. In fact, the links on the left of the page expand to sub-links prior to switching pages to allow a more targeted link.

With regard to this website, the application of the following Heuristics are particularly illustrative of the usability of the site. The remaining Heuristics are unremarkable in their application to this site, but may be discussed elsewhere in the thesis.

<u>Nielsen's Heuristic #4</u>: Consistency and standards

The site uses the same size and style font to differentiate the subject headings from the descriptions of the services for each page. Paragraph topics are in red and the paragraphs are in black on the left of the page (as shown below). This provides for ease of navigation for the user.

Advantage Payroll Screenshot

Nielsen's Heuristic #8: Aesthetic and minimalist design

Messages are delivered in concise terminology making the user's first impression

one of ease rather than confusion. The description of the payroll process describes it as

"easy as 1, 2, 3". This accomplishes an important goal of giving a comfort level to the

potential user. All colors used have good contrast.

WWW.CERIDIAN.COM. Ceridian Corporation was originally part of a larger corporation. In 2000 it was spun-off and its shares distributed to its shareholders, making the company an independent entity. The home page of Ceridian seems somewhat cluttered as a result of the use of similar color schemes between business segments. The home page acts more as an advertisement for the company on a corporate entity basis rather than a useful way of linking to useful information for those seeking payroll or human resource services.

The Ceridian.com/myceridian page is more appropriately deemed the home page for payroll services. It has a well placed login section at the top right hand corner. The site contains an excellent Flash Player demo of the payroll process and how it works online. The demo acts as a selling tool and educational tool for the users of the services.

The company offers all essential and non-essential payroll and human resource services. Of particular importance is the ability to organize and set up specialized reports with any criteria of information gathered for the employees. The customer can view all information fields and then choose the relevant fields and view them without the others. The software then automatically launches Microsoft Excel and places the data into the spreadsheet for easy viewing and manipulation.

With regard to this website, the application of the following Heuristics are particularly illustrative of the usability of the site. The remaining Heuristics are unremarkable in their application to this site, but may be discussed elsewhere in the thesis.

Nielsen's Heuristic #7: Flexibility and efficiency of use

This heuristic deals with accelerators which allow the experienced user to take

shortcuts to more advanced features. The site contains a clearly labeled login and password box for those users that wish to proceed directly to the interface site.

Nielsen's Heuristic #5: Error prevention

No errors in the functioning of the site were found. The company has a fill in form that allows the user to ask questions or make comments regarding errors found on the web site. This is an excellent way to avoid errors.

WWW.CHASE.COM. Serviced by Ceridian. The Chase site is separate from the Ceridian site and acts as a marketing interface for the Chase customers to use the payroll services of Ceridian. Chase does not provide its own payroll services. The business relationship between Chase and Ceridian is not disclosed. The Chase.com site contains a summary page that lists the essential features of the Ceridian payroll services which is the company providing the payroll services to the Chase customers. The Chase site does a better job than Ceridian in utilizing heuristic #2.

With regard to this website, the application of the following Heuristics are particularly illustrative of the usability of the site. The remaining Heuristics are unremarkable in their application to this site, but may be discussed elsewhere in the thesis.

Nielsen's Heuristic #2: Match between system and the real world

With 5 bullet points Chase is able to list the full range of services offered to its customers seeking payroll services. The order of the information is also broken down first by the essential services then followed by the non-essential services. (See Chase screen shot below).
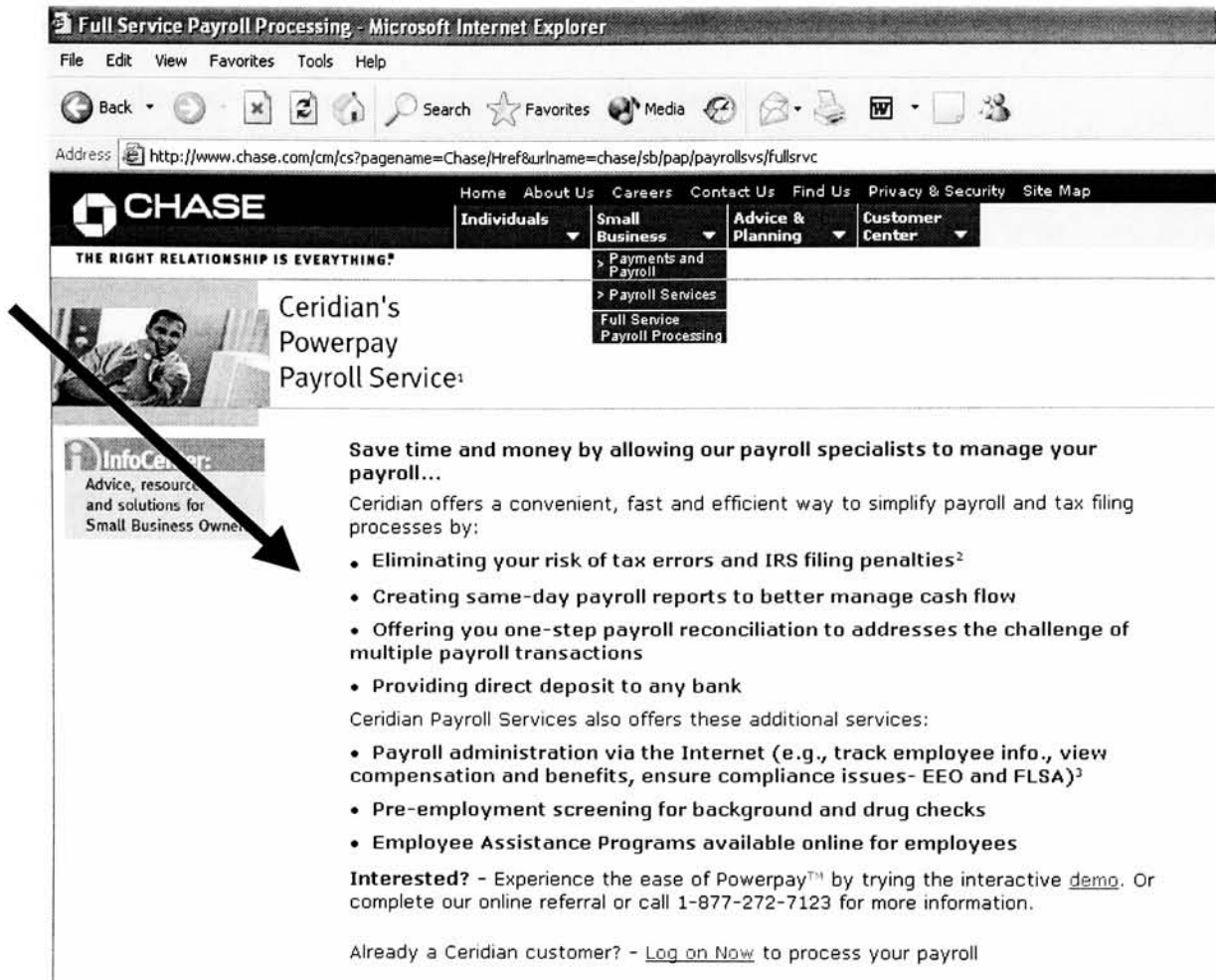
Chase Screenshot

WWW.GTMASSOCIATES.COM. GTM Associates clearly states on its

homepage that it is specializing in nanny and household payroll processing. The

company provides all essential services of payroll processing and tax compliance matters.

The company also notifies its clients of any tax breaks that are available for people who

hire help in their home. The site is professional in its appearance and makes good use of

logos and photo graphics. Some of the non-essential services offered include links to

nanny agencies and other domestic agencies and updated compliance procedures and

seminars offered by the company.

With regard to this website, the application of the following Heuristics are particularly illustrative of the usability of the site. The remaining Heuristics are unremarkable in their application to this site, but may be discussed elsewhere in the thesis.

Nielsen's Heuristic #8: Aesthetic and minimalist design

The site is easy to navigate and is not over burdened with extraneous information. Customers who use this service are hiring domestic help to simplify their lives and therefore are looking for a service that is uncomplicated. The contact, home link and other major navigation tabs and buttons are conveniently available at the top of each page.

Nielsen's Heuristic #10: Help and documentation

The press release section is current to within one month. The ability to obtain help is enhanced by the use of a contact list that gives the personal email addresses of the employees.

The prominently displayed newsletter was only published 4 times in 2002. As of January 2004, no issues had been produced since 2004. The publication of a newsletter is not essential to the functioning of a payroll site, however if a company states that they will deliver a newsletter every month and then fails to deliver the newsletter, it gives an indication that the company cannot meet the obligations it sets for itself.

WWW.INTUIT.COM. Intuit has one of the most professional looking sites. Its company homepage has its three main products displayed: TurboTax for the web, TurboTax Deluxe and QuickBooks, all three of which demonstrate that the company has

technical and up to date regulatory knowledge.

With regard to this website, the application of the following Heuristics are particularly illustrative of the usability of the site. The remaining Heuristics are unremarkable in their application to this site, but may be discussed elsewhere in the thesis.

Nielsen's Heuristic #8: Aesthetic and minimalist design

The home page has unnecessary scrolling. This shows a lack of proper design for a home page and is a violation of heuristic # 8. The user should not have to scroll to find its desired link from that page.

Nielsen's Heuristic #7: Flexibility and efficiency of use

The Payroll Services home page is smartly located at www.payroll.com, and has a login form which is prominently displayed. This is an important criterion given that users of a payroll service will generally be returning to the site often and it would be a burden to have to take multiple steps to find the login each time access is desired.

All essential services are offered. The company has four levels of payroll service offerings. The company has a $50.00 referral program. The very helpful comparison chart clearly shows the differences in the services offered. The programs seamlessly work with the other programs offered by Intuit. The QuickBooks programs are one of the most popular accounting packages for small and medium size businesses and the ability to transfer data back and forth between the two represents a possible area for cost savings for the user.

WWW.KEYSTONEITC.COM. Keystone Information Technology is a technology and consulting company providing payroll services as part of their suite of outsourcing services for businesses. The website for the company is Keystoneitc.com.

With regard to this website, the application of the following Heuristics are particularly illustrative of the usability of the site. The remaining Heuristics are unremarkable in their application to this site, but may be discussed elsewhere in the thesis.

Nielsen's Heuristic #2: Match between system and the real world

It is not entirely clear from the web site of Keystone Information Technology whether they are a software developer and seller or a payroll service bureau. The site does not have an area for customers to login or to input any information to the company. The company seems to focus on construction and trade-related companies and seeks to provide tools for the accomplishment of certain tasks. There is a lack of information regarding how the payroll function is managed.

It uses a moving banner to convey information to the users which is difficult to read. The company seeks to manage information technology for firms. The payroll function is one small part of the services offered. Whether the payroll function covers all essential services is not clear from the site. It may merely perform the calculation of payroll and the amount of taxes and FICA and return the information to the user. It describes its function as "outsourcing" but does not define what the term encompasses.

Nielsen's Heuristic #4: Consistency and standards

Standards have not been maintained throughout the site. Some words with blue underlines are hyperlinks as are some green words without underlines. The homepage is

unorganized and lists of words are not consistently left justified.

The usability of the site is extremely poor because the functions essential to processing payroll are not accessible from the site. The site appears to be no more than an invitation to contact the company and to discuss their offerings with a company representative. Usability is hampered by the general lack of information. The site is only useful as a place to find the phone number and address of the firm if a relationship has already been established.

If the site is only meant to invite users to contact the company, it correctly places the company phone, email and address on the bottom of each page. If the site is meant to be functional as a portal through which information passes, it fails entirely.

WWW.PAYCHEX.COM. Paychex has an efficient and professional appearing home page. From a design stand point it uses too much of the color blue, in fact it has approximately 7 shades of blue. The only other prominent color is yellow. The site would benefit by having a Flash Player presentation showing people working or actual employees with customers.

With regard to this website, the application of the following Heuristics are particularly illustrative of the usability of the site. The remaining Heuristics are unremarkable in their application to this site, but may be discussed elsewhere in the thesis.

Nielsen's Heuristic #4: Consistency and standards

There is no consistency with the use of the color blue. For example if a blue word is underlined it is a hypertext link. However, if there is no underline then it may or may

not be a hypertext link. There is also a lack of consistency with changing the color of a hypertext link after it has been viewed. For some pages it turns from blue to purple, and for some it remains unchanged. See Screenshot of homepage below. The "Human Resource Services" text acts as a link however the "Major Market Services" text does not.

Paychex Screenshot

The company offers all essential payroll functions. Additionally, the company has made it a priority to be a location for one stop service of all employee related issues. The

company will act as a payroll service provider or will have a company's employees be hired through Paychex and work for the other company. This option takes all of the compliance issues away from the company and puts them on Paychex.

The site is easy to navigate and easy to find the services and links which are desired. The site index gives a complete outline of what is on the site and where it can be found. The home page makes good use of being efficient by not crowding the site. No scrolling is necessary for the home page.

Nielsen's Heuristic #10: Help and documentation

The Paychex resource library offers many downloadable documents for the free use of customers and the public on several topics. The company also offers web based seminars and classes.

WWW.PAYCYCLE.COM. The company homepage has a clear statement that the service provides payroll for small businesses. The site offers all essential payroll services except for payment of taxes and printing of checks. The company keeps costs low by not handling money or by printing checks, the company merely processes the payroll information and transmits it to the customer. Many of the large payroll service bureaus use the handling of money as a means of generating income off of the float. As they hold the money of their clients for 3-8 days, the company can earn interest off of the funds. PayCycle has made the decision to avoid the additional cost of money management and the interest generated by it.

With regard to this website, the application of the following Heuristics are particularly illustrative of the usability of the site. The remaining Heuristics are

unremarkable in their application to this site, but may be discussed elsewhere in the thesis.

Nielsen's Heuristic #8: Aesthetic and minimalist design

The site has good use of tabs and easy link for client login. The site is professional in appearance. The site makes good use of colors and contrasts and uses the photo of an attractive person calculating payroll in a relaxed and confident manner.

Nielsen's Heuristic #7: Flexibility and efficiency of use

The company has partnered with Microsoft Money and provides payroll services to the subscribers of Money. This acts as a source of business as well as a technological endorsement. It will also speed the transfer of information between the two compatible software programs.

The design is user friendly. The home page is scroll free and limits the choices to those that are necessary to direct the user in the direction of what they are looking for. Specifically, the people going to the site will either be subscribers to the service or not. Subscribers are greeted with a login fill in form for easy access. Non-subscribers are asked for their state of residence which then directs them to the list of self service options available for the choosing. The company describes its services as ideal for the small company with less than 25 employees. It does allow a maximum of 50 per license. This is a restrictive number but it also represents the largest area of growth in payroll bureau business.

Nielsen's Heuristic #2: Match between system and the real world

Simple and straight forward language is used at a level appropriate for all users. Relevant questions are presented and answered regarding all aspects of the company and

the services that it offers.

Nielsen's Heuristic #3: User control and freedom

One problem arose that was not reversible. If the site is entered through the
Microsoft Money site, the Microsoft Money logo is then present on each page. Closing
the browser and re-linking to the site did not reverse the presence of the logo.

WWW.PAYMAXX.COM. Paymaxx, Inc., is the 6th largest payroll processing
bureau in the U.S. having been found in 1979. All essential payroll services are offered
through the website. The company also offers a tremendous amount of human resource
management tools and services. Insurance products are offered through the site. The
company has a link to assist in at least 15 different areas related to employee
management.

With regard to this website, the application of the following Heuristics are
particularly illustrative of the usability of the site. The remaining Heuristics are
unremarkable in their application to this site, but may be discussed elsewhere in the
thesis.

Nielsen's Heuristic #8: Aesthetic and minimalist design

The cluttered homepage has too much information with over 60 links attached to it.
This amount is confusing for the user and is more than double any other site. See
screenshot below.
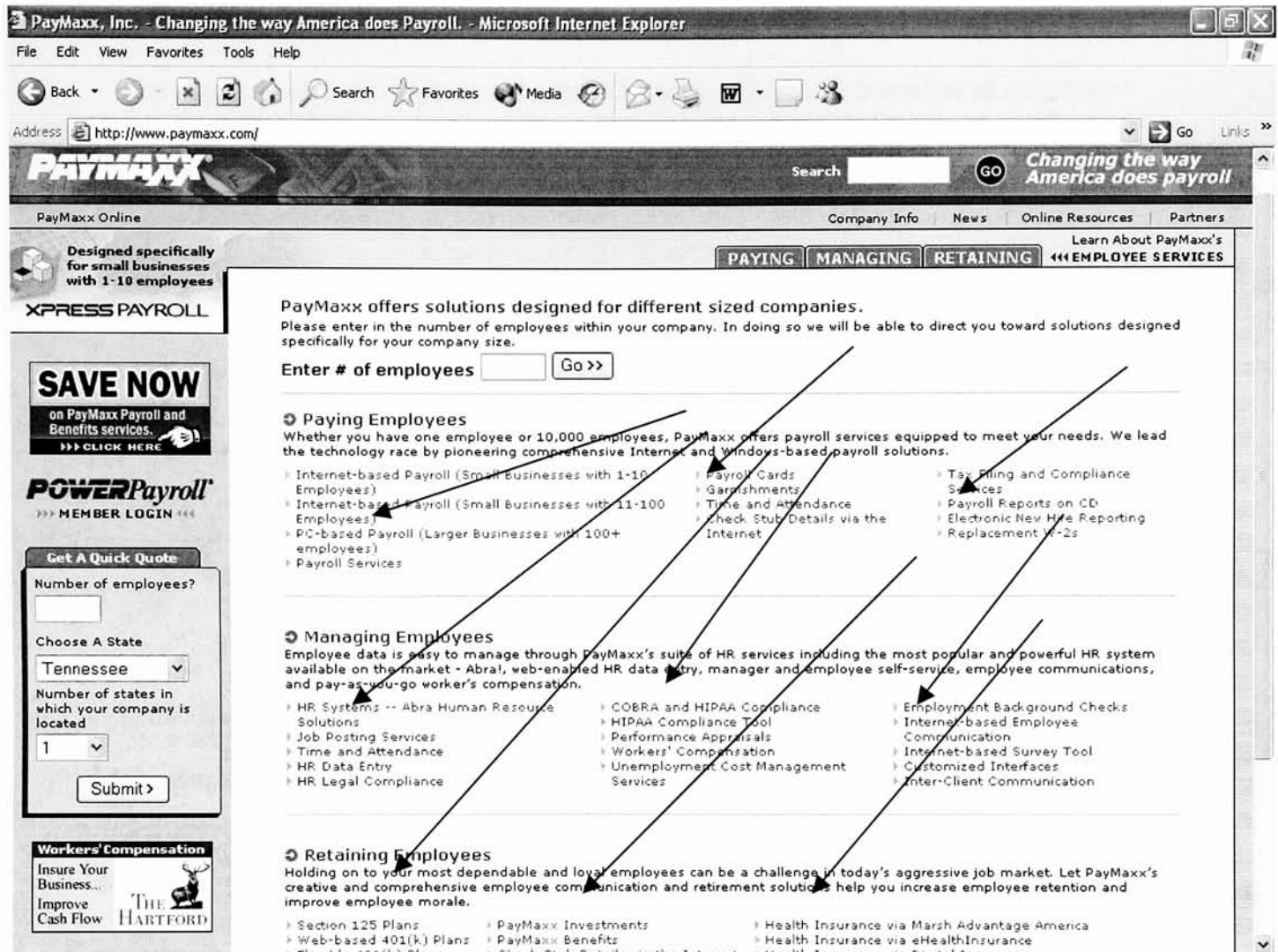
Paymaxx Screenshot

The login is difficult to find amid the list of features. The homepage's main focus seems to be on the advertising for new customers. The first and most prominent link asks the number of employees so that a proper solution for payroll can be directed toward the user. The site makes good use of separate links which educate the user on the various aspects of the payroll process. The site also uses Flash Player demonstrations of the features offered.

Nielsen's Heuristic #7: Flexibility and efficiency of use

The login link is located on the home page and is easily accessible once it is found among the remainder of the home page. The login requires the corporate id, user name and password. This is the only website which required more than two input fields to accomplish this task.

WWW.PAYROLLONLINE.COM. The company Payroll Online Corporation was established in 1993 and has a professional appearing homepage. The company claims to be a Microsoft Certified Business Solution Partner, however, this could not be confirmed by searching the Microsoft site.

The company offers all essential services for payroll processing and many services that are non-essential. The site has a help desk and a demo link which is comprehensive enough to assist the user in setting up and using the site for its intended purpose.

With regard to this website, the application of the following Heuristics are particularly illustrative of the usability of the site. The remaining Heuristics are unremarkable in their application to this site, but may be discussed elsewhere in the thesis.

<u>Nielsen's Heuristic #2</u>: Match between system and the real world

The homepage states that it is, *"the recognized leader for online communication of payroll, benefit and human resource information."* This assertion is not explained either in what it means or who is doing the recognition. The company also states that it is a member of the APA (American Payroll Association), which is a membership for individuals, not companies.

<u>Nielsen's Heuristic #9</u>: Help users recognize, diagnose, and recover from errors

The SS-4 Form on the site was not a current form. The form date was 1998 and there has been a new federal form since 2001. The form is used by a company to apply for a federal employment number. Although the form is substantially similar to the current form, it does not make a favorable impression on the user of the site if the form is not current. The Forms 8821, 2848, SS-5 were also out of date. The Application for Social Security card has a new edition dated 10-2003 which clearly states *Destroy Prior Editions*. It could not take more than one hour to check these forms and update to current editions or simply link to the IRS site, indicating a lack of attention to the site and perhaps implying a lack of attention to potential customers. Additionally, if there are penalties charged to a client because of an error caused by the use of the wrong form, the company could be held responsible. These are errors that the user will not know about until an out of date form is used.

Nielsen's Heuristic #5: Error prevention

There are some navigation issues with the site that could and should be fixed without too much effort. Some missing link errors were present on the site. The return to home page link does not consistently work. The site has a Business to Business page with three links to businesses with which the company is associated, however, none of the links work. Several of links to outside parties listed as "Partners" do not work. The screenshot below shows that one "Partner" link for B2bstores.com does not work and leads the user to a site which has that domain name for sale. The credibility issues that are raised with errors, even simple errors, can mean the difference between getting and not getting a client.
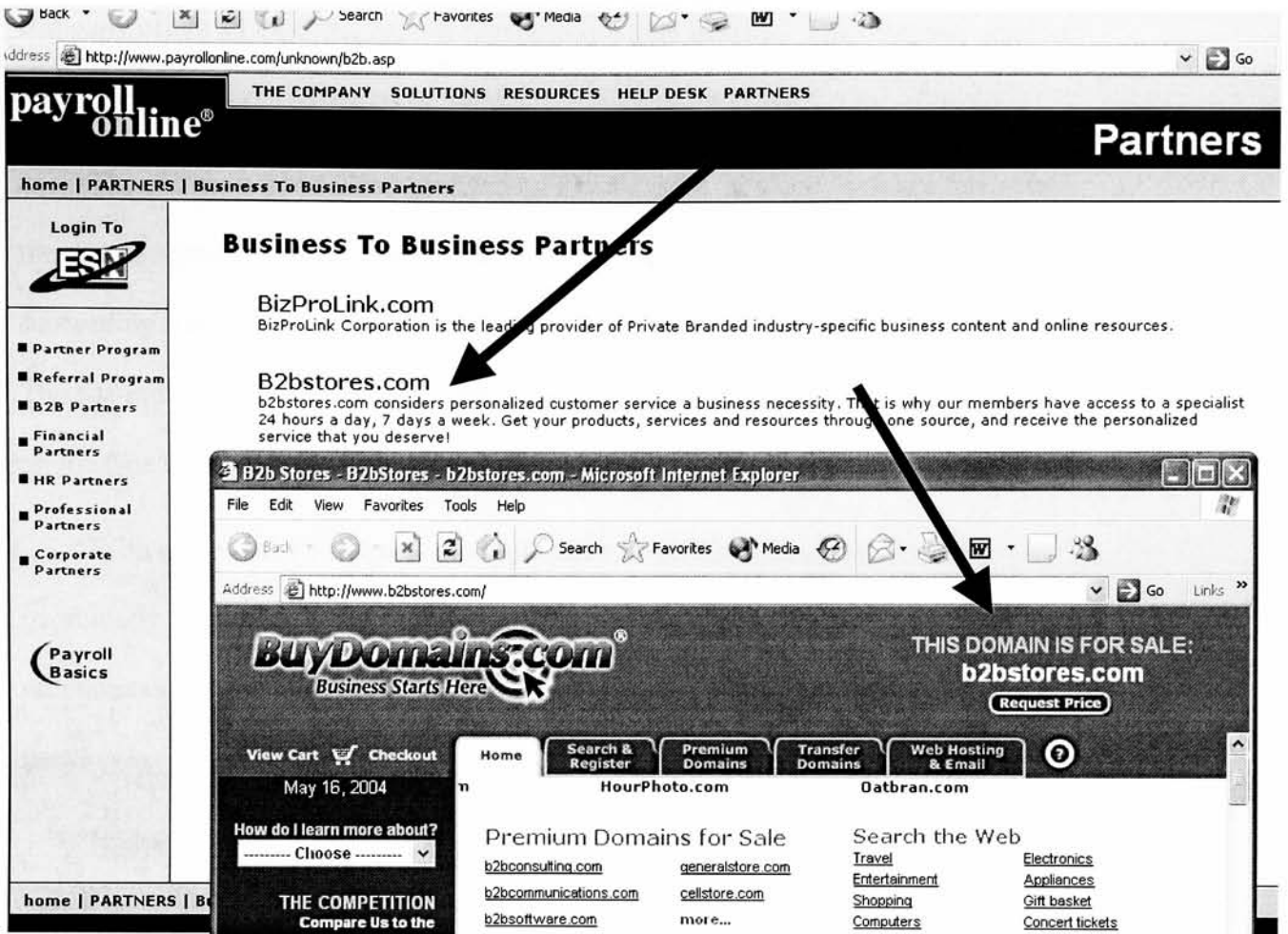
Payrollonline Corporation Screenshot

Finally, the "Sign Up Now" link on the homepage does not work. That could

certainly be a problem in obtaining business.

WWW.PRIORITYPAY.COM. Priority pay is a payroll service provider that sells

its services to end users and resellers such as accountants and bookkeepers. The site has

a professional appearance, but is light on information about the company. It would be

difficult for potential customers to commit to a company that does not provide

information about its financial strength or longevity in the industry. Any company can

put together a slick looking website, but it's what's behind the website that counts. The

company offers all essential payroll functions over the Internet. The company does not offer human resource functions or other non-essential functions.

The site has a good demo powered by Flash Player. It moves quickly, but allows the user to repeat the illustration of specific functions prior to moving on to the succeeding frame. The demo shows sample output in the form of checks and pay stubs. The site provides several downloadable browsers that are used by customers depending on the type of operating system employed.

With regard to this website, the application of the following Heuristics are particularly illustrative of the usability of the site. The remaining Heuristics are unremarkable in their application to this site, but may be discussed elsewhere in the thesis.

Nielsen's Heuristic #5: Error prevention

The menu bar at the top of the page lists 6 different areas that the user can view. However when the window is resized even by one inch, some of the hypertext links are lost. This occurred on an 18 inch screen with the window reduced to the size of a 17 inch screen.

Nielsen's Heuristic #3: User control and freedom

The site should allow for error recovery with the use of the undo function or the use of the back button of the browser. The login site did not function properly. An error was detected when the login link was used. Thereafter the back button did not bring the user to the previous page.

Nielsen's Heuristic #8: Aesthetic and minimalist design

47

The home page has an unnecessary scroll bar on the page. Its presence makes the user scroll down the page to see what else is contained on the bottom of the homepage. However when the user scrolls nothing is found. This should be eliminated as irrelevant and wasteful.

WWW.PSAPAYROLL.COM. Pay Systems of America uses the website called PSA Payroll for marketing purposes; the company is a subsidiary of The Sheakley Group of Companies. The site for the payroll function is professional in appearance. The site makes good use of tabs and icons. The use of a photograph, on the homepage, of a person talking on a phone gives the user the impression that the company is friendly and responsive to the needs of its customers.

All essential payroll functions are available. A number of non-essential services are offered in the areas of human resource management, retirement services, background checks and workers compensation. The site offers a full range of services.

With regard to this website, the application of the following Heuristics are particularly illustrative of the usability of the site. The remaining Heuristics are unremarkable in their application to this site, but may be discussed elsewhere in the thesis.

<u>Nielsen's Heuristic #8:</u> Aesthetic and minimalist design

The site contains too much scrolling on the home page, which could be eliminated given that the features are readily apparent. The text and contrast of words and links is dark blue against a white background, giving an appropriate ease of use. The text and scroll bar is as shown in the following screenshot.
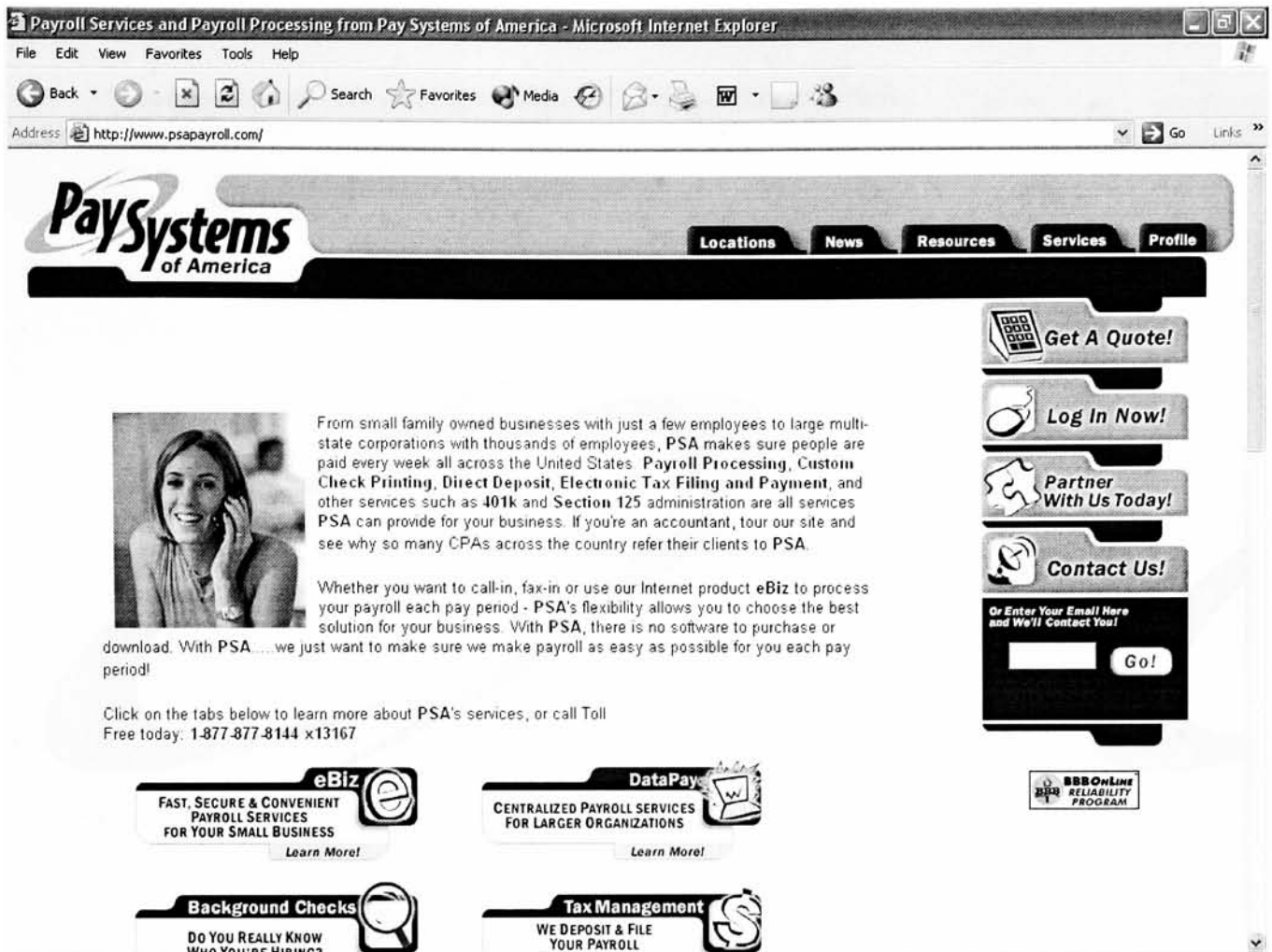
Pay Systems of America Screenshot

Nielsen's Heuristic #7: Flexibility and efficiency of use

Accelerators could be used for customers seeking to login. The login link is prominently displayed on the home page however the user must click from that page to a second page to choose from four services available then the third page has the customer name and password. The customer should be able to input its name and password on the home page and the system then differentiates and determines which service or services the user has registered for.

There is no software to purchase or download in order to use the service which is a benefit to the user in avoiding updates and compatibility problems.

Nielsen's Heuristic #5: Error prevention

The only detected errors in the site were on the resource page. There are three links to different areas on the Internal Revenue site. Only one of the links works, the other two are no longer current and return error messages.

WWW.QQESTPAYROLL.COM. Qqest Payroll Services was established in 1992. Qqest Payroll Services has a modern and professional appearing site, and offers all essential payroll services. Once the software from the company is loaded it can act entirely as the outsource payroll provider. The company has an integrated time and attendance software package that allows employers to efficiently track employees and then integrate that information into the payroll software. The company uses proprietary software to simplify the payroll and human resource function for companies.

With regard to this website, the application of the following Heuristics are particularly illustrative of the usability of the site. The remaining Heuristics are unremarkable in their application to this site, but may be discussed elsewhere in the thesis.

Nielsen's Heuristic #8: Aesthetic and minimalist design

The site makes good use of screen shots and sample images of its product output. The pleasing font choices and colors enhance the image of the company; although the use of light gray font on light gray background (and light orange on white) can be difficult to read. The use of colors also helps the user to focus on finding the desired links.

The site is easy to navigate. The top of page menu contains the search function, return to home link and four choices for the user on whether they want to link to information on services, reason for outsourcing, software, and time and attendance solutions.

Nielsen's Heuristic #4: Consistency and standards

A standardized layout for each page allows the user to easily identify where the important information is from page to page. Menus are consistently positioned and there is minimal use of scrolling.

Nielsen's Heuristic #10: Help and documentation

No errors were detected on the site. It should be noted that there are no resources on the site itself. The site is an invitation to learn more about the services and products offered. Therefore there is no login link and no forms or outside informational links.

WWW.SEINETWORK.COM. Success Express, Inc., operates under the website of Seinetwork.com. The company offers most essential payroll services, however does not print checks or facilitate direct deposit. It is unclear whether services for state payroll issues are addressed outside of Illinois. None of the traditional non-essential services are offered. The Success Express, Inc. home page has several characteristics which lead the user to believe that professionalism is not a high priority. The home page has ten links along the left side of the page, four of which are irrelevant to the payroll function or any other services offered by the company. A Screenshot of the homepage is below.

Success Express, Inc. Screenshot

With regard to this website, the application of the following Heuristics are particularly illustrative of the usability of the site. The remaining Heuristics are unremarkable in their application to this site, but may be discussed elsewhere in the thesis.

Nielsen's Heuristic #10: Help and documentation

The Help Desk is nothing more than a "mail to" link to the company so that the user can ask a question. As will be shown in the email study, no response was received from

this email link.

Nielsen's Heuristic #8: Aesthetic and minimalist design

The site contains links about the topics of Tax Information, World News, Local Weather or Stock quotes which are prominently positioned along the left of the home page. All four links direct the user off of the website without launching a separate window, sometimes making returning to the site difficult.

The last link on this page represents the most unprofessional element of any of the sites used in this study. The link is the "Meditate link" which directs the user to a Meditation Room showing a rippling water scene and the phrase, "Relax a moment or two, and regain your serenity." (http://www.seinetwork.com/meditate.htm). A screen shot is shown below.
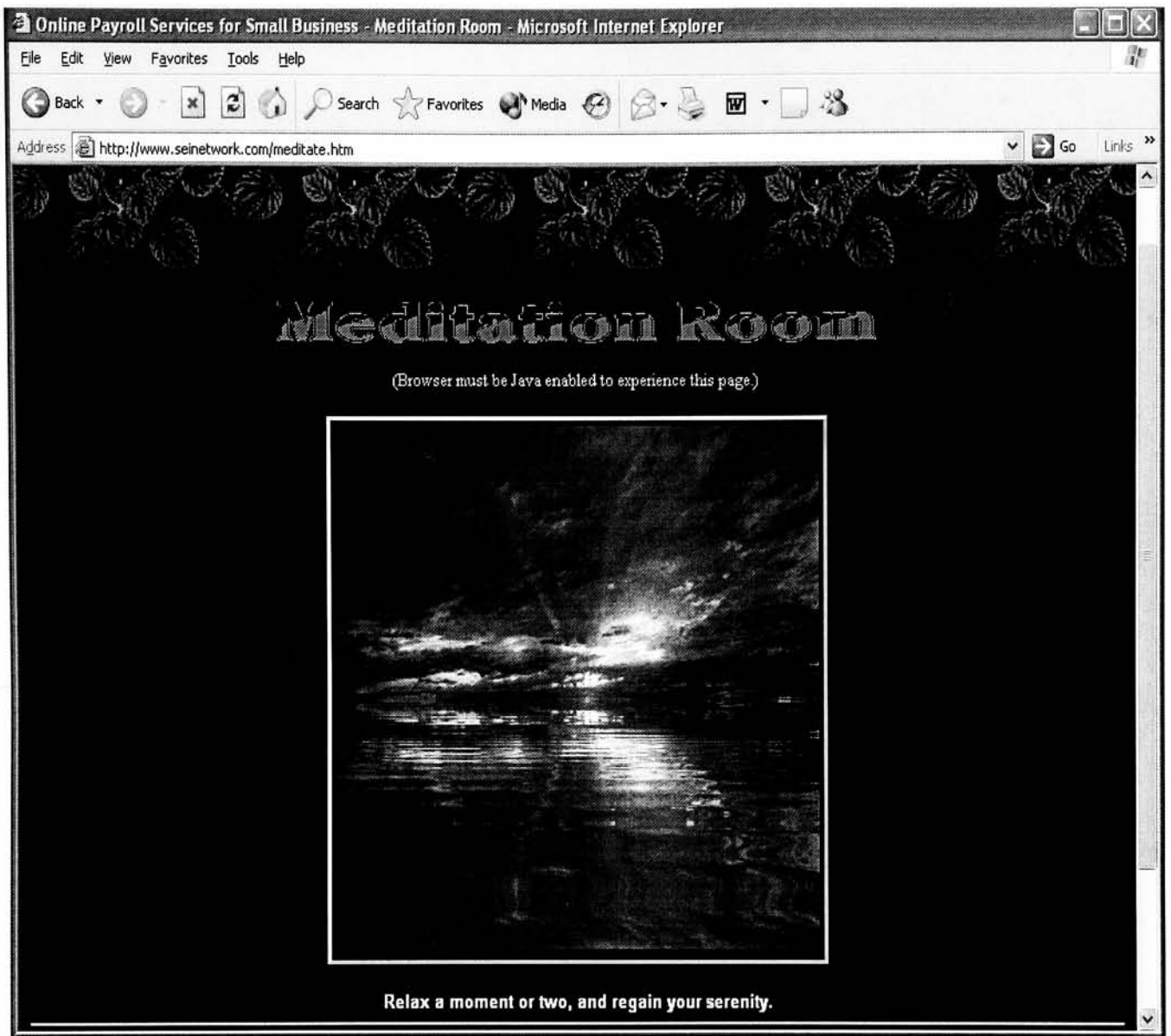
Success Express, Inc. - Meditation Room.

The site is difficult to navigate even with the scarcity of information contained.

There is no need for the scrolling that is used on the home page. On smaller monitors,

the site requires scrolling left to right as well as top to bottom. The more work that is

required of users, the less usable the site becomes.

Nielsen's Heuristic #5: Error prevention

The errors included typographical, missing links in the tax help section, and 8 of the

tax help links lead to the same page on the IRS site.

WWW.SMALLBUSINESSPAYROLLSERVICE.COM. This is the site for

McBee Systems, Inc. which has been in business since 1906 and presents a professional

appearance. The home page uses the four images of someone working with a pen, pad

and computer, a pocket watch, someone on a phone and a desk with a coffee cup. These

are images that convey that managing a business is difficult but that there are processes

that can make it easier and take the paperwork burden away from the manager. The

company offers all essential services for the payroll function. The company offers some

non-essential services such as workers compensation and Section 125 Plans.

With regard to this website, the application of the following Heuristics are

particularly illustrative of the usability of the site. The remaining Heuristics are

unremarkable in their application to this site, but may be discussed elsewhere in the

thesis.

Nielsen's Heuristic #8: Aesthetic and minimalist design

It is difficult to find the login link. The navigation of the site is not difficult but

could be made easier by eliminating the use of scrolling and by making the company

name and logo, which appears at the top of each page, a link back to the home page.

There is a home link on each page for that purpose. The size and type of font make the

site easy to read.

Nielsen's Heuristic #5: Error prevention

Some errors were found. The application for Social Security card form (SS-5) is

out of date; the listed form is the 3-2001 edition and not the 10-2003 edition. The

Immigration link is expired and has changed.

WWW.ST-LOUIS-PAYROLL.COM. FMS Payroll Services, Inc., has been providing payroll services since 1974. The company also operates under the website of st-louis-payroll.com. The home page provides good graphics and uses images of people in movement. One image is of a person in a deliberate hurry to get somewhere and the other is of four people meeting for business. The company offers all essential payroll functions across the US. The non-essential services that are offered include union reports, 401K management and reporting and ETO (Emergency Time Off) and PTO (Planned Time Off) reporting. This is stated almost immediately in the about us page and advises the user that the company is well established.

With regard to this website, the application of the following Heuristics are particularly illustrative of the usability of the site. The remaining Heuristics are unremarkable in their application to this site, but may be discussed elsewhere in the thesis.

Nielsen's Heuristic #8: Aesthetic and minimalist design

The homepage is professional in appearance and provides clear links to desired areas without the use of scrolling. The bullet points look as though they are links and they are not.

Nielsen's Heuristic #2: Match between system and the real world

No errors were detected. However, the company has a link that directs the user to a "customer list", which would generally lead to a list of actual customers; however it is not a list of customers but a list of the category of customers that it serves.

The company offers three levels of service: Complete Outsource, Partial Outsource and Minimal Outsource. The site has an excellent graphic which explains the differences between the payroll offerings available. The graphic, which would be helpful for other companies to use, is the following:
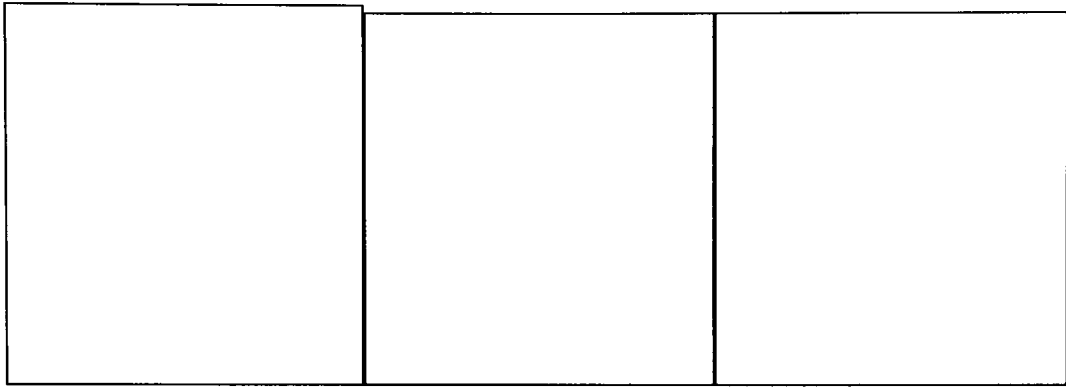
Nielsen's Heuristic #1: Visibility of system status

The site is easily navigable and does not make unnecessary use of scrolling. The site is an invitation to obtain a quote and more information. The actual signing up for the service must be done with a representative of the company. The menu bar at the top of the page remains and helps to navigate among Quote, Services, Solutions, About Us and Contacts Us.

WWW.SUREPAYROLL.COM. SurePayroll.com is the website of SurePayroll, Inc., a Delaware corporation formed in 1999. The website has a professional looking appearance with good use of tabs and graphics. The company offers all essential payroll services. Non-essential services are limited. The services are available completely through the web and the website acts as a portal as well as a promotional vehicle.

Nielsen's Heuristic #7: Flexibility and efficiency of use

The company homepage has a list of links to specific areas that users may have to link to. Login is a tab on the top of the site. It allows the payroll administrator or the employee to login.

<u>Nielsen's Heuristic #4:</u> Consistency and standards

The site is user friendly. The SurePayroll link at the top of each page brings the user back to the home page. The index tabs are available at the top of each page for easy navigation. The sign up for the service can be accomplished online.

<u>Nielsen's Heuristic #2:</u> Match between system and the real world

The site has a graphic to describe the ease of signing up for the service,
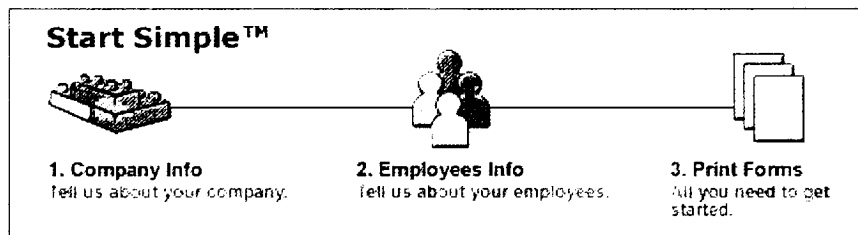
This graphic is inviting and simplifies the overview of the process. It is clear that the actual set up will be more difficult because each employee will have to be inputted; however it helps to show that the company tries to simplify tasks into their basic components in order to assist the customer through the steps.

WWW.TALX.COM. TALX Corporation was formed in 1996. The first viewing of this site lets the user know that they are dealing with a well polished, professional and efficient site.

With regard to this website, the application of the following Heuristics are

particularly illustrative of the usability of the site. The remaining Heuristics are unremarkable in their application to this site, but may be discussed elsewhere in the thesis.

Nielsen's Heuristic #6: Recognition rather than recall

There is good use of graphics on the home page with the depiction of working people. The login and search features are prominent. The homepage has a logo representing that the users of their services will be going paperless in the administration of their payroll. This is an important symbol which conveys that not only will there be savings from not having to purchase supplies and store large amounts of records, but also that the company is efficient and technologically advanced enough to eliminate the paper portion of the process. The icon follows:
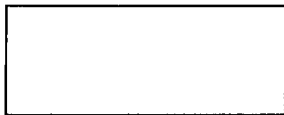
The company provides all essential payroll services. The company has made divisions within its company in order to perform different functions. The user can then decide on a function by function basis which services it will outsource and which it will keep in-house. The company has the following separate service offering classifications:

for unemployment insurance issues, this service performs employment verifications, income verifications and social services,

is the traditional payroll service bureau, processes time and attendance data and offers voice messaging services, and finally

processes paperless W-2s for the company and allows for the automated retrieval of the

same by employees.

<u>Nielsen's Heuristic #4:</u> Consistency and standards

The top of page menu is consistent from page to page making navigation easy. The site is user friendly beginning with the home page which does not use scroll bars. The site does not allow the user to sign up without first making contact with the company to evaluate the needs of the user. The site has a link to see who its representative clients are. The link gives a list of actual clients and case studies to read to better understand the problems that these companies were having and how this payroll service provider helped to provide a solution.

WWW.TECHVALLEYPAYROLL.COM. Tech Valley Payroll is the full service payroll service bureau associated with GTM Associates discussed above. The company has a web site which is similar in appearance to the GTM site and offers the same services and features. The site does not limit itself to household help.

With regard to this website, the application of the following Heuristics are particularly illustrative of the usability of the site. The remaining Heuristics are unremarkable in their application to this site, but may be discussed elsewhere in the thesis.

<u>Nielsen's Heuristic #4:</u> Consistency and standards

The site looks like the GTM site, however, when the tabs and links were placed on the site it does not appear that any reference was made to the other site. The problem that arises is that if someone is familiar with the color coded and ordered tabs from one site and tries to click the same tab on the other site, for the same function, they will get a

different result. Although this may be a minor annoyance for the user of the site, it shows a lack of coordination between sites and could be an indication of the type of business the company offers. On the Tech Valley site the "About Us" and "Contact Us" links are blue and green tabs at the top of the page. On the GTM site the same functions are icons located lower down the page. The blue and green tabs are for accounting firms and domestic agencies for GTM which does not hold true for Tech Valley.

WWW.TELEPAYROLL.COM. Telepayroll.com, Inc., operates under the website of Telepayroll.com which has an unsophisticated looking home page in need of improvement. The information contained on the site is impressive, such as 37 years of service. However, the company states that it has been in business since 1963, making the years in business actually 41 years. Perhaps the math has not been updated for 4 years.

The company offers all essential services and some non-essential services such as background checks and payroll clock sales.

With regard to this website, the application of the following Heuristics are particularly illustrative of the usability of the site. The remaining Heuristics are unremarkable in their application to this site, but may be discussed elsewhere in the thesis.

Nielsen's Heuristic #8: Aesthetic and minimalist design

The site is easy to navigate, primarily because it does not contain much information or functionality. Most links lead to fill in forms that will send information to the company which will then contact the user. There is a demo of the services offered. After filling in a fill in form the demo is downloaded to the computer and demonstrates the

services.

Nielsen's Heuristic #5:   Error prevention

The Legal Services link on the links page does not work.

WWW.TIMEPLUS.COM. Time+Plus, Inc. was established in 1989. The homepage of the company makes good use of colors and images of people working to help convey the nature of this site as a professional and capable enabler of payroll services.

The site offers all essential payroll services. The site also offers human resource management tools including employee tracking, benefits administration, applicant tracking, applicant wizard, company information and job tracking. Workers compensation and other supplemental insurances are offered through the site.

With regard to this website, the application of the following Heuristics are particularly illustrative of the usability of the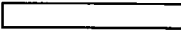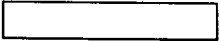 site. The remaining Heuristics are unremarkable in their application to this site, but may be discussed elsewhere in the thesis.

Nielsen's Heuristic #7: Flexibility and efficiency of use

The site has the username and password login directly on the home page. The ability to login is probably the most well placed of the sites listed. The fill in box for the login also has a check box option for the computer to remember the user and password on the computer to skip the login process. On many sites, the login function is buried on a different page. Although there is scrolling on the home page, the use of it is not

necessary to gain access to the major areas of the site.

The other useful links attached to the login are the "sign up" link for new users, "forgot login" for a password reminder, and a link to the "CheckConnect" feature allowing the user to view and edit payroll information.

Nielsen's Heuristic #5: Error prevention

There are no serious errors detected. The links to state taxation sites are sometimes in need of updating and the New York State site link actually directs the user to the New York City site. There is a reminder on the site to notify the webmaster if a broken link is found.

WWW.WELLSFARGO.COM. The site is powered by one of the largest banks in the US. The Wells Fargo web site has a link under the small business tab which directs the user to the payroll function. The payroll homepage can also be bookmarked. The Wells Fargo corporate logo is a depiction of a stage coach in motion. This theme is followed with the use of a bicyclist in motion on the payroll homepage. The site offers a free newsletter and the opportunity to test the payroll services for a free 90 day period. The design and choice of functions conveys a professional appearance.

All essential payroll services are offered along with every traditional financial service. Many non-essential services are offered, however specialty areas such as background checks are not. The payroll function is a small portion of the financial giant. A full range of insurance products are available through the site.

With regard to this website, the application of the following Heuristics are particularly illustrative of the usability of the site. The remaining Heuristics are

unremarkable in their application to this site, but may be discussed elsewhere in the thesis.

Nielsen's Heuristic #4: Consistency and standards

The usability of the site is well planned. A consistent menu bar appears at the top of each page making navigation easy and facilitating returning to the login or home.

Nielsen's Heuristic #9: Help users recognize, diagnose, and recover from errors

The left side of the page operates in a fashion similar to Windows Explorer in tracking the sub folders that are being viewed so that the user can retrace the steps taken and return to the desired page.

GROUP HEURISTIC ANALYSIS

This portion of the thesis describes the group heuristic analysis that was conducted over a two month period. Three testers were chosen to complete a study which would assess the usability of the payroll processing websites used in this thesis. The testers were chosen based upon age and education to conform to what a manager in a decision making position would possess. The first tester is Nicole, a graduate student in Management studying at the University of Pittsburgh. The second tester is Allen, a partner at an architect firm in eastern Washington State. The third tester is Christopher, a lawyer living in Rochester, NY.

The testers were given descriptions of Nielsen's Ten Usability Heuristics and instructions on how to evaluate the websites giving weight to the heuristics. Testing began by emailing to each tester a spreadsheet listing one of the payroll company

websites and the Ten Heuristics. The testers were then responsible for filling out the spreadsheet with a score for each heuristic from 1 to 7 (1 being poor and 7 being terrific).

Once I had received all three responses, I would send out the next spreadsheet and website to be evaluated. Over a 2 month period all websites had been emailed to the testers, responses were received and are presented in the tables that follow.

(Poor = 1) (Terrific = 7)	www.adaptasoft.com	www.adp.com	www.advantagepayroll.com	www.ceridian.com	www.chase.com	www.gtmassociates.com/	www.intuit.com	www.keystoneitc.com	www.paychex.com	www.paycycle.com	www.payrollonline.com	www.prioritypay.com
Visibility of System Status	5	6	5	3	3	3	5	4	6	7	5	6
Match Between System and Real World	6	6	6	5	5	4	6	2	5	6	4	5
User Control and Freedom	5	6	5	4	4	4	7	3	6	5	5	3
Consistency and Standards	5	4	4	2	2	5	5	5	6	6	4	4
Error Prevention	3	6	5	5	5	4	6	6	7	5	5	5
Recognition Rather than Recall	5	6	2	7	4	4	5	5	4	6	3	4
Flexibility and Efficiency of Use	5	6	4	4	6	3	4	4	5	7	5	5
Aesthetic and Minimalist Design	6	6	5	5	6	4	7	5	5	6	4	3
Recognize and recovery from Error	6	5	6	6	2	3	6	4	5	5	5	5
Help and Documentation	2	7	4	5	4	4	6	4	7	5	4	4
Average for Allen	4.8	5.8	4.6	4.6	4.1	3.8	5.7	4.2	5.6	5.8	4.4	4.4
Visibility of System Status	4	6	5	5	4	5	4	4	5	6	5	5
Match Between System and Real World	5	6	5	5	5	6	5	5	6	5	3	4
User Control and Freedom	4	5	6	6	5	6	7	4	5	4	4	5
Consistency and Standards	5	6	5	5	6	5	6	5	4	5	6	4
Error Prevention	4	7	4	6	5	6	5	6	5	6	3	5
Recognition Rather than Recall	4	6	5	4	4	6	4	5	6	7	2	6
Flexibility and Efficiency of Use	5	5	6	5	5	7	6	5	6	6	3	5
Aesthetic and Minimalist Design	5	6	5	6	6	5	5	3	5	7	5	3
Recognize and recovery from Error	4	5	4	5	5	6	5	5	6	6	4	4
Help and Documentation	4	7	3	6	5	5	5	4	7	5	5	5
Average for Nicole	4.4	5.9	4.8	5.3	5.0	5.7	5.2	4.6	5.5	5.7	4.0	4.6
Visibility of System Status	5	6	5	5	5	5	5	4	5	5	4	5
Match Between System and Real World	6	6	6	6	5	5	4	5	6	6	4	6
User Control and Freedom	4	7	5	5	5	6	6	4	4	4	5	5
Consistency and Standards	5	7	6	6	5	5	5	5	5	5	5	4
Error Prevention	6	5	6	4	4	6	6	5	7	6	6	5

Recognition Rather than Recall	5	6	6	5	5	5	5	5	7	6	5	7
Flexibility and Efficiency of Use	6	5	5	5	3	6	7	5	6	7	4	6
Aesthetic and Minimalist Design	6	6	6	6	5	4	7	5	5	7	3	5
Recognize and recovery from Error	5	6	5	7	5	5	6	5	7	7	5	3
Help and Documentation	6	6	4	5	5	6	5	6	7	6	4	4
Average for Chris	5.4	6.0	5.4	5.4	4.7	5.3	5.6	4.9	5.9	5.9	4.5	5.0
Overall Usability Score	4.9	5.9	4.9	5.1	4.6	4.9	5.5	4.6	5.7	5.8	4.3	4.7

Group Heuristic Analysis

www.psapayroll.com	www.qqestpayroll.com	www.seinetwork.com	smallbusinesspayrollservice	www.st-louis-payroll.com/	www.surepayroll.com/	www.talx.com	www.techvalleypayroll.com	www.telepayroll.com	www.timeplus.com	www.wellsfargo.com	www.paymaxx.com	(Poor = 1) (Terrific = 7)
6	7	2	5	4	5	5	5	4	5	6	5	Visibility of System Status
5	5	3	4	5	6	7	4	3	6	5	6	Match Between System and Real World
4	6	1	5	6	5	7	5	4	5	6	6	User Control and Freedom
5	7	2	6	5	5	6	4	3	6	5	6	Consistency and Standards
5	6	3	3	5	5	5	4	4	5	7	5	Error Prevention
4	5	4	5	4	6	6	5	2	6	5	6	Recognition Rather than Recall
4	6	2	6	5	5	5	4	4	7	6	6	Flexibility and Efficiency of Use
5	6	3	5	6	5	5	4	3	7	5	4	Aesthetic and Minimalist Design
4	6	2	5	5	6	5	5	4	5	6	5	Recognize and recovery from Error
4	5	2	5	3	4	5	6	2	6	5	6	Help and Documentation
4.6	5.9	2.4	4.9	4.8	5.2	5.6	4.6	3.3	5.8	5.6	5.5	*Average for Allen*
5	5	2	5	4	5	5	5	5	5	5	5	Visibility of System Status
4	4	1	5	5	5	5	5	4	5	5	4	Match Between System and Real World
4	5	1	4	5	6	4	4	5	6	4	5	User Control and Freedom
4	5	1	5	4	6	5	5	4	5	5	6	Consistency and Standards
5	6	2	5	5	6	5	5	5	6	5	5	Error Prevention
5	5	3	4	6	6	6	5	4	5	5	6	Recognition Rather than Recall
6	5	4	3	4	7	5	3	3	6	6	5	Flexibility and Efficiency of Use
5	6	2	5	5	6	5	5	4	5	5	6	Aesthetic and Minimalist Design
4	4	4	6	3	5	4	5	5	6	5	5	Recognize and recovery from Error
5	5	2	5	5	5	5	3	5	6	5	5	Help and Documentation
4.7	5.0	2.2	4.7	4.6	5.7	4.9	4.5	4.4	5.5	5.0	5.2	*Average for Nicole*
5	5	3	5	2	5	5	5	4	5	5	5	Visibility of System Status
4	6	4	4	5	4	6	5	5	6	5	6	Match Between System and Real World
5	4	2	5	6	5	5	6	4	7	6	6	User Control and Freedom
6	4	3	6	5	6	5	5	5	5	6	5	Consistency and Standards
3	6	2	6	5	6	6	5	6	6	5	6	Error Prevention
5	6	3	5	4	6	5	4	5	5	6	5	Recognition Rather than Recall
6	6	3	4	4	5	6	5	5	6	7	3	Flexibility and Efficiency of Use
6	7	2	4	5	5	6	5	5	5	7	5	Aesthetic and Minimalist Design
4	6	2	7	5	5	6	5	6	5	5	5	Recognize and recovery from Error
5	5	1	5	6	4	5	5	6	7	6	5	Help and Documentation
4.9	5.5	2.5	5.1	4.7	5.1	5.5	5.0	5.1	5.7	5.8	5.1	*Average for Chris*
4.7	5.5	2.4	4.9	4.7	5.3	5.3	4.7	4.3	5.7	5.5	5.3	Overall Usability Score

Group Heuristic Analysis

The testers were told to pay attention to the functionality and ease of use of the websites. They were also given a list of observations to make prior to completing the evaluation. These observations included ease of navigation, use of search prompts, hierarchy, tabbing, return to home prompts, colors, text, fonts and scroll bars. The website should have an initial interface that lacks confusion and breaks up the tasks to be performed and the information to be retrieved into easily recognizable segments.

The ranking of the usability scores ranged from a high of 5.90 for ADP to a low score of 2.37 for Seinetwork.com (aka Success Express).

5.90	www.adp.com
5.80	www.paycycle.com
5.67	www.paychex.com
5.67	www.timeplus.com
5.50	www.intuit.com
5.47	www.qqestpayroll.com
5.47	www.wellsfargo.com
5.33	www.surepayroll.com/
5.33	www.talx.com
5.27	www.paymaxx.com
5.10	www.ceridian.com
4.93	www.gtmassociates.com/
4.93	www.advantagepayroll.com
4.90	www.smallbusinesspayrollservice.com
4.87	www.adaptasoft.com
4.73	www.psapayroll.com
4.70	www.st-louis-payroll.com/
4.70	www.techvalleypayroll.com
4.67	www.prioritypay.com
4.60	www.chase.com

4.57	www.keystoneitc.com
4.30	www.payrollonline.com
4.27	www.telepayroll.com
2.37	www.seinetwork.com

Group Usability Rankings

The group testing was used because it gave me an opportunity to moderate the

process by suggesting areas of particular importance on the websites. Additionally the

group method allowed me to gather a large amount of information in a short period of

time without having to hire professional usability testers. The methods used can be

repeated for the cost-effective testing of other sites. Jakob Nielsen has stated that testing

with three users is adequate and results in the best cost benefit ratio. (Nielsen, 2000).

EMAIL RESPONSE STUDY.

As payroll is seen by most managers as a cost center rather than a profit center, the

questions that are generated are often last minute inquiries as tax or filing deadlines

approach. The responsiveness to emails, in both timeliness and completeness, are

therefore essential elements in the critical analysis of such businesses. The author's

approach on this topic is simple; the author decided to develop a standard question to

pose to each of the companies, through their website or email address, designated for

such purpose. The author then determined how long the response time of each was and

also whether the question was answered or whether the author was directed to a FAQ

section of the site. (Rhodes, 2001).

The email response study was conducted by sending a uniform email request to all

of the payroll processing companies researched for this thesis. The email asked the

simple question, "Does your company provide payroll service in New York State? " The email responses ranged from no response, to automatically generated guidance to the website's FAQ section to personalized responses that directly answered the question. The entire response set is attached to the thesis at Appendix, "C".

A summary of the responses follows;

	Company	Response Time: days:hrs:mins	Type of Response
1	GTM Associates	00:00:02	Auto reply
2	St Louis Payroll	00:00:15	Auto reply
3	McBee Payroll	00:00:20	Auto reply
4	Wells Fargo	00:00:28	Auto reply
5	Priority pay	00:00:42	Error Message
6	PSA Payroll	00:01:59	Directly responsive to question.
7	Timeplus	00:12:35	Directly responsive to question.
8	Paymaxx	00:13:41	Auto reply
9	Paycycle	00:14:11	Directly responsive to question.
10	Tech Valley	00:14:13	Directly responsive to question.
11	Ceridian	00:14:44	Auto reply
12	SurePayroll	00:15:24	Directly responsive to question.
13	Talx	00:16:37	Directly responsive to question.
14	Chase	00:18:27	Auto reply
15	Keystoneitc	00:21:45	Directly responsive to question.
16	ADP	01:15:30	Auto reply
17	Paychex	11:15:36	Directly responsive to question.
18	adaptasoft	No response	none
19	advantagepayroll	No response	none
20	intuit	No response	none
21	payrollonline	No response	none
22	qqestpayroll	No response	none
23	seinetwork	No response	none
24	telepayroll	No response	none

QUESTIONNAIRE FEEDBACK FROM OWNERS AND MANAGERS.

The purpose of conducting interviews with certain owners and/or managers of

payroll services was to obtain information regarding various aspects of their website

design and efforts to maintain or improve their sites. A questionnaire was developed and

distributed to several parties holding management positions at some of the companies

being studied. The questionnaire was provided to three companies and their responses

were requested. Prior to seeing the questions, the managers were willing to participate in

the study – especially given that it was for educational purposes. Once the questions

were formulated and distributed, all three companies refused to answer on the basis that it

could reveal trade practices or secrets. (Hurst, 2000).

The questions presented have therefore touched upon aspects of the website

management process that the companies find valuable enough to protect from disclosure.

The questionnaire was presented in the format and asked the questions as shown in

Appendix "D".

After initially agreeing to assist in providing information for this thesis the

companies have either ceased communicating or have indicated an unwillingness to

cooperate with the study. The response from Paychex was as follows:

> *---- Response from Paychex ----*
> *"Good afternoon, Stella:*
> *Thank you for clarifying your request.*
> *Unfortunately - and as I had anticipated - after reviewing*
> *your questions, we have determined that we are unable*
> *to participate in your thesis. In talking with our Web*
> *marketing manager, the determination was made that*
> *much of the information you requested the company*
> *deems confidential and/or proprietary.*
> *Best wishes with your studies.*
> *Regards,*
> *Laura Saxby Lynch*
> *Public Relations Manager – Paychex"*
> *---- Response from Paychex ----*

The response from Payrollonline Corporation was as follows:

---- Response from Payrollonline ----
"Stella,

I have gone through the questions and would prefer to have you complete a Nondisclosure agreement prior to sending you my responses. I do not want to sound paranoid, especially since I'm not. I just feel as though it would be best to reserve the option to limit the amount of disclosure should something arise in the future."

Thanks,

Mike
---- Response from Payrollonline ----

The conclusion to be drawn from the exchange of correspondences and the reluctance of these companies to divulge this information is that they deem the information to be an important competitive advantage to the way they operate their businesses. A review of the questions presented, together with the reasons given for not responding, is revealing of the aspects of web design that the companies believe give them a competitive advantage.

Question #1. asks the company to reveal whether their website is focused towards expanding the customer base or maintaining the current customer base. Although Paychex is a large company it is also a growing company, the CEO has stated that the market is far from mature. In the target market of small to medium size businesses, only 15 to 20 percent have outsourced payroll. Admitting that the website is a powerful marketing tool might lead other companies to deploy resources in the same direction.

Question #2. asks the nearly rhetorical question of whether the company monitors competitors' websites, and if so, which, and how often. This may be difficult in that it leads to the revelation of which companies represent the closest competitive threat.

Question #3. asks for an opinion of what other companies have sites which

effectively execute the important aspects of a website in the payroll industry. In a growing and competitive market, this type of response is possibly viewed as an admission that a company's own site is lacking in some areas, if a company site is listed that is not similar to its own. In contrast, if a site is listed that is similar to its own, it could appear that there is not a significant amount of differentiation between the companies.

Question #4. asks for the percentage of its customers that transact their entire payroll through the Internet. This question is a more specific follow up on question #1. The more customers that are entirely online is beneficial from a cost savings standpoint, but it also represents less human to human contact which means that the business is more susceptible to migration to another company offering better service or lower prices.

Question #5. asks for the number of employees that are employed full time in the capacity of web site maintenance. This number would reveal the importance that the company places on the proper functioning of the web site in the day to day functioning of the site and the periodic updating for news releases and regulatory changes. The Paychex site has a current listing of year 2004 regulatory pronouncements while the Payrollonline site has outdated government forms. It would be difficult for Payrollonline to assert that it has 6 to 20 employees dedicated to the website when an examination of the site revealed errors and outdated materials.

Question #6. asks whether the company seeks input from their customers, and if so, how? Email users generally do not appreciate surveys being sent to them. However, emails, if written and directed properly, can be an important tool in determining customers' satisfaction level with a website. (Rhodes, 2001).

Question #7. asks whether the website has reduced the number of helpdesk telephone calls. This use of the website can represent significant savings for a firm. The

first savings that can be realized is that customers may initially seek answers to their questions by searching the website and not calling the company. The second area of cost savings is that the actual operators working at the helpdesk have the website as a resource for information retrieval when customers do call.

Question #8. asks how often the website is updated. The answer to this question can sometimes be found directly by visiting the site and viewing the news section of the site. The Paychex site appears to be updated weekly while the Payrollonline site appears to be updated quarterly.

Question #9. asks whether customers are bothered when changes are made to the site. Customers go through a learning curve with any new interface and may resist change. When making changes it is important to know whether customers will be upset at sweeping changes or whether slow evolving changes will be more annoying.

Question #10, asks whether focus group testing is conducted prior to making website changes, and if so, whether employees, non-employees or web professionals are used. This question expands on the seriousness with which the company takes its web practices. Although the Payrollonline website may have been professionally developed, it is obvious that it has been neglected over a period of years. The forms are out of date, the links on its Partners page are broken and the "Sign Up Now" link on the homepage does not work. These deficiencies may support the reason that the company is reluctant to disclose the requested information.

In contrast, the Paychex website managers may have a different set of reasons for not disclosing this information. The company has obviously spent time and effort on the creation and maintenance of its website and may feel that the value could be lost if their self-taught lessons are shared.

The five areas of research included website analysis for completeness of offerings and conformity with known usability heuristics, group heuristic analysis for usability rankings, email responsiveness study and company questionnaire.

The findings from the individual website analysis for completeness of offerings revealed that 21 of the 24 sites offer all essential payroll services to their clients. The remaining three companies were either software development companies selling software to customers to manage in-house payroll or were companies that failed to include this information on their websites and therefore a determination could not be made. This lack of information regarding their service offerings shows a need to have their websites reviewed and improved.

The heuristic analysis involved a closer look at each website relative to known usability heuristics. The findings were that the companies generally execute well but have individual inadequacies in various areas. The analysis clearly demonstrated the need for the companies to take a more structured approach to monitoring their own websites. Some of the errors revealed were as simple and easily corrected as not having the most current government forms available from their website.

The Group Heuristic Analysis of the websites acts as a benchmark of where each site stands in relation to its competition. Although the sample of companies studied ranges from multi-billion in annual revenue to companies that have recently entered the business, this was not always apparent by a study of the websites. A startup can have a website that is as good if not better than the most established company in the field. It is

this type of power, through a leveling of the playing field, which the Internet gives to companies. Once customers gain a confidence in transacting financial business over the Internet, the competition will intensify. (Harper, 2004).

The email response study was undertaken to determine how quickly the companies would respond to a question from a potential customer. The question was drafted to indicate it was from a potential customer and was simple enough that research by the company was not necessary to answer it. Four companies responded within 1 hour. The next 10 companies responded within 1 day. ADP took almost 2 days and Paychex took nearly 2 weeks. The remainder of the companies did not respond. This is an area that is easily improved and should lead to the acquisition of customers.

The questionnaire to company managers caused a protective response from the three companies studied. As shown by the companies' reactions to the questionnaire, the information that is not available can lead to conclusions about the importance of the data. Payroll is thousands of years old, but competition for effective websites has only been around for less than 6 years. Companies are intensely perusing this strategy for customer attainment and are unwilling to divulge what may be valuable insight.

CONCLUSION

There has been a significant shift in the efficiencies with which payroll processing companies are able to process information. The initial shift was made possible by the invention of the computer and development of software to manage the task of payroll. The most recent transformation has occurred as the companies have launched websites to attract and retain customers. ADP launched their website in 1999 and Paychex became

more serious about its website sometime after 2001. (Gaskin, 1998) (Maxwell, 2001). These companies are still in the formative stages of their web offerings. It is at this stage that usability testing, starting with a customer needs based analysis, is most important.

The increased amount of competition in the business of outsourced payroll services has forced payroll service providers to maximize the effectiveness and efficiency of their online offerings. This is reflected in the website design characteristics present on payroll service companies' websites, as well as the substantial ancillary offerings available on the websites.

These companies are able to operate effectively without spending money on branch locations. Paymaxx, the 6th largest provider was started in 1995 and has only three branch offices. Its growth is accelerated through the Internet. The real time transaction power of the Internet allows an employer on the east coast to contract with a payroll processor on the west coast as easily as the transaction occurring between companies sharing the same room. (McGarvey, 2000).

Payroll processing companies offer many products and services; however their primary business is the facilitation of payroll payments from the employer to the employee with the correct accounting and payment of tax liabilities to government authorities. These services are essentially undifferentiated from company to company. That is to say, if a person has gross wages of $1,000.00 every two weeks, and the tax to be collected is $180.00, that amount will be the same regardless of the company processing the payroll and making the government remittance. The electronic facilitation of these services by these companies allows them to profit from the economies of scale and electronic transfer of the funds to employees and taxing authorities. The initial costs

of establishing a company and an electronic forum for the processing of the information can be significant. However, once the initial costs have been made the provider is able to benefit from the small marginal cost associated with adding additional customers.

For the reasons of economy of scale and increased use of the Internet as a source of acquiring business and servicing clients, the websites of the payroll service companies have become an important element of the profit equation.

As this thesis has demonstrated those companies that want to lead in the payroll industry have to look at their websites as having three important functions. First is acquiring customers, this is accomplished through the drawing in of potential customers to the site and having an easily navigable site that gives the users a sense of comfort that they can accomplish the required tasks, as well as the confidence that the company is capable in the payroll field and can manage this important function for the user. Second is the servicing of the client's needs through a website that demonstrates all the essential functions of the administration of payroll. Finally, the company must retain the clients by maintaining the website interface in such a manner that it continually grows in conjunction with the expectations of the users. This growth must be both in the additional services that the clients may seek as well as growth in the knowledge base maintained by the company. A company that has out of date information on its website and inaccurate calculations of withholding amounts, because it did not keep current with the most recent changes in the law, will cause frustrating problems for its clients and will surely lose them.

Payroll is the primary source of employee reward and compensation. Employees often rely on the paycheck for their weekly and monthly expenses and cannot afford to

have difficulties arise when they expect money to be in their bank account. If payroll processing companies fail to deliver wages to a group of employees, it is almost for certain that the payroll company will be replaced. However, if a payroll company executes efficiently and accurately and provides service to its clients, it will thrive in this arena. As shown above, a properly designed and implemented website can automatically attain clients, service clients and retain clients.

Because payroll relationships tend to remain in place once they are established, the marketing interface is the most important part of the website from a business growth point of view. Those companies that do not successfully implement a web strategy to meet the needs of their potential and current customers, risk losing market share and risk not taking advantage of the efficiencies that a properly implemented website allow.

Americanpayroll.com. American Payroll Association. 19 Mar. 2004.
www.americanpayroll.com.

Bevan, Nigel and Ian Curson. "Planning and Implementing User-Centered Design."
National Physical Laboratory, Usability Services. UK: Crown, 1998.

Boling, Elizabeth and Theodore W. Frick. "Holistic Rapid Prototyping for Web Design:
Early Usability Testing Is Essential." Web-Based Instruction. Ed. Badrul H.
Kahn. Englewood Cliffs: Educational Technology Publications, 1997.

Boling, Elizabeth. "Usability Testing for Web Sites." (1995).
<http://www.indiana.edu/~iirg/ARTICLES/usability/usability.main.html.>

Bruner, Rick, E., Leland Harden and Bob Heyman. Net Results.2: Best Practices for
Web Marketing. Indianapolis: New Riders Publishing, 2001.

Gaskin, James, E. "The Wages of Java: ADP Rolls Out Payroll System." Inter@ctive
Week 16 Nov. 1998: 46-47.

Harper, Rebecca. "The New Currency: Kiss Your Cash Goodbye. By 2010, Two-Thirds
of Your Payments Will Be Virtual." Wired Apr. 2004.

Hurst, Aaron. "One-Day Usability Testing." Clickz.com. 5 Oct. 2000.
<www.clickz.com/experts/archives/ebiz/prod_manage/article.php/830171>.

ISO 9241-11. Ergonomic Requirements for Office Work With Visual Display Terminals
(VTDs) – Part 11:Guidance on Usability. (1998). International Organization for
Standardization. <www.iso.ch>.

Ivory, Melody, Y. Automated Web Site Evaluation: Researchers' and Practitioners'
Perspectives. Dordrecht: Kluwer Academic Publishers, 2003.

Johnson, Jeff. Web Bloopers: 60 Common Web Design Mistakes and How to Avoid
Them. San Francisco: Morgan Kaufmann Publishers, 2003.

Kahn, Badrul, H. Web-Based Instruction. Englewood Cliffs: Educational Technology
Publications, 1997.

Keeker, Kevin. "Improving Web Site Usability and Appeal – Guidelines compiled by
MSN Usability Research." (1997).
<http://msdn.microsoft.com/library/default.asp?url=/library/en-
us/dnsiteplan/html/improvingsiteusa.asp>.

Kuniavsky, Mike. "Why User Testing Is Good." (1998).
<http://hotwired.lycos.com/webmonkey/98/14/index3a.html?tw=design>.

Maxwell, Jill Hecht. "Net Wages: The CEO of a Payroll Company and PayChex's Brash Boss Disagree When it Comes to the Internet." Inc Magazine 15 Nov. 2001.

McGarvey, Robert. How To Dotcom: a step-by-step guide to e-commerce. Irvine: Entrepreneur Press, 2000.

Miller, Michael. Telephonic interview with Maria Stella Plutino. 20 Mar. 2004.

Nielsen, Jakob. "Why You Only Need to Test With 5 Users." (2000). <http://www.useit.com/alertbox/20000319.html>.

Nielsen, Jakob and Donald A. Norman. "Web-Site Usability:Usability On The Web Isn't A Luxury." (2000). <http://www.informationweek.com/773/web.htm>.

Nielsen, Jakob. Designing Web Usability. Indianapolis: New Riders Publishing, 2000.

Nielsen, Jakob. "What Do Users Really Want?" International Journal of Human-Computer Interaction, 1(1), 1989: 137-147.

Nielsen, Jakob, Kara Pernice Coyne and Marie Tahir. "Make It Usable". PC Magazine 6 Feb. 2001.

Paychex, Inc. Form 10-K: Annual Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 – For the Year Ending May 31, 2003.

"Payroll Services Keep Up With Computer Technology." The Boston Law Tribune Apr. 2002.

Rhodes, John S., Daniel L. Sloat, James W. Griffith and Gregory E. Benoit. "The Usability of Email Subject Lines." 8 Feb. 2001 Webworld.com.

Sears, Andrew. "Introduction: Empirical Studies of WWW Usability." International Journal of Human-Computer Interaction, June 2000: 167-172.

Shapiro, Carl and Hal R. Varian. Information Rules: A Strategic Guide to the Network Economy. Boston: Harvard Business School Press, 1999.

Sindell, Kathleen, Ph.D. Loyalty Marketing for the Internet Age: How to Identify, Attract, Serve, and Retain Customers in an E-commerce Environment. Chicago: Dearborn Trade, 2000.

Slywotzky, Adrian J and David J. Morrison, with Karl Weber. How Digital is Your Business? New York: Crown Business, 2000.

"Website Design: Scents and Sensibility." The Economist 26 Apr. 2001.

"Off with the Pith Helmets: Management: The Use of Anthropologists in Technology firms, once a novelty, has now become commonplace. What has changed?" The Economist 13 Mar. 2004.

Payrollonline.com. Payroll Online Corporation. 19 Mar. 2004. <http://www.payrollonline.com/>.

Adaptasoft.com. Adaptasoft, Inc. 19 Mar. 2004. <http://www.adaptasoft.com/>.

ADP.com. Automatic Data Processing, Inc. 19 Mar. 2004. <http://www.adp.com/>.

Advantagepayroll.com. Advantage Payroll Services, Inc., 19 Mar. 2004. <http://www.advantagepayroll.com/>.

Ceridian.com. Ceridian Corporation. 19 Mar. 2004. <http://www.ceridian.com/>.

Chase.com. J.P. Morgan Chase & Co. 19 Mar. 2004. <http://www.chase.com/>.

GTMassociates.com. GTM Household Employment Experts. 19 Mar. 2004. <http://www.gtmassociates.com/>.

Intuit.com. Intuit, Inc. 19 Mar. 2004. <http://www.intuit.com/>.

Keystoneitc.com. Keystone Information Technology. 19 Mar. 2004. <http://www.keystoneitc.com/>.

Paychex.com. Paychex, Inc. 19 Mar. 2004. <http://www.paychex.com/>.

Paycycle.com. Paycycle, Inc. 19 Mar. 2004. <http://www.paycycle.com/>.

Payrollonline.com. Payroll Online Corporation. 19 Mar. 2004. <http://www.payrollonline.com/>.

Prioritypay.com. Tricentra Corp. 19 Mar. 2004. <http://www.prioritypay.com/>.

Psapayroll.com. Pay Systems of America. 19 Mar. 2004. <http://www.psapayroll.com/>.

Qqestpayroll.com. Qqest Software Systems, Inc. 19 Mar. 2004. <http://www.qqestpayroll.com/>.

Seinetwork.com. Success Express, Inc. 19 Mar. 2004. <http://www.seinetwork.com/>.

Smallbusinesspayrollservice.com. McBee Systems, Inc. 19 Mar. 2004. <http://www.smallbusinesspayrollservice.com/>.

St-louis-payroll.com. Financial Management Services Inc. 19 Mar. 2004. <http://www.st-louis-payroll.com/>.

Surepayroll.com. SurePayroll, Inc.. 19 Mar. 2004. <http://www.surepayroll.com/>.

Talx.com. TALX Corporation. 19 Mar. 2004. <http://www.talx.com/>.

Techvalleypayroll.com. GTM Associates - Tech Valley Payroll. 19 Mar. 2004.
<http://www.techvalleypayroll.com/>.

Telepayroll.com. Telepayroll.com, Inc. 19 Mar. 2004. <http://www.telepayroll.com/>.

Timeplus.com. Time+Plus, Inc. 19 Mar. 2004. <http://www.timeplus.com/>.

Wellsfargo.com. Wells Fargo Bank, N.A. 19 Mar. 2004.
<http://www.wellsfargo.com/>.

Paymaxx.com. Paymaxx, Inc. 19 Mar. 2004. <http://www.paymaxx.com/>.

Appendices

Appendix "A"

Company summary spreadsheet

	Description	1 www.adaptasoft.com	2 www.adp.com
Home	The home page of a company refers to the screen that is the main page for the company's web site. The entire site will generally cousist of several additional pages.	Simple explanation of services offered. Links to 11 additional pages.	Simple explanation of services offered. Links to 21 additional pages. Home page blends data processing as overall umbrella of fuctious available.
Company Information (About Us, Company Profile)	Company information is sometimes labeled the "About Us" portion of a site and gives a description of the years in business, the needs that the company fills, its territory and mission. Some sites cover these areas in greater detail on separate pages.	Founded in 1995 first as a servicer of in-house payroll. Later developed external payroll services.	Leading provider of computerized trausaction processing. Operates in 26 countries and pays over 30 million people each payday.
Historical Profile	Historical Profile gives a detailed history of the company from inception. This is often used for compauies that have served the industry prior to the Internet and wish to use this as a selling point.	Founded in 1995 the company was purchased by employees in 2000.	50 year old company. Processes data and payroll services for compauies with from 1 to over 1,000 employees.
Contact Us	Contact Us has information on how to contact a company through traditional mail, phone numbers and email addresses. Often this section is broken down into departments for customers and investors.	One address, one main phone number with fax and sales number with fax, email.	1-800 number, links for Investors, general and FAQs. Unique feature of Office Locator together with State and City listing of locations.
Privacy Statement	Privacy Statements are required under Federal Law and mandate that the company tell the customers how their information is gathered and used and whether the customer allows the company to use the information for the further solicitation of business.	Information for internal use only.	Information for internal use only. And only by those who need to use it. Questions are directed via email regarding the Privacy Policy.
Products & Services	Products and Services may be presented in a brief listing that links to other areas of the site or the listing could be a summary that requires the customer to contact the company for more information.	All essentail services offered. Bullet listing of features. 50 state ready for in-house and off-site payroll processing.	All essentail services offered. Full service, 50 States, 26 Countries. Comprehensive, integrated approach to Human Resources at all levels.
Tax Services	Tax Services offered by payroll compauies typically involve calculating, depositing, filing returns, reconciliation reports and responding to tax departments for both state and federal tax matters.	Not clear whether program is complete tax solution for payroll.	Complete federal and state tax solutions provided.
Employee Pay Options	Employee Pay Options refers to the way a company can trausfer payment to the employee. This can be as a check, direct deposit, or deposit to a debit card account for employees that do not have a bank account.	Payment by client check or direct deposit.	Payment by client check, direct deposit or deposit to debit card account..

Workers' Compensation	Worker's Compensation is an insurance policy which pays employees who are injured on the job. The insurance is based upon the risk level and compensation level of the employees.	Payments supported and facilitated. Service not arranged through the site.	Payments supported, facilitated and services arranged through site.
Health Insurance	Health Insurance is often offered through a group coverage made up of the employers own employees or from a group made up of employees who all use the specific payroll company.	Payments supported and facilitated. Service not arranged through the site.	Payments supported, facilitated and services arranged through site.
State Unemployment Insurance	States which require Unemployment Insurance can have this covered as an ancillary service to the payroll function.	Payments supported and facilitated. Service not arranged through the site.	Payments supported, facilitated and services arranged through site.
Handbook Services	Handbook Services are a non-essential service which help an employer assemble a handbook for its employees setting forth federal and state rules. Updates are researched and transmitted to employers when laws change.	Not available.	Not available directly. Course offered for $259.00.
Section 125 Plans	Section 125 Plans allow employees to place money in a "flexible spending account" pre-tax and the money is then used to pay for qualifying expenses. This allows the employee to reduce taxes and the employer to avoid payroll taxes on that portion of the pay.	Function payment supported but not administered.	Payments supported, facilitated and services arranged through site.
Retirement Services	Retirement plans can be set up and administered through the payroll company.	Function payment supported but not administered.	Payments supported, facilitated and services arranged through site.
Administrative Services (ASO)	Administrative Services is a broad term meant to encompass the managing of payroll, human resources, employee benefits, and other employee service administration in a holistic way. All employee administration is handled by the payroll provider.	Not administered.	Fully supported, facilitated and services arranged through site.
Business Solutions (PEO)	Business Solutions is the same as Administrative Services except that the employees are employees of the payroll processing company and are merely working on the location of the employer.	Not administered.	Fully supported, facilitated and services arranged through site.
Office Locations	Office Locations listing or display of branch locations. Although payroll processing in an online environment can be handled over great distances, many customers will expect a local office to transact with. It may also be necessary for quick transmittal of paychecks.	One location in Francesville, IN.	Offices in 43 states of the US, services available throughout the US and 26 countries.
Career Opportunities	Career Opportunities lists jobs available or gives contact information for those interested in employment at the company. Listings may include positions, locations and benefits.	No information on site.	Searchable database and listing by business units.
Investor Relations	Investor Relations allows those companies that are publicly traded to communicate financial information to shareholders and the public. It is generally a collection of filings that are required to be filed with the Securities and Exchange Commission, financial news and Annual Reports.	No information on site.	Includes company information, SEC filings, list of directors, historical quote and chart information, and latest news.

News Center	News Center presents the company's press releases and other news articles. The content is controlled by the company.	No information on site.	3 years of news releases by business units.
Customer Educational Resources	This area contains information useful to customers for the efficient management of employees. It may also contain information useful for employees. Sub-categories may include: Managing Your Business, Managing Your Employees, Managing Your Restaurant, Resource Library.	No information on site.	Classes offered through ADP Institute for Educational Excellence.
Forms	Companies are often required to use forms for government filings, in-house uses or retirement elections. This area may include forms that the companies or employees need.	Tax forms available.	Tax forms available. Other forms available as part of services or through seminars.
Online Clients	Allows customers utilizing online services to access their account to input data, retrieve or modify data. May include time sheet input, addition of employees, modification of rates, etc.	Supported.	Fully supported.
Internet Report Service	Allows customers to access online reports for a given period of time.	Library of over 100 reports. Customizable reports available.	Fully Supported.
General Ledger Reporting Service	Allows for payroll information that is maintained by the payroll service provider to be directly linked to the customer's accounting software such as AccPac®, Creative Solutions Accounting™, M.Y.O.B®, Peachtree® or QuickBooks.	No information on site.	Fully Supported.
Accounting Professionals	Allows the payroll processing company to offer their services through the accountant. This is either branded by the accountant or co-branded with the payroll service provider.	Supported.	Fully Supported.
Web Linking Program	This feature allows companies to place the Payroll service provider's link directly on their web site to easily access the web site of the online payroll service provider.	No information on site.	No information on site.
Publications	Available publications dealing with paymll issues, employment issues, tax and legal, which can include in-house and external publications.	No information on site.	Newsletter archive, seminar archive.

3	4	5	6
www.advantagepayroll.com	www.ceridian.com	www.chase.com	www.dtmassociates.com/
Simple explanation of services offered from payroll and HR to Claims services. Links to 15 additional pages.	Divided explanation of services ranging from payroll and HR to transportation. Links to 44 additional pages.	Sub-page of JPmorganchase.com. Services of payroll processing offered Ceredian Payroll Service or through self-service of Chase Online for Small Business. Links to 36 additional pages.	Simple home page with 28 links to additional pages.
Founded in 1967, offers payroll and HR services throughout the conntry.	Information services company in the human resource, retail and trausportation markets.	Refers to JP Morgan Chase. Large financial service company with more than 30 million customers.	Payroll service focused toward the household employee. Nanny, eldercare and household.
No separate page.	Originally part of Control Data Corporation founded in 1957. Newly formed in 1992.	History of companies go back over 200 years. Companies were instrumental in development of New York City.	No separate page, established in 1991 to service the household employer.
1-800 number for sales, local number finder for customer service. Online survey to taylor respouses to prospective client.	15 email addresses aimed at different areas of concern. 1-800 and direct phone numbers. Links to subsidiaries.	13 links directing users to pages with focused guidance to assist users.	One phone number and one fax, an address and fill-in form. Company directory with email quick links.
Information for internal use only.	Not on site.	Privacy information includes practices, measures, choices and tips for consumers.	Not on site.
All essentail services offered.	All essentail services offered.	All essential services offered.	Four choices from preparing checks to full services with tax filing.
Complete federal and state tax solutions provided.	Complete federal and state tax solutions provided.	Complete federal and state tax solutious provided.	Complete federal and state tax solutious provided.
Payment by client check, direct deposit or deposit to debit card account.	Payment by client check, direct deposit or deposit to debit card account.	Payment by client check, direct deposit or deposit to debit card account.	Checks or direct deposit.

Payments supported, facilitated and services arranged through site.	Payments supported, facilitated and services arranged through site.	Payments supported, facilitated and services arranged through site.	Not on site.
Payments supported and facilitated. Service not arranged through the site.	Payments supported and facilitated. Service not arranged through the site.	Payments supported and facilitated. Service not arranged through the site.	Not on site.
Payments supported, facilitated and services arranged through site.	Payments supported, facilitated and services arranged through site.	Payments supported, facilitated and services arranged through site.	Not on site.
Available.	Available.	Available.	Not available
Payments supported, facilitated and services arranged through site.	Payments supported, facilitated and services arranged through site.	Payments supported, facilitated and services arranged through site.	Not available.
Function payment supported but not administered.	Function payment supported but not administered.	Function payment supported but not administered.	Not available.
Not administered.			Not available.
Not administered.			Not available.
	Offices in 3 states of the US, services available throughout the US, Canada and England.	Offices in very state and 50 countries worldwide.	One.
Searchable database. Broadest search possible yielded no results.	Links to job listings by business unit.	Full searchable database for entire site. Sectioned by educational level and segment of business units.	Not on site.
No information on site.	Includes company information, SEC filings, list of directors, historical quote and chart information, latest news, email alert service, calendar and analyst reports..	Includes financial information, SEC filings, presentations, announcements and FAQs.	Not on site.

Quarterly newsletter only. Not updated since year end 2002.	Press releases, media contact and interesting facts.	Press releases.	News letter.
Resource library contains links to useful sites. No original information.	Resource library contains links to useful sites. No original information.	Links on the site lead to various information for consumers seeking advice in several areas of cousumer finance.	Useful information on site specific to household payroll and dealing with household help.
Few IRS forms available.	Tax forms available. Other forms available as part of services or through seminars.	Forms for all areas of personal finance.	Several useful forms for managing household employees.
Fully supported.	Fully supported.	Fully supported.	Supported.
Library of over 150 reports. Customizable reports available.	Library of form and customizable reports available.	Library of form and customizable reports available.	Limited forms supported.
No information on site.	No information on site.	No information on site.	Not supported.
Fully Supported.	Fully Supported.	Fully Supported.	Not supported.
No information on site.	No information on site.	No information on site.	Not supported.
Quarterly newsletter only. Not updated since year end 2002.	Several compliance newsletters available.	Several compliance newsletters available.	Monthly newsletter not updated since October 2002.

	7	8	9	10
	www.intuit.com	www.keystoneitc.com	www.paychex.com	www.paycycle.com
	Effective Home page with three main categories of: Personal, Business and Accounting Professionals. 29 additional links.	Home page describes the function of the company is to allow technology to empower companies to focus on their core competencies.	One page, w/o scrolling. 35 additional links. Web seminars offered. Services for any size business, specialities for 50-2000 employees and restaurants.	Home page has clear statement that service provides payroll for small businesses. Good use of tabs and easy link for client log in. Contains 13 additional links.
	Clean and pleasing page segmented into 10 additional pages based on company facts and information.	Answers questious regarding background of company, management team, corporate philosophy and why Keystone is a good solution for companies. Content is light on detail.	Links to history, Golf spousorship, etc.	Lists 8 reaous to use their services. Describes that company received their last round of funding from investors in 2002. Link includes, Investors and Our Gnarantee pages.
	20 year old company that seeks to simplify management of company finances.	No separate history page. Company has been in business for 15 years.	Company began in 1971, and web site has timline of major accomplishments up to 2004.	Formed in 1999 and now operates in 50 states.
	Links to the specific produce that the user needs information about. The links lead to specific phone numbers.	Includes phone number, fax number, email and office address of president. Apparently a one man shop.	Broken down by info request, investor relatious, paychex online, retirement services and sales.	One office address, 5 email links, link to Yahoo map, phone and fax.
	Privacy statement is verified by TRUSTe. Personal information is not shared and stays with Intuit if the company sells a division of its company.	None.	Paychex does not share information with outside companies.	Privacy and security both on same page. Endorsed by Trust-e. Information kept private.
	Full service payroll. All essential services offered.	Difficult to understand whether the company provides payroll services or just payroll software.	Full service payroll and HR provider.	Three levels of service from 1099 processing to full service for $39.99 per month.
	Complete federal and state tax solutions provided.	Federal, State, and Local Tax Form Processing	Supported.	Complete federal and state tax solutions provided.
	Checks or direct deposit, or a mix of both. Debit cards available.	Check or direct deposit.	Check, direct deposit and debit card.	Check or direct deposit.

Payments supported, facilitated and services arranged through site.	Not on site.	Supported.	Supported.
Complete range of insurance products available.	Not on site.	Supported.	Supported.
Payments supported, facilitated and services arranged through site.	Not on site.	Supported.	Supported.
Available.	Not on site.	Supported.	Not on site.
Payments supported, facilitated and services arranged through site.	Not on site.	Supported.	Supported.
Not on site.	Not on site.	Supported.	Supported.
Not available.	Not on site.	Supported.	Not on site.
Not available.	Not on site.	Supported.	Not on site.
18 locations throughou the country, several in Canada.	One.	Offices in 39 states.	One.
Full searchable database for entire site. Sectioned by educational level and segment of business units.	Email and street address for interested candidates.	Careers, benefits, working at Paychex, interviewing in Rochester, and info on Rochester. Fortune top 100.	List of available positions with complete description of job duties.
Includes company information, SEC filings, list of directors, historical quote and chart information, latest news, email alert service, calendar and analyst reports, and more.	Not on site.	Includes company information, SEC filings, historical quote and chart information, annual reports, divident info, etc. Info on Dividend reinvestment plan.	Discusses who the current venture capital firms are that have $20,000,000 invested in company.

Corporate news releases.	Not on site.	News releases current to end of 2003. Other headlines to end Jan 2004.	15 press releases currtne through July 2003.
Links on the site lead to various information for consumers seeking advice in several areas of consumer finance.	Not on site.	Large library for business owners. Special information for restaurant owners.	Provides payroll calculators, tools and supplies (ordering), business advice (outside links), and government links to forms.
Hundreds of forms and sets of forms for sale. Several governmental forms on site.	Not on site.	Proprietary and links to government forms.	Links to government agencies.
Fully supported.	Not on site.	Supported.	Supported.
Over 40 reports available.	Some reports available.	Supported.	Supported.
Supported.	Not on site.	Supported.	Supported.
Fully supported.	Not on site.	Supported.	Supported.
Not supported.	One site linked to site.	Supported.	Not on site.
None	Not on site.	Publications available in areas such as restaurant payroll issues. HR publications.	Not on site.

	11	12	13	14
	www.payrollonline.com	www.prioritypay.com	www.psapayroll.com	www.qqestpayroll.com
	Home page clearly displays that the company is a payroll provider and HR information. 21 additional links including Microsoft certification and APA membership. Easy to navagate.	Home page states that the company provides online payroll processing anywhere anytime. Clear and easy to understand. Contains 21 additional links.	Clean and easy to find links to all information, company uses proprietary icons with word descriptions. 32 additional links which are not crowded and easy to find.	Home page states that the company provides online payroll processing anywhere anytime. Clear and easy to understand. Contains 15 additional links. Contact us appears 4 times on home page.
	Link from home page to company information is non functional from home page but is functional from the Resources page. Company formed in 1993.	No separate page for company information on site. Address and phone number on home page.	Based in Nashville, TN. And founded in 1993. Management team made up of experienced payroll company employees.	Established in 1992, now has over 25,000 clients.
	Separate page difficult to find. Breif description of the history of the company. Discusses the technology that the company has developed. Company was first to offer online service.	No history available.	Founded in 1993, offers services throughout the US via internet.	On same page as company info. Offers employment based software.
	Includes address, phone number, toll free and direct, email and fax. Driving directions link leads to same page (without driving directions.)	No link on site, However, in the press releases section, a press release contained a link to the president's email address.	Fill in form, phone and fax #s, and email.	Broken into five sections. Email addresses, for sales, technical, demo and general comments. Addresses for Utah HQs. Phone and fax #s provided.
	Privacy statement states that the company will not use the personal information for any non essential purpose.	Not on site.	Not on site.	Not on site.
	Product Descriptions page does not provide much information. Page does link to Getting Started page that has information that is essential for the opening of a payroll account.	All essential services offered.Provides a full range of services. All offered through the internet.	Full service provider.	Full range of services offered. All essential services offered.
	Federal and State form processing.	Federal and state tax filing available.	Supported.	Supported.
	Not on site.	Direct deposit and check available.	Direct deposit, check and debit card.	Direct deposit, check or other account.

Not on site.	Not on site.	Supported.	Supported.
Not on site.	Not on site.	Supported.	Supported.
Not on site.	Supported.	Supported.	Supported.
Not on site.	Not on site.	Not on site.	Supported.
Not on site.	Supported.	Supported.	Supported.
Not on site.	Not on site.	Supported.	Supported.
Not on site.	Not on site.	Not on site.	Supported.
Not on site.	Not on site.	Not on site.	Not on site.
One	California.	One.	Not on site.
Two positions available. Applications taken through email.	Not on site.	Fill in form.	Site lists available positions. Link to apply. Updated as of Jan 03.
Not on site.	Not on site.	Not on site.	Not on site.

Not on site.	One press release available (no date).	News releases from June 2001 to Sept 2002.	Not on site.
Some online training available.	Not on site.	US government links.	Not on site.
Some government forms available.	Link to government sites which include forms. No forms on site.	US government links.	Not on site.
Fully supported.	Fully supported.	Supported.	Supported.
Some reports available.	Not on site.	Supported.	Supported.
Not on site.	Not on site.	Supported.	Supported.
Fully supported.	Supported.	Supported.	Supported.
Not on site.	Not on site.	Not on site.	Not on site.
Not on site.	No.	Not on site.	Not on site.

15	16	17	18
www.seinetwork.com	www.smallbusinesspayrollservice.com	www.st-louis-payroll.com/	www.surepayroll.com/
Simple home page has unique link to unprofessional looking Meditate room, which links to .gif of flowing water. 13 additional internal links and 12 outside links.	McBee Payroll Processing, Home page clearly alerts user to functions. Professional look. Contains 17 additional links.	Clean and simple site, good information and graphics. 5 additional links.	Clean home page with good use of colors and tabs. 35 additional links (some repeats). Includes guided tour, and video.
Long list of information includes, Mission Statement, Privacy, Software/Equipment, Online Help, Delivery Options, Payment Policies, Office Hours and History.	In business since 1908. Company has traditionally offered checks and accounting services and now offers a full range of services in payroll.	Providing payroll services since 1974. Offers services throughout the US. Provides link to client list, which is really a category list of typical clients (ie. Retailers, accounting firms, etc.).	News section contains news releases with company history. Apparently began business in June 2000.
Founded in 1990. Dunn & Bradstreet rating: Good.	Founded in 1908 there is no separate history page.	Founded in 1974 there is no separate history page.	No separate page.
No separate page, but information available on every page. One address and fax and phone.	Contact page lacks phone, fax or address. There is a fill in email form which will be tested.	Contact page has address and phone number and a fill in form for email inquiries.	Six phone, fax and email numbers for six areas of business. Very well divided for ease of use.
No separate statement. Site states that information is secure.	Privacy statement does not cover how the company uses the financial/payroll information which is gathered by the company. The statement only deals with cookies and their use.	Full and detailed privacy statement with options for opting out. Includes link to the Federal Trade Commission.	Full and protective privacy statement.
Does not state whether it offers services outside of Illinois.	Full range of services and products offered.	Full range of services and products offered.	Full range of services and products offered.
Available for Illinois and Federal.	Available for Federal, state and local.	Available for Federal, state and local.	Available for Federal, state and local.
Checks printed by user.	Direct deposit and checks.	Excellent link (Solutions) displaying 3 flowcharts of the various solutions to payroll, from complete outsource to minimal outsource.	Direct deposit and checks.

Not on site.	Offered through Small Biz Workers' Comp - The Hartford.	Not on site.	Not on site.
Not on site.	Not on site. However, payments can be made through the 125 plan.	Not on site.	Not on site.
Not on site.	Not on site.	Supported.	Supported.
Not on site.	Not on site.	Not on site.	Not on site.
Not on site.	Payments supported, facilitated and services arranged through site.	Supported.	Supported.
Not on site.	Not on site.	Not on site.	Not on site.
Not on site.	Not on site.	Not on site.	Not on site.
Not on site.	Not on site.	Not on site.	Not on site.
One	Thirty.	One.	One office location with affiliate locations in 19 states.
Not on site.	Not on site.	Not on site.	Not on site.
Not on site.	Not on site.	Not on site.	Investor page shows 4 major investors. Apparently providing the initial funding for company.

Not on site.	Not on site.	Not on site.	Press releases and articles since 2000. Current through present.
Help desk link launches email server with email addressed to company.	Links to useful government sites.	Not on site.	Large andount of payroll information by state and city. Excellent resource. Over 100 definitions to payroll terminology.
Not available on site. Links provided to government resources.	Links to useful government sites.	Not on site.	Company and government forms available.
Fully supported.	Fully supported.	Fully supported.	Fully supported.
Not fully explained.	Fully supported.	Fully supported.	Available.
Not on site.	Not on site.	Not on site.	Available.
Not on site.	Not on site.	Fully supported.	Fully supported.
Not on site.	Not on site.	Not on site.	Not on site.
None.	None.	None.	Not on site.

	19	20	21	22
	www.talx.com	www.techvalleypayroll.com	www.telepayroll.com	www.timeplus.com
	Home page gives statistics on savings with using paperless pay service. Not clear whether it processes the entire payroll or just the sending of checks and stubs.	Home page is well organized with list of services. Contains 9 additional links.	Simple homepage describing full range of services offered. 27 additional links.	Professional looking and well designed home page demonstrates that company is a full service payroll service company. 24 additional links.
	Service began in 1995 with employment and income verification services. More recently added payroll services.	Founded in 1991, the company provides payroll, staffing, tax and insurance services.	Same as home page. In business since 1963.	Separate page gives information of an historical perspective. Company provides payroll services and backroom operations for other providers.
	Separate page describes how the different segments of the company were added over time.	Founded in 1991. No separate page.	Same as home page. In business since 1963.	Established in 1989 in Atlanta GA. Over 200 offices which are independently owned and operated across the US.
	Contains phone, fax, address and fill in form for information request.	Excellent. 10 employees are listed by title, links to photo and email and phone # of each. General fax, phoune and fill in form email on page.	1-800 fax, phone and email.	Broken into four sections. Email addresses, for sales, technical, careers, and website comments. Addresses for US and Canada HQs. Phone and fax #s provided.
	Full and protective privacy statement with optout provisions.	Full and protective privacy statement.	Difficult to find.	Not on site.
	Paystub review, Direct deposit maintence, W-4 update and Personal Information Manager.	Full range of services and products offered.	Full range of services and products offered. Background checks, and sales of timeclocks.	Full range of services offered.
	Not on site.	Available for Federal, state and local.	Available for Federal, state and local.	Fully supported.
	Check, Direct Deposit and debit card.	Direct deposit and checks.	Direct deposit and check.	Direct deposit and check.

Not on site.	Supported	Not on site.	Supported.
Not on site.	Not on site.	Not on site.	Full line of insurances offered.
Not on site.	Supported	Not on site.	Supported.
Not on site.	Not on site.	Not on site.	Not on site.
Not on site.	Not on site.	Supported.	Supported.
Not on site.	Not on site.	Supported.	Not on site.
Not on site.	Supported	Not on site.	Not on site.
Not on site.	Supported	Not on site.	Not on site.
One	One	No address given. Hidden privace statement has address.	Over 200 throughout the US and Canada.
Not on site.	Not on site.	Not on site.	Opportunities link has video, and information on becoming an employee or opening a franchise.
Includes company information, SEC filings, list of directors, historical quote and chart information, latest news, info request, annual reports, email alerts, etc.	Not on site.	Not on site.	Not on site.

Press releases and articles current through present.	One news article linked to site.	Press release link is not functional.	Four news releases from August 2003.
Not on site.	2 page summary of employer responsibilities. Some government links.	Not on site.	Excellent collection of useful websites and forms.
Not on site.	Some government forms and links.	Not on site.	Contained in Resources section.
Supported for information retreival.	Supported	Supported.	Fully supported.
Supported.	Supported	Not on site.	Fully supported.
Not on site.	Supported	Not on site.	Not on site.
Not on site.	Not on site.	Not on site.	Fully supported.
Not on site.	Supported	Supported.	Not on site.
Not on site.	Not on site.	Not on site.	Not on site.

23	24
www.wellsfargo.com	www.paymaxx.com
Home page for payroll is a link from the small bisiness section of WF. Links to features, benefits, tour, pricing and FAQ. 18 additional links.	Home page is loaded with 60 additional links. These include links to other empluyment related companies.
Includes links to Investor relations, Corporate, Media, History, Employment, Community, Diversity, Privacy. Link to Spanish text.	Includes links to history, paying, managing and retaining employees.
Links to 9 WF History Museeums in the US. Wells Fargo began in 1852.	Company overview also gives history.
Email, FAQs, link to lists of phone #s. Fill in form for specific questions.	Email, phone #s, fax #s, toll free and fill in form for specific questious.
Well documented privacy statement. Information is only shared to better serve customers within Wells Fargo companies.	Well documented privacy statement. Information is only shared to better serve customers.
All essential services supported.	All essential services supported.
Supported.	Supported.
Direct deposit and checks.	Direct deposit , debit cards and checks.

Available	Available.
Available	Available.
Available	Available.
Not on site.	Available.
Supported.	Supported.
Supported.	Supported.
Not on site.	Not on site.
Not on site.	Not on site.
Across the US, 3000 banking stores, 6200 ATM's.	Nashville 2 locations and Rochester, NY.
Employment link has job search and info for undergrads and MBAs.	Not on site.
Includes company information, SEC filings, list of directors, historical quote and chart information, latest news, info request, annual reports, listen to online earnings reports, etc.	Private company.

News releases and link to contact mediia department. Releases from 1998 to Jan 2004.	2-3 press releases through within 30 days.
Includes tools, demos, glossaries and FAQs. Comprehensive listing of information. Email newsletter for small businesses.	Excellent link called payroll-101 which teaches the basics of payroll.
Several proprietary forms available.	Several government forms available.
Supported.	Supported.
Supported.	Supported.
Supported.	Supported.
Not on site.	Supported.
Not on site.	Supported.
Email newsletter for small businesses.	Not on site.

Group Heuristic Analysis summary

5.90	www.adp.com
5.80	www.paycycle.com
5.67	www.paychex.com
5.67	www.timeplus.com
5.50	www.intuit.com
5.47	www.qqestpayroll.com
5.47	www.wellsfargo.com
5.33	www.surepayroll.com/
5.33	www.talx.com
5.27	www.paymaxx.com
5.10	www.ceridian.com
4.93	www.gtmassociates.com/
4.93	www.advantagepayroll.com
4.90	www.smallbusinesspayrollservice.com
4.87	www.adaptasoft.com
4.73	www.psapayroll.com
4.70	www.st-louis-payroll.com/
4.70	www.techvalleypayroll.com
4.67	www.prioritypay.com
4.60	www.chase.com
4.57	www.keystoneitc.com
4.30	www.payrollonline.com
4.27	www.telepayroll.com
2.37	www.seinetwork.com

Group Usability Rankings

Appendix "C"

Email Response Study

On March 3, 2004 an email account was set up using the free Internet mail service provider Hotmail.com. The fictitious name used was Richard Norgard with an email of rnorgard@hotmail.com.

Beginning at approximately 8:00 pm an email message was sent to each site listed in the study with the following question:

"Does your company provide payroll service in New York State?"

The question was designed to elicit a specific answer to determine whether the email would be responded to by a person assigned to read email inquiries or whether it would be treated with an auto-reply message.

The responses are reproduced in their entirety below.

		Sender	Subject	Date	Size
		Danielle Elizabeth D...	Paychex 5ervices	Mar 15	2KB
		adpcontact.form@imgu...	A Special Invitation from ADP	Mar 5	2KB
		Karl Dubendorf	RE:	Mar 4	2KB
		Dana McMahon	Re: Request for more info	Mar 4	3KB
		Gia.Hall@chase.com	Online Referral	Mar 4	1KB
		Jackie Hannibal	TALX services	Mar 4	3KB
		Smallidge, Steven	RE: Time Plus Payroll Services	Mar 4	2KB
		Ryan Sarti	RE:	Mar 4	2KB
		Weiskopf, Anna	Ceridian payroll information	Mar 4	3KB
		Michael Maddalone (G...	GTM - the easy way to pay your household ...	Mar 4	1MB
		Jeannine Dubiac	RE: WWW Form Submission	Mar 4	3KB
		PayCycle Sales	Re: PayCycle	Mar 4	3KB
		Scott Stinson	RE: Payroll Services in NY	Mar 4	3KB
		Smallidge, Steven	RE:	Mar 4	2KB
		Adkins, Nicholas	PSA payroll	Mar 3	2KB
		postmaster@priorityp...	Delivery Status Notification (Failure)	Mar 3	3KB
		BIZMAIL@wellsfargo.c...	Thank You from Wells Fargo	Mar 3	1KB
		info@mcbeepayroll.co...	Thank you for your inquiry!	Mar 3	1KB
		info@fmspayroll.com	Contact Us Form from FMSPayroll.com	Mar 3	1KB
		info@gtmassociates.c...	GTM Household Employment Experts: Payroll...	Mar 3	2KB

	Email Sent	Company	Response sent from Company	Response Time: days:hrs:mins	Type of Response
1	3/3/2004 8:00 PM	GTM Associates	3/3/2004 8:02 PM	00:00:02	Auto reply
2	3/3/2004 8:00 PM	St Louis Payroll	3/3/2004 8:15 PM	00:00:15	Auto reply
3	3/3/2004 8:00 PM	McBee Payroll	3/3/2004 8:20 PM	00:00:20	Auto reply
4	3/3/2004 8:00 PM	Wells Fargo	3/3/2004 8:28 PM	00:00:28	Auto reply
5	3/3/2004 8:00 PM	Priority pay	3/3/2004 8:42 PM	00:00:42	Error Message
6	3/3/2004 8:00 PM	PSA Payroll	3/3/2004 9:59 PM	00:01:59	Directly responsive to question.
7	3/3/2004 8:00 PM	Timeplus	3/4/2004 8:35 AM	00:12:35	Directly responsive to question.
8	3/3/2004 8:00 PM	Paymaxx	3/4/2004 9:41 AM	00:13:41	Auto reply
9	3/3/2004 8:00 PM	Paycycle	3/4/2004 10:11 AM	00:14:11	Directly responsive to question.
10	3/3/2004 8:00 PM	Tech Valley	3/4/2004 10:13 AM	00:14:13	Directly responsive to question.
11	3/3/2004 8:00 PM	Ceridian	3/4/2004 10:44 AM	00:14:44	Auto reply
12	3/3/2004 8:00 PM	SurePayroll	3/4/2004 11:24 AM	00:15:24	Directly responsive to question.
13	3/3/2004 8:00 PM	Talx	3/4/2004 12:37 PM	00:16:37	Directly responsive to question.
14	3/3/2004 8:00 PM	Chase	3/4/2004 2:27 PM	00:18:27	Auto reply
15	3/3/2004 8:00 PM	Keystoneitc	3/4/2004 5:45 PM	00:21:45	Directly responsive to question.
16	3/3/2004 8:00 PM	ADP	3/5/2004 11:30 AM	01:15:30	Auto reply
17	3/3/2004 8:00 PM	Paychex	3/15/2004 11:36 AM	11:15:36	Directly responsive to question.
18	3/3/2004 8:00 PM	adaptasoft	No response	n/a	none
19	3/3/2004 8:00 PM	advantagepayroll	No response	n/a	none
20	3/3/2004 8:00 PM	intuit	No response	n/a	none
21	3/3/2004 8:00 PM	payrollonline	No response	n/a	none
22	3/3/2004 8:00 PM	qqestpayroll	No response	n/a	none
23	3/3/2004 8:00 PM	seinetwork	No response	n/a	none
24	3/3/2004 8:00 PM	telepayroll	No response	n/a	none

Dear Rich,

Thank you for sending us your request. If you have asked us to contact you, we will be contacting you shortly with the information you requested.

GTM is known for our impeccable reputation and complete competence in the household employment field. Managing millions of dollars in household payroll funds, GTM consistently provides accurate, timely and hassle-free reports to each one of our clients in order to simplify their "nanny tax" obligation. In fact, our clients rate our services with a 99% client satisfaction rating time and time again.

In order to provide you with a better understanding of your tax obligations for
employing your household employee please see the GTM Tax Resource Center at
http://www.gtm.com/resourcecenter. I am also including a link to our fast, easy
and secure online registration page, located at http://www.gtm.com/signup

Thank you for considering GTM to simplify your payroll and tax filing needs. We
look forward to assisting you.

Sincerely,

Guy Maddalone
President
GTM Household Employment Experts
Phone: 1-888-4EASYPAY (1-888-432-7972)
http://www.gtm.com

From :	info@fmspayroll.com <info@fmspayroll.com>
Sent :	Wednesday, March 3, 2004 8:15 PM
To :	"rnorgard@hotmail.com" <rnorgard@hotmail.com>
Subject :	Contact Us Form from FMSPayroll.com

Dear Rich Norgard,

Thank you. We have received your message from our Contact Us Form.

Someone will be in contact with you.

Your message: "Does your company provide payroll service in New York State?"

Payroll Solutions:
http://www.fmspayroll.com/payroll.solutions.htm

Services:
http://www.fmspayroll.com/payroll.services.htm

Get a Custom Price Quote:
http://www.fmspayroll.com/payroll.quote.htm

FMSPayroll.com
1650 Des Peres Road, Suite 125, St. Louis, MO 63131
Toll Free 888.440.0046
M - F 8:00 AM to 5:00 PM Central Standard Time

From :	<info@mcbeepayroll.com>
Sent :	Wednesday, March 3, 2004 8:20 PM
To :	rnorgard@hotmail.com
Subject :	Thank you for your inquiry!

Thanks for your interest in McBee Payroll! Your e-mail will be forwarded to the
appropriate representative working in your area. You should hear from us shortly!
Thank you!
McBee Payroll

From : <BIZMAIL@wellsfargo.com>
Sent : Wednesday, March 3, 2004 8:28 PM
To : rnorgard@hotmail.com
Subject : Thank You from Wells Fargo

Dear Rich,

Thank you for your interest in Wells Fargo Business Payroll Services. One of our payroll specialists will be in contact with you soon to provide additional information on payroll solutions for your business.

You may also contact our payroll group directly from 7:00AM - 6:00PM PST at 800-421-4714 or revisit the payroll site:
http://www.wellsfargo.com/biz/products/payroll/payroll.jhtml

Sincerely,

Wells Fargo Business Internet Services

From : <postmaster@prioritypay.com>
Sent : Wednesday, March 3, 2004 6:42 PM
To : rnorgard@hotmail.com
Subject : Delivery Status Notification (Failure)

This is an automatically generated Delivery Status Notification.

Delivery to the following recipients failed.

info@prioritypay.com

From :
Richard Norgard <rnorgard@hotmail.com>

To :
info@prioritypay.com

Sent :
Wednesday, March 3, 2004 8:11 PM

Does your company provide payroll service in New York State?

Get a FREE online computer virus scan from McAfee when you click here.
http://clinic.mcafee.com/clinic/ibuy/campaign.asp?cid=3963

Yes, we provide payroll processing services for clients in all 50 states. May we be at your service? I would be happy to provide you with a price quote. How many employees do you pay? What is your pay frequency? And, what is your current solution for payroll processing?

Thank you for your interest in Pay Systems of America. I look forward to hearing back from you.

Nicholas Adkins
Pay Systems of America
Toll Free: 877.877.8144 x13167
www.psapay.com

-----Original Message-----
From: Richard Norgard
To: info@psapayroll.com
Sent: 3/3/2004 7:12 PM

Does your company provide payroll service in New York State?

Yes we do

-----Original Message-----
From: Richard Norgard [mailto:rnorgard@hotmail.com]
Sent: Wednesday, March 03, 2004 8:27 PM
To: Sales
Subject:

Does your company provide payroll service in New York State?

Get business advice and resources to improve your work life, from bCentral.
http://special.msn.com/bcentral/loudclear.armx

Richard,

Thank you for your interest in PayMaxx. Founded in 1991, PayMaxx offers state-of-the-art products and services to meet a variety of employer needs including Windows and Internet-based payroll processing, nationwide tax filing (local, state & federal), 401(k) Administration, Abra HR Management Systems, pay-as-you-go workers' compensation, employee self-service, manager self-service, employee communications, and Internet-accessible W-2s. PayMaxx processes payroll for employers in all 50 states, for companies with 1-10,000 employees.

Pricing will be dependent upon your location, number of employees, and payroll frequency. Please contact me at your earliest convenience, or fill out our information sheet located at http://www.paymaxx.com/contact.cfm and I will have a representative provide you with a detailed price quote and answer any further questions you might have.

Sincerely,

Scott Stinson
Marketing Specialist
PayMaxx, Inc.
318 Seaboard Lane, Building 100, Suite 110
Franklin, TN 37067
tel. 877-729-6299
sstinson@paymaxx.net
http://www.paymaxx.com

-----Original Message-----
From: Richard Norgard [mailto:rnorgard@hotmail.com]
Sent: Wednesday, March 03, 2004 7:30 PM
To: Info@paymaxx.com
Subject:

Does your company provide payroll service in New York State?

DISCLAIMER: This Electronic Message contains information from PayMaxx which may be privileged. The information is intended to be for the use of the addressee only. If you are not the addressee, or the employee or agent responsible to deliver it to the intended recipient, note that any disclosure, copy distribution or use of the contents of this message is prohibited. If you have received this Electronic Message in error, please promptly notify the sender by return e-mail. For more information regarding our firm, please visit www.paymaxx.com.

Hi Richard,

Thank you for your interest in PayCycle. PayCycle is an online payroll solution, and offers service in all 50 states and Washington D.C.

There are two service levels to choose from in New York: Basic and Plus.

The PayCycle Basic service accurately calculates federal, state, and local taxes for creating paychecks and paystubs, filing returns, and making deposits. You will receive email reminders for paydays and federal tax deadlines, and will be able to make all federal filings and payments electronically. After the 30 day free trial, the cost for PayCycle Basic is $19.99 per month for up to five employees, and only $0.99 for each additional employee over five.

The PayCycle Plus service includes all the features of Basic. In addition, it provides support for state-level taxes and filings. In New York This means that PayCycle will provide signature-ready state withholding and unemployment returns, as well as allow you to make state withholding payments electronically. After the 30 day free trial, the cost for PayCycle Plus is $39.99 per month for up to five employees, and only $0.99 for each additional employee over five.

With either service level, there are no setup costs, or additional fees for any of the features that PayCycle offers. Even W-2's and direct deposit are offered at no extra charge.

I hope this information is helpful, Richard. If you have any questions, please do not hesitate to email us or call toll-free 1-866-729-2925.

Sincerely,
Mike Humaydan
Customer Advocate
PayCycle Inc.
866-729-2925
www.paycycle.com

"Richard Norgard" <rnorgard@hotmail.com> wrote:

> Does your company provide payroll service in New York State?
>
> _____

Dear Mr. Norgard,

Tech Valley Payroll processes payrolls for customers in all 50 states. Our corporate offices are located in Clifton Park, New York (15 miles North of Albany).   Would you like me to contact so we can discuss your payroll needs?

Looking forward to speaking with you soon.

Jeannine Dubiac, Sales Manager
Tech Valley Payroll powered by GTM
(518) 373-4111 x 226
www.techvalleypayroll.com
e-mail jdubiac@techvalleypayroll.com

PS. Want to receive $50 from us? Refer a business to Tech Valley Payroll and get $50 for each new business that signs up. More details at www.techvalleypayroll.com/referabusiness.htm

> This communication may contain privileged and/or confidential information. It is intended solely for the use of the addressee. If you are not the intended recipient, you are strictly prohibited from disclosing, copying, distributing or using any of this information. If you received this communication in error, please contact the sender immediately and destroy the material in its entirety, whether electronic or hard copy.   This communication may contain nonpublic personal information about consumers subject to the restrictions of the Gramm-Leach-Bliley Act. You may not directly or indirectly reuse or redisclose such information for any purpose other than to provide the services for which you are receiving the information.
>
>
>

-----Original Message-----
From: rnorgard@hotmail.com [mailto:rnorgard@hotmail.com]
Sent: Wednesday, March 03, 2004 8:25 PM
To: sales@techvalleypayroll.com
Subject: WWW Form Submission

Below is the result of your feedback form. It was submitted by (rnorgard@hotmail.com) on Wednesday, March 3, 2004 at 19:24:56

FirstName: rich

LastName: norgard

CompanyName: self

Address1: 2000 South St

City: Rochester

State: ny

Zip: 14614

Phone_daytime: 555 555 5555

# of employees: 9

Contact: yes

More_information: yes

Subject: Sign-Up

Comments: Does your company provide payroll service in New York State?

📎 Attachment : **GTMRegistrationForms.pdf** (711 KB), **GTMwelcomepack_Mike.pdf** (427 KB)

Dear Rich,

Yes GTM is a national company and we are based out of Clifton Park, NY. Please feel free to contact me directly and we can go over any questions you may have.

At GTM, we understand that employing a household employee is a big decision and a lot of work. GTM can help. GTM will simplify the process of payroll and taxes for you, eliminating your responsibility and ensuring you abide by legal regulations.

Signing up is easy and fast: just go to GTM's secure site: <https://secure.gtmassociates.com/clientsignup.asp> and sign up in less than five minutes.
Or you can fill out the attached set-up forms* and fax them to me at 518-348-1960.

By using GTM, you can be safe in the knowledge that you will be

- paying your employee on time
- complving with tax reaulations and therefore eliminatina possible

GTM Household Employment Experts

7 Halfmoon Executive Park Dr.
Clifton Park, NY 12065
t. 800-929-9213 x. 225
f. 518.348.1960
www.GTM.com

Frequently asked questions: www.gtmassociates.com/servicefaqs.html

Thank you for your interest in Ceridian Services.
If I may get additional information from you, I can forward your information to the appropriate source.
May I get the name of your company
Address, city, state and zip
A phone number so I can have someone contact you and the approximate number of employees you have.
I look forward to hearing from you soon!
Thank you

Anna Marie Weiskopf

Ceridian Employer Services

Hi Richard-
Thanks for your email.
We do provide payroll service for companies in New York State.
Just curious, what has you interested in our payroll service?
All the best-
Ryan Sarti
The Info@ Answer Guy

-----Original Message-----
From: Richard Norgard [mailto:rnorgard@hotmail.com]
Sent: Wednesday, March 03, 2004 7:22 PM
To: info@surepayroll.com
Subject:

Does your company provide payroll service in New York State?

Richard,

You can find out more about us by visiting our web site at www.timeplus.com or calling me directly at 678-597-3864.

My name is Steve Smallidge and I am the sales manager here at Time Plus Payroll Services.

Best Regards,

Steven Smallidge

-----Original Message-----
From: Richard Norgard [mailto:rnorgard@hotmail.com]
Sent: Wednesday, March 03, 2004 8:27 PM
To: Sales
Subject:

Does your company provide payroll service in New York State?

Thanks for your interest in our services. TALX is not a complete payroll outsourcer. We use a company's payroll data to outsource specific HR/Payroll functions, such as Time and Attendance Collection, Employment and Income Verifications, W2 services, Unemployment Claims Management, and electronic access to payroll information.

Our services provide a strong return on investment for organizations with more than 1,000 employees. If you are interested in learning more, please contact Jackie Hannibal, TALX Corporation, at (314) 214-7139 or jhannibal@talx.com.

You may also contact your payroll service provider to see if they already have an agreement with TALX to provide these services. If they currently do not, please suggest they establish a working relationship with TALX.

Thank you for your recent inquiry around our Payroll services. Unfortunately we are unable to contact you with the number you provided 555-555-5555. If you can please contact us with the correct number or call us at our toll free number 877-422-1695, we will be more than happy to assist you.

Thank you for your interest. We are looking forward to servicing you.

Sincerely,
Gia Hall, AT
JPMorgan Chase

From :   Dana McMahon <dana.mcmahon@mcbeepayroll.com>
Reply-To :   Dana McMahon <dana.mcmahon@mcbeepayroll.com>
Sent :   Thursday, March 4, 2004 3:57 PM
To :   rnorgard@hotmail.com
Subject :   Re: Request for more info

Yes we do! Let me know if you'd like more information.
Thank you!
Dana McMahon
McBee Payroll
----- Original Message -----
From: <rnorgard@hotmail.com>
To: <info@mcbeepayroll.com>
Sent: Wednesday, March 03, 2004 8:18 PM
Subject: Request for more info

>
> *** Request for more info ***
>
> What is your primary interest in McBee Payroll:
> Prospective Client
> Company Name.................Self
> Contact Name.................Rich
> Address.....................@1 East St
> Address 2...................
> City........................Rochester
> State.......................NY
> Zip.........................14610
> Phone.......................555 555 5555
> Fax.........................
> Email.......................rnorgard@hotmail.com
> Type of business............
> Number of employees.........
> Pay Frequency...............Monthly
> Current Payroll Method.......
> Comments:
> Does your company provide payroll service in New York State?
>
>

Richard,

We offer payroll services across the country. Our two lines are as follows:

1. "Payroll Insourcing" which allows companies to keep the payroll on their financial system without having to staff for the payroll work.

2. Payroll Backup which handles your payroll if your payroll person(s) can't run your payroll, e.g. vacation, sickness, or termination.

Can you tell me a little more about what you're looking for?

Karl Dubendorf
President
Keystone Information Technology
Office: 610-695-9303
Fax: 610-695-8221
Cell: 610-420-2778

-----Original Message-----
From: Richard Norgard [mailto:rnorgard@hotmail.com]
Sent: Wednesday, March 03, 2004 8:07 PM
To: info@keystoneitc.com
Subject:

Does your company provide payroll service in New York State?

Thank you for visiting the ADP Web site and submitting your request. Your inquiry has been forwarded to the appropriate department for follow up.

As part of a special FREE offer, you are invited to become a **Preferred User** for **ADP's Resource Center**, the information portal for payroll, tax and HR managers.

ADP's Resource Center provides access to tools and information you'll use every day, such as calculators, compliance information, news and alerts, reference guides, forms and much more. Becoming a **Preferred User** entitles you access to restricted content as well as special updates and information from ADP. All you need to do is register!

To preview **ADP's Resource Center**, please go to:
http://www.adp.com/corporate/es/resource_center.html

To register to become a **Preferred User**, please go to:
http://www.adp.com/corporate/es/register.asp

Richard,

I received a message that you'd contacted the office in regard to a
quote & I'd love a chance to meet with you to determine if Paychex could

benefit your business in any way. In addition to payroll & payroll tax
services, we also provide workers comp & health insurance for small
businesses locally. Please contact me at your convenience.

Thank You,
Danielle Duex
218-5022

Appendix "D"

Management Questionnaire Interview Study

The following questionnaire was posed to three different payroll processing companies.

The ten questions were designed to determine the amount of effort put into refinement of their site and monitoring of competitor sites.

The questions and responses are reproduced in their entirety below.

QUESTIONNAIRE

Please answer the questions to the best of your ability. I understand that your answers are not necessarily company policy and they will not be presented in any format that would suggest so.

1. Although your web presence is important <u>both</u> for maintaining current customers/customer service and for the establishment of new customers, which do you believe more accurately describes the primary focus of your website.
   a. Maintaining current customers/customer service.
   b. Establishment of new customers.

2. Do you monitor the websites of your competitors?
   a. Yes.
   b. No.
      i. If yes, which 2 competitors do you view most often?
         1. _____
         2. _____
      ii. How often?
         1. Daily
         2. Weekly
         3. Monthly
         4. Other _____.

3. Which competitors' websites do you believe effectively execute what you believe to be the important aspects of a website for your industry? (*Put another way, which do a good job.*)
   a. _____
   b. _____
   c. _____

4. What percentage of your customers, do you believe, transacts their entire payroll through the internet, as opposed to calling in or faxing employee hours to your company?
   a. Zero to 25%
   b. 26 to 50 %
   c. 51 to 75 %
   d. 76 to 100%

5. How many employees does your company have whose sole function is maintenance of the company website?
   a. 0.
   b. 1.
   c. 2-5.
   d. 6-20.
   e. More than 20.

6. Do you actively seek input regarding your website from your customers?
   a. Yes.
   b. No.
      iii. If so, how?
         1. Periodic email to random customers.
         2. Mail solicitation.
         3. Telephone questioning.
         4. Other _____.

7. Have you taken any steps through your website to reduce the number of help desk telephone calls? If so, has it been effective and how do you quantify whether there has been improvement?

   _____

   _____.

8. How often is your website updated?
   a. Daily.
   b. Weekly.
   c. Monthly.
   d. Annually.
   e. Other _____.

9. When changes are made to the website, how much customer resistance (or discontent) is communicated to the company?
   a. Not a significant amount.
   b. A small amount – but not enough to influence the timing of changes.
   c. Some - enough to influence the timing of our changes.
   d. A significant amount – enough to influence the timing and whether we even make the changes.
   e. A large amount.

10. Do you use focus group testing prior to implementing changes to the website?
    a. Yes.
    b. No.
       iv. If yes, are your focus groups made up of:
          1. company employees.
          2. non-employees.
          3. professional testing consultants.
          4. Other _____.

Thank you for your participation.