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Litigation Success Factors of Technology Firms

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by

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Abstract:

In this day and age litigation cases are abundant, especially against technology companies. Some technology firms have been more successful in their businesses and have become rich and powerful and some have not. It is interesting to explore if financial success equates to success in the courtroom. Through collecting and analyzing data from cases in the years 2000, 2001, and 2002 we recognized a trend that supports this inquiry. This is concluded via the use of several statistical tests.

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Chapter 1 - Introduction

The technology industry continues to be extremely important in our society, which relies more and more on the products and services that they provide. Not only do schools and businesses depend heavily on technology but our economy is also fueled by the technology industry, which is quickly growing all over the world. Technology firms have been involved in a staggering amount of lawsuits over the past few years.[1] The rate of litigation for these firms continues to increase every year, and the numbers surpass most other industries.[2]

A question we as a group are asking ourselves is very important. It is: What are the factors contributing to the successes and failures of litigation cases involving technology firms, and does this have any correlation to the variables involved in a company's financial strength? We plan on answering this question by analyzing a number of cases, and thereby finding out if a company's stature might give it an unfair advantage in the court of law. These companies could potentially make use of this advantage with little concern of the consequences it could have on smaller companies.

Through our preliminary analysis of litigation involving technology firms we found that there may be some wealthy companies that are able to win their cases. We feel this problem has a lot to do with the increasing number of litigation cases against

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[1] http://securities.stanford.edu/
[2] http://securities.stanford.edu/

technology firms. Another reason this appeals us as a group is because it is interesting to see just how much the financial strength of a company can influence a court case.

We plan to analyze the litigation involving cases brought to court against technology firms during the years of 2000, 2001, and 2002. Some examples of such cases include Hewlett-Packard, which violated the Securities Exchanges Act of 1934. Apple and Sun Microsystems are two companies that brought suits to other companies. The Apple suit alleges that another company infringes on certain Apple patents, and Sun alleged that another company's anticompetitive behavior was unfair. A complaint was also filed against Intel involving a violation of the Securities and Exchange Act of 1934, which resulted in an all-time high for their stock.

As we continue more research is done on these companies as well as all that are included in the years of 2000-2002. We will analyze these cases, and we will compare them with each other. We will separate these cases according to how successful the litigants were, whether they case was dropped, settled or was won in court. This will be compared with the variables concerning the financial strength of the company, which will be determined by the Thompson Analytics Database. With this we will be able to draw some conclusion refuting or supporting our initial statement.

In our research we have learned a lot of things. Most importantly we found that in general there is a tendency for companies who have won their lawsuits in court to also have what we consider a strong financial situation. Companies that tend to lose their lawsuits, however, tend to have a relatively weaker financial situation. That is companies with more money to spend and more invested in their companies tend to do better when faced with litigation. We believe that the data and analysis in this paper support this statement.

This may be interesting to many companies because it may indicate a problem with the way our court system deals with litigation between companies. It may be that companies are allowed to win lawsuits not because they have a have been treated unfairly, but because they are more powerful and can allocate more resources to the trial proceedings. If this is true, this could be very damaging to smaller companies who have little to defend themselves with against much larger companies. Our economy relies greatly on smaller companies, who may be destroyed if a company is able buy their way to a successful lawsuit. This is why this topic should be further analyzed to see if this might actually be happening.

Chapter 2 - Methodologies of Data Collection

Upon selecting the timeframe for our analysis we decided to focus our findings on a specific group of cases. We used several variables that we felt represented financial strength, and tried to find a correlation between these and the outcomes of the cases. We then analyzed our findings and brought it together to try and answer our initial question.

Our project began by separating our research by year. We chose to focus on the litigation cases from 2000, 2001, and 2002, because they are the years with most recent, significant, and complete data. We also decided to focus on a particular industry. We chose technology companies based on the large number of technology companies that have been involved with litigation in the past few years. The number of cases seems to keep increasing and there is a lot of interest from the public about these cases. The cases were found on the Stanford Law School's Securities Class Action Clearinghouse website. On this website we were able to search for cases by year. After looking through each

case we were able to separate out and recorded the cases in which the companies implicated are involved in technology.

The next step was to narrow down the cases some more. Only the cases in which there was a clear outcome were kept. The outcomes were defined as either a win or a loss for each company in the case. Any case where there was a settlement was declared a win for the plaintiff and a loss for the defendant. We decided that since the plaintiff gained something from the case that it was successful. All cases that were dismissed or were similarly decided were listed as a loss for the plaintiff and a win for the defendant. Also, all cases that were decided in court in favor of the plaintiff even if only partial judgment was granted were declared wins for them and losses for the defendant. This information was found on Stanford Law School's Securities Action Clearinghouse and LEXIS-NEXIS which is a database of news articles. The LEXIS-NEXIS database was available to us on the WPI website through the library. The data from the cases was then described and recorded in a Microsoft Excel spreadsheet. Each case listed the companies involved, the reason for the suit, and the outcome.

Using the spreadsheet we were able to sort out the cases by year and then based on the outcome of the case, two groups were assembled. Then the ticker symbols were added for any company that has a symbol and therefore has gone public. Those cases in which one company did not have a ticker symbol were then thrown out, because the companies would not be useful to our research without financial data. The groups consisted of those companies who had lost their case and those who had won. Once the groups had been established, we needed to analyze our findings by comparing those companies that had lost and those that had won based on some variables. The variables that we thought would be indicative of a financially strong company that were used

consist of "Debts", "Sales", "Market Capitalization", "Assets", "Earnings", "Retained Earnings", "Price Trend Year to Date", "Industry Name", and "Location". The information for these variables was found using the program Thompson Analytics by plugging in the necessary information into the formula, including the year of the case, the type of information needed, as well as the company ticker symbol. These results would then be taken and analyzed to discover any trends that may arise to associate winning or losing with a characteristic. We wanted to be able to compare the strength of the companies that had won their cases with the strength of those who did not. We hoped that there would be a difference in the power held by these two groups. The information for these variables was found using the program Thompson Analytics by plugging in the necessary information as well as the company ticker symbol. Thompson Analytics gets the majority of its data from Standard & Poor's COMPUSTAT Database.

A couple tools were used to be able to make a comparison between the different datasets. Beginning with the wins for all three years, each column from "Sales" to "Price Trend Year to Date" was taken and the mean of each was calculated. The same was then done with the losses for each year. With this information some conclusions were drawn based on trends comparing the means of the results in the wins columns to the losses columns. At this time it was then necessary to take make more comparisons using a T-test statistic. Prior to conducting the T-test, an F-test was needed to help determine which type of T-test could be performed on the respective columns. The F-test took the array of wins in a column with the remaining array of losses in that column. With this information a T-test was conducted. The T-test used the same arrays used in the calculation of the F-test, as well as the decision of using a one-tailed or two-tailed test,

and the type of test to perform. We used a type two test with one-tail and the results were taken and analyzed to discover any relevant trends to support our theory.

Once all data was collected, sorted, and analyzed it was necessary for our Excel spreadsheets to go through some aesthetic changes. Fonts would be changed and made uniform throughout the spreadsheet. Information in each cell was centered and made presentable. It was also necessary to be able to identify the units that each variable was displayed as and make sure that each company was using those same units.

Chapter 3 - Definition of Variables

Sales is the amount charged by the company of all goods or products, sold or distributed as well as for operations performed, rentals, and dues or fees. Several things do not get deducted from sales. These include: foreign exchange discounts, freight allowance to customers, trade or cash discounts, bad debts, or repossession of items sold on installments. Other items can be deducted from sales and these include: royalty income from patents or copyrights which are not product sales, allowances for damaged and spoiled goods, and rental receipts.[3]

Total Debts represents all interest bearing and capitalized lease obligations. It is the sum of long and short term debt.[4]

Net Income is the difference between a business' total revenue and its total expenses. Otherwise known as Net Profit, it can be found at the bottom of a company's Profit and Loss statement.[5]

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[3] http://www.ventureline.com
[4] Thomson Analytics Database
[5] http://www.ventureline.com

Total Assets is the total of all assets including both current and fixed. Current assets are assets of a company that are expected to be converted into cash, or sold, or consumed during the normal business year. Such assets include cash, accounts receivable and money due usually within one year, short-term investments, US government bonds, inventories, and prepaid expenses. Fixed assets are of more of a permanent nature and are required for the normal conduct of the business. Normally these assets will not be converted into cash during the fiscal period. Some examples of fixed assets are, furniture, fixtures, land, and buildings are all fixed assets. However, accounts receivable and inventory are not.[6]

Price Trend Year to Date is a financial measure calculated by taking the current stock price and dividing it by the most recent year's end price minus one. This number is then multiplied by one hundred resulting in the price trend year to date.[7]

Market Capitalization is the total dollar value of all outstanding shares. Commonly called "market cap" and is calculated by multiplying the number of shares times the current market price.[8]

Retained Earnings are profits from the business that have yet to be paid out to the owners as of the balance sheet date. They are considered "retained" because they are still used in the company. It can be found in the equity section of the balance sheet.[9]

Industry refers to the classification of the type of company that it is and what type of business it is involved in.

Location refers to the area in the world in which the company's headquarters operates.

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[6] http://www.ventureline.com
[7] Thomson Analytics Database
[8] http://www.ventureline.com
[9] http://www.ventureline.com

Chapter 4 - Analysis of Collected Data

A.) Analysis by Variable

The data that had now been collected was ready to be analyzed. It needs to be analyzed in relation to our original claim. Each variable that was chosen was analyzed to reveal trends that supported our statement.

The companies that were successful in their lawsuits were looked at to find the sales for the year in question. These companies were grouped together and the average of their sales was important to the analysis, so the mean of their sales was taken. Once this was done they could be compared as a group. The average sales for the companies involved in winning lawsuits between the year 2000 and the year 2002 was $8,557.197 million. This average is going to be compared to the average sales of companies that were involved in losing lawsuits in the same period of time. The sales for losing companies during that time period were added up and the average total sales came out to $6,173.705 million. These numbers seem to be quite different on first glance, however to statistically prove that there is a significant difference between the mean of these two groups, the standards are much more strict. There are tests that must be performed to find out.

First, there seemed to be plenty of data points, which would allow us to do a parametric test. Next we did an F-test to be sure that the groups had equal variance. The F-test came out to about 0.7, which is well within the accepted range. This means that the groups had equal variance and we could move on. We then performed a T-test to see if the differences that we see between the average sales of the two groups were statistically significant. The T-test gave us a value of 0.253. Even though this number is

close to 0.1 it is not small enough that it can be considered statistically significant. So technically there is clearly not a significant difference between the means of the two groups. It is, however, very possible that the reason that these numbers did not come out significant could be due to the fact that there are not enough companies to compare. The T-test is very sensitive to sample size, and if the trend we see of sales being higher for companies who win their lawsuits continued, then there might be a significant difference. This could be looked at again with more data in following years, but for now the means for the sales variables cannot be looked at as groups with significantly different means.

The same process was then carried out for the market capitalization variable for each company. The group of companies who were successful in their lawsuits had a mean market capitalization of $24,210.589 million. This number is considerably higher than the mean market capitalization for the companies who were unsuccessful in their lawsuits. The mean market capitalization of these companies was only $7,885.612 million. There is a much greater difference between these two means then was seen for the sales variable. It was hoped that this difference would be clear after the tests were performed.

A parametric test was again appropriate. The F-test was done and it gave a very low number, which suggested that the two groups had equal variance. The T-test was then preformed on the groups to see if the means of the groups were indeed different. The T-test gave us a value of 0.07. This value is lower than the required 0.1 that is needed to declare two groups significantly different. This means that there is a clear difference between the mean market capitalization of the group of companies that were successful in their lawsuits and the companies that were not.

When comparing the average debt of all of the companies who were considered successful in their lawsuits with those who were unsuccessful it is clear that there is not a large difference between them. The winning companies had an average debt of $1,352.313 million. This number is very close to the average amount of money the losing companies are in debt, which is $1,336.86 million. There is only a difference of about $15.5 million, which is unlikely to show up as a significant difference in our T-test. However a T-test was still performed anyways. The F-test was again within the appropriate range to say that the groups had equal variance. The T-test gave a value of 0.493, which is certainly not considered significant. So the T-test proved the suspicion that the debts of the group of winning companies were not very different from the debts of the group of losing companies.

Another good variable to compare the financial strength of a company is their assets. The assets of all the companies who won their lawsuits were taken in dollar amounts and averaged. The average value of the assets for winning companies is $14,746.217 million. Similarly this was done for the companies who lost their lawsuits, and the average value of the assets for these companies is $6,283.86 million. The average value of the assets for winning companies is more than twice the value of the assets for the losing companies. However these numbers cannot be considered statistically significant until a T-test is done, which can prove one way or the other.

The F-test was done first which gave a very low value indicating equal variance once again. So then the appropriate numbers were plugged into the T-test. The T-test then gave us a value of 0.11. The generally accepted procedure is to only accept values equal to or under 0.1 as statistically significant. So according to these rules, there is not a significant difference between the average value of the assets for winning companies and

the average value of assets for losing companies. However, despite the fact that it is not significant it still shows us that there is a distinct possibility that these groups are actually different and there is a chance that this could be proven with a slightly larger data set. Also this T-test value is very close to an accepted value and some might consider it to be significant as it is.

The net incomes for each company were compiled as another possible variable to distinguish between the winning and losing companies. The average incomes were calculated for both the companies who were successful in their litigation and those companies who were unsuccessful. The average net income for winning companies was --$0.488 million. The companies who were unsuccessful in their lawsuits had an average of -$90.67 million. This is not an exceptionally large difference so this was not expected to be a variable to distinguish between the two groups significantly.

The F-test gave a low value, which proves that they have equal variance and the T-test is appropriate. The T-test gave a value of 0.412, which is not lower than the lowest acceptable value of 0.1, so the variable is not statistically significant. This means that the net income should not be considered when dealing with statistical analysis of the two groups of companies.

Retained earnings were then looked at as a separate variable from earnings. The retained earnings values were averaged for the companies who were successful in their lawsuits. The average value came out to $3,491.320 million. This is higher then the value that was found for the average retained earnings for the companies who were not successful in their lawsuits. This average value was only $2001.791 million. These numbers seem to be quite different. They can be taken for what they are without

analysis, however to find out if this difference is actually statistically significant a T-test needs to be performed.

The numbers were plugged into the F-test to test for equal variance. This gave a low enough value to be sure that there is indeed equal variance, and a T-test is appropriate in this case. The numbers were then plugged into the equation for a T-test and the value that it gave was 0.204. This number is not low enough to accept as significant. So there is not a significant difference between the average retained earnings of the group of winning companies and the average retained earnings of the losing companies. So this variable cannot be used confidently in a statistical analysis for separating the two groups of companies.

The last variable that was used to compare the financial strength of the companies was price trend. So a price trend was found for each individual company and the average was taken for both groups. The average price trend for the group of companies that were successful in their lawsuits was $131.567 million. The other group of companies was made up of all the companies who were not successful in their lawsuits. The average price trend for these companies was -$0.1406 million. These numbers seem to be clearly different once again. The winning companies have a fairly large, positive average price trend, while the losing companies have a negative value for their average price trend. So once again these differences can be observed for all that they are worth, but they cannot be considered statistically significant until a T-test has been performed and an acceptable value is given.

When the numbers were plugged into the F-test it once again gave a low enough value that the two groups were shown to have equal variance. So a T-test was then performed with the same data being plugged into the equation. The T-test gave a value of

0.211 for these numbers. This shows that the data is not significant in a statistical sense. This means that there is not a clear difference between the average price trend of the companies who were successful with their lawsuits and the average price trend of the companies who were not successful.

Although most of these variables do not show significant difference between winning and losing companies, it is clear that there is a trend with the data. Perhaps with more data points added these numbers would indeed become significant.

Market capitalization was the only variable we looked at, which showed actual statistically significant T-values. This allows us to make a clear connection between companies that have higher market capitalization and companies who tend to win their lawsuits. We can say that companies that have high market capitalization are much more likely to win their cases against companies that have lower market cap. Large market capitalization is an indicator of a company that is financially strong. This comes back to our original hypothesis that companies with more financial strength have more success in the courtroom.

All the other variables are still relevant, despite the fact that they were found not to be significant by the T-test. A lot can still be learned from the data. There are differences between the means of the groups in for many of the variables that can be seen without a test. These differences certainly at least contribute to the conclusions demonstrated by market capitalization, and many would consider the differences very compelling on their own.

The Sales of companies that were successful in their lawsuits were on average $2,300 million higher than those companies who were unsuccessful. However, there was no real difference in the average debt between the two groups of companies. When

comparing the assets of the companies that won their lawsuits and those companies that did not there was quite a large difference. The actual difference in their assets was almost $8,500 million. There was close to a $1,500 million average difference in retained earnings between the winning companies and those that lost their lawsuits. The price trend was also higher for companies who were successful in their lawsuits. On average the price trend was $131.252 million higher for winning companies. The average price trend was also only a positive value for the winning companies.

It is easy to see that variables like sales and assets are very convincing evidence for our hypothesis. Looking at the mean value for these variables, without using parametric tests it seems clear that companies who are financially strong have a better chance of winning their lawsuits. Certainly assets are a very important part of a company's financial health, as it is a key to how much money the company has invested in itself. So it seems that companies that have a lot invested in their business do well in lawsuits. Sales are also a clear sign of a strong company.

B.) Data Analysis by Case Type

We did a great deal of observing and broke up our data into different groups and variables to see if we could find any trends. One of the things we did was break up all out cases into case types. We came up with number different types of cases. It is very important to know what these cases are, in order to be able to understand the data. The cases we observed were patent infringement, breach of contract, discrimination, trademark infringement, bankruptcy petitions, damages, misappropriation of trade secrets, product restrains, antitrust, false advertising, and broken rules of civil procedure.

Patent infringement, which we found was the most common type, is the violation of another party's patent, or idea. If a company comes up with an original idea they are able to patent it, which means they own that idea for a period of time. During this time no one can infringe upon this patent or use the idea for themselves. In certain types of industry, it is very hard to determine if a patent is being infringed upon. This is especially true for technology firms, which deal with very complex concepts and ideas.

The next most common type of case we ran into was breach of contract. In industry there are many times when a written agreement is made. By law both parties are expected to stay true to this agreement. Many times these agreements can be misinterpreted, and both sides might have different view on what a statement means. This causes problems, and usually leads to a litigation case.

The third most common case we ran into was discrimination. Discrimination can be a number of different things. A company could be sued for discriminating against a certain race or sex. They could also be sued for discriminating against someone with a disability. While this may not seem like it has a lot to do with technology case, it comes up more than one might think.

An additional type of case that came up in our research was trademark infringement. A trademark is a company's name or symbols that represent the origin or ownership of the merchandise to which it is applied. It is legally reserved to the exclusive use of the owner as maker or seller of a product. This means no one else has a right to use this name as their own once another company has made it their trademark. This occurs quite often as many companies in the same industry come up with similar names. The reason this is such an issue is because a catchy name is good for advertising.

Bankruptcy petitions is another common case type that shows up in the courtroom. There are many times when a company will be working really closely with another company, and one of them is forced to declare bankruptcy. This causes many problems. Agreements need to be made to make up for the other companies losses. Usually this does not go as smooth as one would like, and a case is brought up in court.

An additional case we dealt with was damages. This is anything that causes a loss of money for another party. An example includes selling faulty equipment to a company, which results in an accident. This is actually the type we ran into. This can cause a lot of money in damage which in turn results in a litigation case.

Misappropriation of trade secrets is an additional type of case that we ran into as a group. There are many times when a company will come up with and idea and it takes time before they can come up with a patent. During this time employees will sometimes move to another company. The ideas they worked on with their previous company is that company's property, and it is against the law for them to share it with their new company. This is true even if the ideas could help out their new employer. There are still are times when this rules is broken and the case is brought to court, as misappropriation of trade secrets.

Another type of case we came across is product restrains. In Industry companies will work together to sell a product. One company will develop the product and sell it, while another smaller company will resell the product for a profit. When this occurs especially with software some restraints are put on the reseller. If these restraints are unjust, and hamper the sales of the smaller company, this can lead to a litigation case where the smaller company sues the larger company for unfair product restraints.

An additional case we ran into is Antitrust Law cases. Antitrust is a way of preventing a company from becoming a monopoly due to a patent. If a patent is made that makes it impossible for other companies to compete in the market, than the antitrust law comes into play. A patent is a company's protected idea, but it should under no circumstances allow a company to be the lone or dominating power in a particular market. If this is the case than the antitrust laws come into play and a case can be brought to court. This occurs a lot in software industry, and is brought to Microsoft a great deal.

The last case we looked at was false advertising. If at anytime a company falsely advertises their product to improve sales, they are subject to be brought to court. All claims and product specs must be accurate, when a company is advertising their product.

Case type	Cases	% of Cases	Wins	Losses
Patent Infringement	19	42%	8	11
Breach of Contract	12	22%	3	9
Discrimination	5	12%	1	4
Trademark Infringement	3	6%	1	2
Bankruptcy Petitions	2	4%	2	0
Damages	2	4%	1	1
Misappropriation of Trade Secrets	1	2%	1	0
Product Restrains	1	2%	0	1
Antitrust	1	2%	0	1
False Advertising	1	2%	0	1
Broke Rules of Civil Procedure	1	2%	1	0

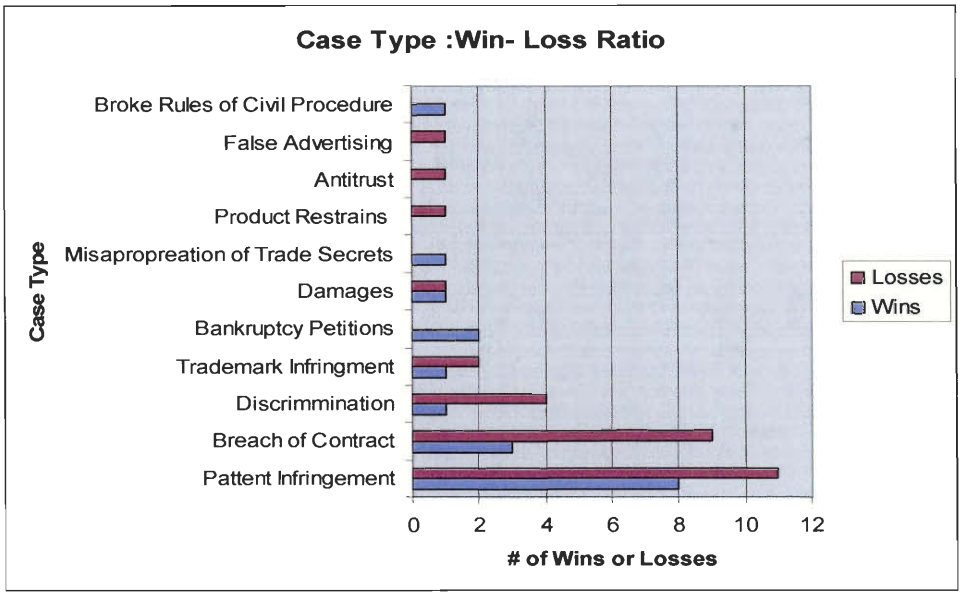

Figure 1: Breakdown of Case Types

It is important to know what all these cases mean, before you can examine the data by case type as shown above in Figure 1. It is obvious by looking at our data sheet that the most common case we ran into was patent infringement. It made up 42% of our total cases. If you think about it this does make sense. It is very important for a technology firm to come up with new and innovative ideas in order to stay competitive. These new ideas are their future products, and these ideas need to be protected. If someone tries to take your ideas, they are hindering your company's progress in order to improve upon their own. This happens often with extremely competitive technology companies, so it makes sense that patent infringement is such a common case.

The other most common cases included breach of contract, discrimination, and trademark infringement. These four types are the only types with sufficient amounts of

data to examine. The fact that these were the most common types of cases found in our research made perfect sense.

Breach of contract is a type of case that will come up often in an extremely competitive industry such as technology. Companies in these types of industries will do whatever they can to get the edge over their competition. If they feel like they can get away with breaking an agreement that is holding them back, it is sometimes a good decision to do so.

As for discrimination, there are many times when a company might not hire someone, because they do not feel they are a good fit. A company cannot afford to hire someone they do not feel they could make contributions. When this happens, issues such as race, sex or disabilities come up. As you can see from out data, this is more of a problem than one might expect.

The last type of company we looked at in great detail was trademark infringement. We know that a trademark is a company's way of identifying themselves. It is their name or symbols that represent the origin or ownership of the merchandise to which it is applied distinct from other companies. If someone try's to infringe upon a companies trademark they are stealing this distinct label, which is a good way to market their products.

The first thing we noticed when looking at these cases was that there were more losses than there were wins. This mean that cases are being brought to court, but the majority of the time the case is dropped. We don't fully understand why this is happening, but we have a few ideas of why it might be happening.

We stated earlier that we felt companies with more market power and capital are the companies that tend to have more success in the courtroom. If this is true, then the

defendant will tend to have larger market capitalization in these cases than the plaintiff. We looked at this by case, and came up with the data below in Figure 2. This data derived from Appendix B and C.

Company Type	Plaintiff higher market cap.	Defendant higher market cap.
Patent Infringement	62%	38%
Breach of Contract	30%	60%
Discrimination	20%	80%
Trademark Infringement	33%	66%

Figure 2: Company Type Percentages

We found that our prediction was correct, except for patent infringement. In this type of case the plaintiff had higher market capitalization than the defendant the majority of the time. There are a number of reasons why this might have occurred. It could be because companies with larger market capitalization feel like they can have their way in the court room, so they take smaller companies to court for any little threat that comes up. This could also be the reason why they are losing these cases. They are bringing cases to court that they should not because they feel they still have the power to win them. They do not want these companies to be able to develop any product that is even similar to their products or ideas. This seems to be backfiring for these companies, because for patent infringement these smaller companies are winning. What we observe in Figure 4 is that only in Patent Infringement cases does the plaintiff have a higher market capitalization the majority of the time. The opposite occurs in the other case types.

C.) Analysis by Company Type

Another type of data we looked at was what impact the type of company involved in a case had on the cases outcome. We came up with a chart of data, which is shown below in Figure 3.

Company Type	Cases Involving	% of Cases	Win	Loss
Software and Services	16	22%	12	4
Computer Manufacture	12	16%	8	4
Other Computers	11	15%	7	4
Semi-Conductor Company	7	9%	3	4
Retailing Goods	6	8%	4	2
Communications	5	7%	3	2
Electronic Systems	4	5%	2	2
Office Equipment	3	4%	0	3
EAFE Electrical	2	3%	1	1
Machinery Engineering	1	1%	1	0
Biotech	1	1%	1	0
Defense	1	1%	1	0
Photo-Optical Equip	1	1%	1	0
Chemicals	1	1%	1	0
Data Processing	1	1%	0	1
Insurance	1	1%	0	1
Finance + Loan	1	1%	1	0

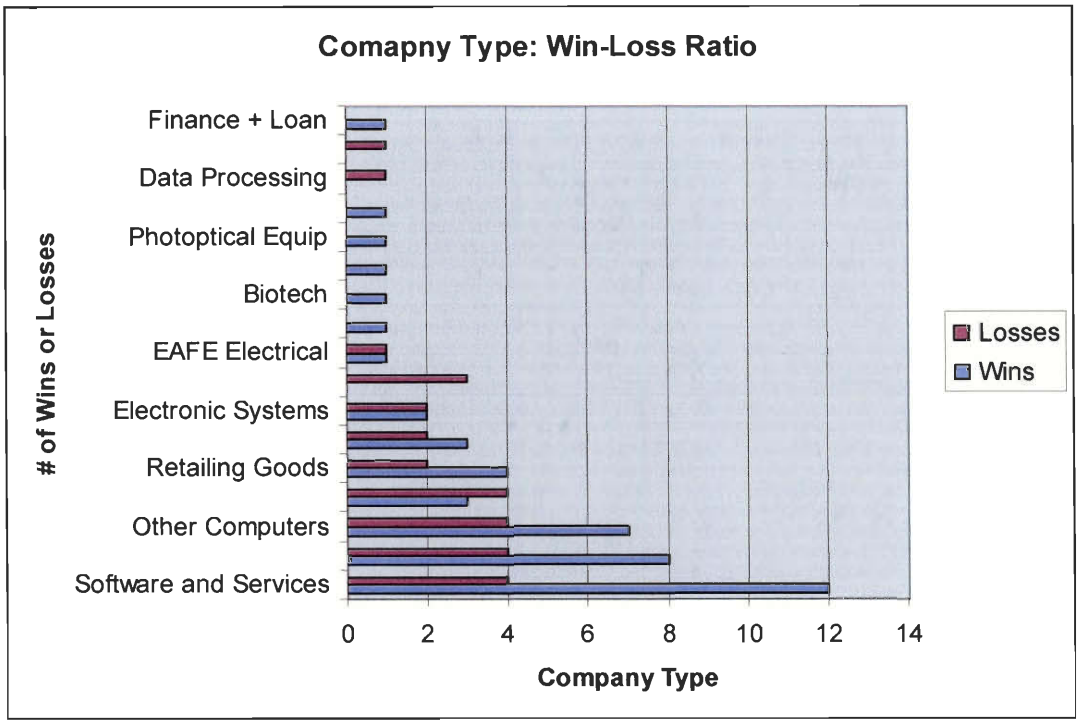

Figure 3: Breakdown of Company Types

By looking at the data you can clearly see that computer companies made up most of the cases. This makes perfect sense because modern technology is centered on computers. The first four largest company groups we have in the chart all deal with computers.

In order to see what effect the company type had on the case outcome we needed to look at the win loss comparison. We can really only use the first seven types we have listed, because they are the only types with a sufficient amount of data. The company types out of these that seem to be winning the most are software, both types of computer companies, and retailing. All others are around 50-50 win-loss.

There can be many reasons for this result, but the most noticeable is these companies relation to computers. Computers are the core of modern technology, and as a result companies associated with computers tend to be financially powerful. In order to

see if this was the case we found the average market capital for each category. A graph of the results is shown below in Figure 4.

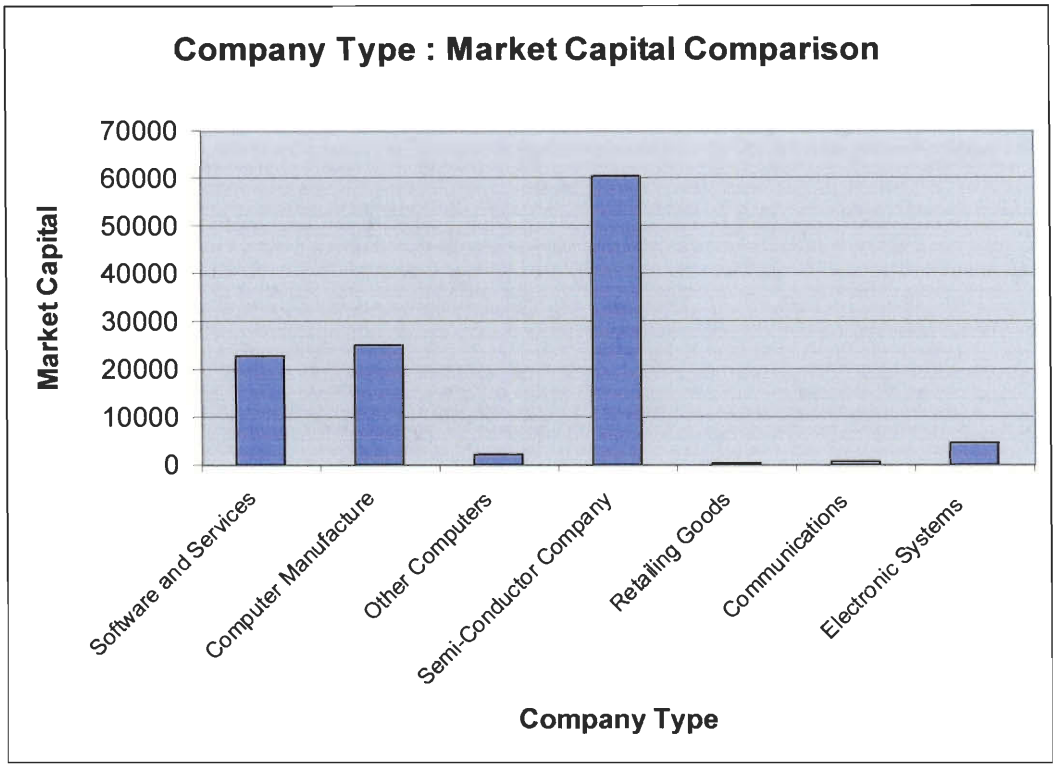

Figure 4: Market Capital for Different Company Types

By looking at our data shown above, the five company types with the highest market capitalization are associated with computers, and all except the semi-conductor companies are winning their cases. This indicates that companies with higher market capitalization tend to win their cases. Once again not enough data was taken for this to be considered statistically significant, but enough was collected to make observations.

Chapter 5 - Conclusion

Upon trying to come a cross a trend to examine the previous question, What are the factors contributing to the successes and failures of litigation cases involving technology firms, and does it have any correlation to the amount of money and power the firm holds?, we arrived at a conclusion from our data. A trend can be seen through the analysis using the T-test for market capitalization as well as the case by case analysis. There is a clear difference between the mean market capitalization of the companies that were successful in their lawsuits and those that were not. The data analyzed in the years 2000, 2001, and 2002 shows these factors and others may have an influence on the outcome of litigation cases against technology companies. Our findings demonstrate the beginnings of a trend that shows that financial success equates to success in the courtroom. This and all of the data could become more significant if more data was collected and taken into account, but a trend can be identified through the available statistics. This research brings up important issues about litigation involving technology companies, and questions whether companies with stronger financial backing are more successful in the courtroom.

Appendix A: Examined Cases

2000 Wins							
Buisness Name	**Case Details**	**Outcome**	**win-loss**	**Tick**	**Sales**	**Market Cap.**	**Debts**
Lewis Management							
vs.	trademark infringement	in favor of plaintiff	win				
Corel				COR-T	126.95811	72.642678	0
Digital Equipment							
vs.	misappropriation of trade secret	in favor of plaintiff	win				
Emulex				ELX	254.741	1514.68	345
Surety Tech				SRYP	7.854106	1.39	#N/A
vs	patent infringement	in favor of plantiff	win				
Entrust Tech				ENTU	102.747	218.86	0.088
Imation Corp				IMN	1066.7	1227.45	4.5
vs.	breach of contract	in favor of plaintiff	win				
Quantum Corp				DSS	1087.792	420.82	328.863
Compaq							
vs.	bankruptcy petitions	in favor of plaintiff	win				
Inacom				ICOPQ	4258.425	0	
AEA Tech				AAT-LN	471.9136	202.52542	77.3232
vs.	patent infringement	in favor of plaintiff	win				
Thomas Botts							
Imation Corp				IMN	1066.7	1227.45	4.5

vs.	patent infringement	in favor of plaintiff	win				
Sterling Digital Imaging							
O/E Systems							
vs.	bankruptcy petitions	in favor of plaintiff	win				
Inacom				ICOPQ	4258.425	0	#N/A

2001 Wins							
Business Name	**Case Details**	**Outcome**	**win-loss**	**Tick**	**Sales**	**Market Cap.**	**Debts**
Aclara biosciences				ACLA	2.52	75.93	0.744
vs	Patent infringement … competitors	win except for literal infringement	win				
Caliper technologies corp.				CALP	25.833	74.74	4.398
Akamai technologies				AKAM	144.976	201.4	302.213
vs.	Patent infringement	motion for preliminary injunction denied	undecided				
Speedera Networks							
Akamai technologies				AKAM	144.976	201.4	302.213
vs.	Patent infringement	win	win				
Cable and wireless internet							
Intel corp.				INTC	26764	104100.94	1365
vs.	patent infringement	???					
Broadcom corp.							
McData Corp				MCDTA	328.279	575.1	3.144
vs.	patent infringement	preliminary injunction denied					

Brocade communications							
En Pointe technologies inc				ENPT	257.043	5.38	12.421
vs.	?????	settlement	win				
Sarcom desktop solutions							
Liberate tech				LBRT	80.323	153.89	0.306
vs.	Patent infringement	settlement enforced	win				
worldgate comm.				WGAT	14.122	9.9	0.1
Log on America				LOAX	11.02	0.05	#N/A
vs.	financial agreement broken	dismissed (settlement suggested)	win				
promethean asset management etc.							
Numerical technologies				NMTC	49.032	124.377419	#N/A
vs.	none given	settlement	win				
ASML MASKTOOLS, INC							

2002 Wins							
Business Name	**Case Details**	**Outcome**	**win-loss**	**Tick**	**Sales**	**Market Cap.**	**Debts**
In re Enterasys Networks, Inc. Sec. Litig.				ETS	484.797	308.33	0
vs.	Plaintiff's motion to consolidate all actions granted	plain. Win	win				
Applewhite							
vs.		plain. Win	win				
Computer Assocs. Int'l, Inc.				CA	2964	7798.97	3842
DOUG BOYCE							

vs.	breached Employment Agreement and a Relocation Agreement	Plaintiff's claims stayed	win				
MUTUAL RISK MANAGEMENT LIMITED				MLRMF	497.817	1.46	#N/A
Trim Healthcare Sys.							
vs.	actions he took "were not in TRIM's best interests" $36,000 paid	plain. Win	win				
Quadramed Corp.(def)				QMDCE	#VALUE!	#VALUE!	#VALUE!
Perkin Elmer (pl)				PKI	1504.981	1031.32	805.544
vs.	Federal Rules of Civil Procedure	plain. Win	win				
Trans Mediterranean Airways							
Alvey							
vs.	GRANTED with sex discrimination and constructive discharge and DENIED plaintiff's claim of retaliation		win				
Rayovac Corp.(def)				ROV	572.736	427.01	201.871
Microsoft				MSFT	28365	276411.38	0
vs.	granted	preliminary injunction	win				
vs. Sun Microsystems				SUNW	12496	9751.1	1654
Intel				INTC	26764	104100.94	1365
vs.		settlement	win				
vs. Intergraph Corp.				INGR	501.177	830	0.169
Intel				INTC	26764	104100.94	1365
vs.		confidential settlement	win				
vs. Broadcom Corp.				BRCM	1082.948	3029.51	113.47
Hewlett Packard				HPQ	56588	52973.36	7828

vs.	patent infringement	HP win	win				
Teradyne				TER	1222.236	2381.56	458.63
Hewlett Packard				HPQ	56588	52973.36	7828
vs.	patent infringement	HP win	win				
Pitney Bowes				PBI	4409.758	7785.55	4274.182
Apple				AAPL	5742	5142.83	316
vs.	**Industrial** filed relief action against Apple; Apple filed cross-complaints against **Industrial** and ICSOP	partial judgment partial dismissal	win				
Computronics Inc.				CPS-AU	5.943833	#N/A	1326.166
2000 Loses							
Business Name	**Case Details**	**Outcome**	**win-loss**	**Tick**	**Sales**	**Market Cap.**	**Debts**
Goengineer							
vs.	product restraints	dismissed	loss				
AutoDesk				ADSK	947.491	1640.21	#N/A
Anicome							
vs.	breach of contract	dismissed	loss				
Netwolves				WOLV	0.739	12.72	0.363
motorola				MOT	29451	19886.59	#N/A
vs.	patent infringement + trademark theft	dismissed	loss				
Microstrategy				MSTR	147.827	109.49	49.739
Hewlett Packard				HPQ	56588	52973.36	7828
vs.	affirmed noninfringement		loss				
Plaintiff vs. IQ Technologies Inc.				AIQT	0.000499	2.93	0

Ahrens							
vs.	discriminatory discharge	def. win	loss				
Perot Sys. Corp.(def)				PER	1332.145	1143.71	0
Hewlett Packard				HPQ	56588	52973.36	7828
vs.	discriminatory discharge	def. win	loss				
Ahrens v. Perot Sys. Corp.(def)				PER	1332.145	1143.71	0

2001 Loses

Business Name	**Case Details**	**Outcome**	**win-loss**	**Tick**	**Sales**	**Market Cap.**	**Debts**
Agilent				AGIL	77.771	375.18	0.038
vs.	sale of HOLDRS benefited Merrill Lynch, but imposed an unfair financial burden on Agile.	Dismissed	loss				
Merrill lynch, Fenner & Smith inc. The American Stock exchange, and the Bank of New York							
Akamai technologies				AKAM	144.976	201.4	302.213
vs.	false advertising and unfair competition	motion to compel and motion to sanction denied	loss				
Digital Island							
America Online Latino							
vs.	1 billion in damages due to being removed from internet, when address was given to AOL	Dismissed	loss				
AOL-Time Warner				AOL	40961	56316.35	27509
Franklin Computer corp.							
vs.		Dismissed	loss				
Apple computer inc				AAPL	5742	5142.83	316
Imatec							

vs.	Patent infringement	Dismissed	loss				
Apple computer inc				AAPL	5742	5142.83	316
Microware systems							
vs.	Trademark infringement	summary judgment granted … loss	loss				
Apple computer inc				AAPL	5742	5142.83	316
Apple computer inc				**AAPL**	5742	5142.83	316
vs.	Patent infringement	summary judgment of invalidity … dismissed	loss				
Articulate systems inc							
copper mountain				CMTN	12.941	24.62	3.534
vs.	violation of agreement	dismissed	loss				
Poma of America inc							
Paramount Brokers inc							
vs.	breach of contract	summary judgment for defendant granted (loss)	loss				
Digital river				DRIV	#N/A	321.5	#N/A
Phonometrics inc							
vs.	Patent infringement	dismissed, (attorney fees and costs awarded to defendant)	loss				
ECI telecom (tadiran)							
ePresence inc				EPRE	43.824	44.24	3.823
vs	breach of contract	dismissed	loss				
Evolve software				EVLV	15.077	4.62	2.776
Expedia Inc				EXPE	590.598	3826.47	0

vs.	breach of contract	dismissed	loss				
McKenney's inc							
Methode Electronics				METHA	319.66	384.79	0
vs.	Patent infringement	dismissed	loss				
Hewlett Packard				HPQ	56588	52973.36	7828
and							
Agilent				A	6010	8337.89	1150
and							
Finisar corp.				FNSR	147.265	187.26	89.6
NCR corporation				NCR	5585	2327.54	311
vs	patent infringement	summary judgment granted for defended	loss				
Palm				Palm	1030.831	454.66	51.797
and							
Handspring inc				HAND	240.651	135.61	0
LANTEC INFORMATICA							
vs.	Antitrust (driving them out of buisness)	dismissed	loss				
Novell inc				NOVL	1134.32	1216.67	0
Nocadigm							
vs.	patent infringement	dismissed	loss				
Marimba inc				MRBA	35.227	39.93	0
New Paradigm software corp.				NPSC	6.190389	0.01	#N/A
vs.	breach of contract and tortious interference with contract	summary judgment granted case dismissed	loss				
New Era of Networks							
New Era of Networks							

vs.	??????	dismissed	loss				
Neon systems				NEON	#N/A	24.76	#N/A
Bridgestone/Firestone inc							
vs.	breach of contract	dismissed	loss				
Oracle corp.				ORCL	9673	58678.48	298
Marketel international							
vs.	patent infringement	dismissed	loss				
Priceline.com				PCLN	1003.606	367.67	0
Brittish telecommunications							
vs.	Patent infringement	Summary judgment granted for defendant	loss				
Prodigy communications							
Rambus				RMBS	96.565	661.73	0
vs.	Patent infringement	loss	loss				
Infineon technologies etc				IFX-FF	5146.49	5090.575843	1808.734

2002 Loses							
Business Name	**Case Details**	**Outcome**	**win-loss**	**Tick**	**Sales**	**Market Cap.**	**Debts**
Ballenger							
vs.	merger aftermath	dismissed	loss				
Applied Digital Solutions, Inc.				ADSX	99.6	113.78	85.225
Greenberg							
vs.	violations of the Securities Exchange Act of 1934	dismissed	loss				

Compuware Corp.				CPWR	1728.547	1804.34	0
Hopkins							
vs.	discriminated against on the basis of his disability	def. win	loss				
Electronic Data Sys. Corp.				EDS	21502	8852.11	5387
Whitney							
vs.	breach of contract and relief under the Illinois Sales Representative Act	dismissed	loss				
Peregrine Sys.				PRGNQ	564.683	15.58	#N/A
Barbara J. Metz							
vs.	discrimination based on sex	def. win	loss				
Transaction Systems Architects, INC.				TSAI	282.829	230.17	43.31
SeaChange Int'l, Inc.				SEAC	115.779	163.84	#N/A
vs.	defamation	appellant win	loss				
Putterman							
DAVID DeJOHN							
vs.	breached contract, Illinois Consumer Fraud and Deceptive Practices Act, and Uniform Deceptive Trade Practices Act	def. win dismissed	loss				
VERISIGN INC.				VRSN	1221.668	1897.96	13
Clancy Sys. Int'l							
vs.	patent infringement	def. win	loss				
Symbol Techs.(def)				SBL	1452.697	1886.14	#N/A
Miller							
vs.	wrongful death suit	def. win	loss				
Uniroyal Tech. Corp(def)				UTCIQ	32.862	0.14	#N/A

Appendix B: Financial Variable Calculations

2000 wins										
Company	**Ticker**	**Curr. Year**	**Sales**	**Market Cap.**	**Debts**	**Assets**	**Net Income**	**Retained Earnings**	**Price Trend Year to Date**	**Industry Name**
			x 1,000,000	**x 1,000,000**	**x 1,000,000**	**x 1,000,000**	**x 1,000,000**	**x 1,000,000**		
Surety Tech	SRYP	Y2000	9.389		4.647746	93.081836	-4.114	-8.968077		FINANCE & LOAI
Imation	IMN	Y2000	1234.9	546.2	23.7	931.2	-1	-90.8	5.64424	OTHER COMPUTE
AEA Tech	AAT-LN	Y2000	578.29625	373.554566	134.0052	415.09706	33.5013	76.09581	-22.05882	EAFE MACHINER\ ENG
Imation	IMN	Y2000	1234.9	546.2	23.7	931.2	-1	-90.8	5.64424	OTHER COMPUTE
AutoDesk	ADSK	Y2000	936.324	1519.27	0	789.517	93.233	52.298	9.79021	OTHER COMPUTE
Netwolves	WOLV	Y2000	1.42369	22.95	0.626537	25.54313	-24.326948	-31.349376	63.36634	COMMUNICATIOI
MicroStrategy	MSTR	Y2000	223.93	239.49	0	259.087	-285.368	-299.259	73.04636	SOFTWARE & EC SERVICES
IQ Technologies	AIQT	Y2000	196.8		21.364	46.841	-0.949	3.535	-54.54545	RETAILING - GOO
Perot System Corp.	PER	Y2000	1105.946	899.35	0.369	648.497	55.483	210.492	-7.08955	OTHER COMPUTE
2001 wins										
Company	**Ticker**	**Curr. Year**	**Sales**	**Market Cap.**	**Debts**	**Assets**	**Net Income**	**Retained Earnings**	**Price Trend Year to Date**	**Industry Name**
			x 1,000,000	**x 1,000,000**	**x 1,000,000**	**x 1,000,000**	**x 1,000,000**	**x 1,000,000**		
Aclara Biosciences	ACLA	Y2001	3.245	181.41	0.562	183.753	-29.04	-105.821	-1.42857	BIOTECHNOLOG
Akamai Technologies	AKAM	Y2001	163.214	683.69	300.518	424.82	-2435.512	-3379.878	-19.07514	SOFTWARE & EC SERVICES
Akamai Technologies	AKAM	Y2001	163.214	683.69	300.518	424.82	-2435.512	-3379.878	-19.07514	SOFTWARE & EC SERVICES
Intel	INTC	Y2001	26539	211092.31	1459	44395	1291	27150	7.6429	SEMICONDUCTOI COMPONENT
McData Corp	MCDTA	Y2001	344.406	1984.5	2.723	513.953	-8.656	14.782	30.42254	OTHER COMPUTE
En Pointe Technologies Inc.	ENPT	Y2001	365.28	13.51	9.44	56.015	5.359	-18.922	-42.5	RETAILING - GOO
Liberate Tech.	LBRT	Y2001	39.832	1213.09	1.061	1026.475	-306.438	-536.921	67.13287	SOFTWARE & EC SERVICES
Log on America	LOAX	Y2001	11.02		0.51	8.121	-37.833	-53.937	20	
Numerical Technologies	NMTC	Y2001	49.032	1206.733194	0	216.225	-53.433	-119.184	101.7341	SOFTWARE & EC SERVICES
America Online	AOL	Y2001	38234	136599.75	22840	208559	-4921	-3194	-6.10687	COMMUNICATIOI
Apple Company	AAPL	Y2001	5363	7702.73	317	6021	-37	2260	-7.88555	COMPUTER MFR
Apple Company	AAPL	Y2001	5363	7702.73	317	6021	-37	2260	-7.88555	COMPUTER MFR
Digitial River	RIV-BE	Y2001		388						
Evolve Software	EVLV	Y2001	36.446	15.11	5.593	55.416	-111.367	-215.75	-99.99757	SOFTWARE & EC SERVICES
Hewlett Packard	HPQ	Y2001	45226	39848.14	5451	31704	640	13693	-11.86636	COMPUTER MFR
Agilent	A	Y2001	8396	13132.75	6	7986	-400	931	-22.10468	ELECTRONIC SYST/DEVICES
Finisar Corp.	FNSR	Y2001	188.8	1993.75	0.658	1032.04	-85.449	-104.879	-14.73684	ELECTRONIC SYST/DEVICES
Palm	PALM	Y2001	1559.312	2203.85	0	1206.595	-356.476	-344.039	-42.16561	COMPUTER MFR
Handspring Inc	HAND	Y2001	370.943	889.13	0	253.235	-125.963	-194.643	-29.47368	COMPUTER MFR
Novell	NOVL	Y2001	1040.097	1662.41	0	1904.006	-261.822	985.486	-28.14371	OTHER COMPUTE
Marimba Inc	MRBA	Y2001	44.03	81.07	0.265	73.851	-13.352	-41.882	13.49693	SOFTWARE & EC SERVICES
Neon Systems	NEON	Y2001		39.52						
Oracle Corperation	ORCL	Y2001	10859.672	76806.56	303.696	10654.13	2561.096	1610.48	4.53704	SOFTWARE & EC SERVICES

Priceline	PCLN	Y2001	1171.753	1282.22	0	262.19	-15.866	-1544.341	5.5625	RETAILING - GOO
Infineon Tech	IFX-FF	Y2001	5164.741909	14501.34908	335.351206	8498.557586	-537.885282	177.599842	-1.85716	EAFE ELECTRICA ELECTR
2002 wins										
Company	**Ticker**	**Curr. Year**	**Sales**	**Market Cap.**	**Debts**	**Assets**	**Net Income**	**Retained Earnings**	**Price Trend Year to Date**	**Industry Name**
			x 1,000,000	**x 1,000,000**	**x 1,000,000**	**x 1,000,000**	**x 1,000,000**	**x 1,000,000**		
In re Enterasys Networks, Inc. Sec. Litig.	ETS	Y2002	484.797	308.33		578.04	-115.508		28.20513	OTHER COMPUTE
Perkin Elmer	PKI	Y2002	1504.981	1031.32	805.544	2836.239	-4.135	655.066	7.27273	ELECTRONICS
Microsoft	MSFT	Y2002	28365	276411.38	0	67646	7829	19950	-6.38298	SOFTWARE & ED SERVICES
Intel	INTC	Y2002	26764	104100.94	1365	44224	3117	27847	7.6429	SEMICONDUCTOR COMPONENT
Intel	INTC	Y2002	26764	104100.94	1365	44224	3117	27847	7.6429	SEMICONDUCTOR COMPONENT
Hewlett Packard	HPQ	Y2002	56588	52973.36	7828	68500	-923	11973	-11.86636	COMPUTER MFR
Hewlett Packard	HPQ	Y2002	56588	52973.36	7828	68500	-923	11973	-11.86636	COMPUTER MFR
Apple Company	AAPL	Y2002	5742	5142.83	316	6298	65	2325	-7.88555	COMPUTER MFR
Applied Digital Solutions, Inc.	ADSX	Y2002		113.78			-109.42		-4.87805	COMMUNICATION
Compuware Corp.	CPWR	Y2002	1728.547	1804.34	0	1949.054	-245.255	528.804	-27.08333	SOFTWARE & ED SERVICES
Electronic Data Sys. Corp.	EDS	Y2002	21502	8852.11	5387	18880	1007	7951	-9.98372	OTHER COMPUTE
Peregrine Sys.	PRGNQ	Y2002		15.58					279.51807	SOFTWARE & ED SERVICES
Transaction Systems Architects, INC.	TSAI	Y2002	282.829	230.17	43.31	238.973	15.269	-83.927	-10.30769	SOFTWARE & ED SERVICES
Verisign Inc	VRSN	Y2002	1221.668	1897.96		2391	-4961.297		14.83791	OTHER COMPUTE
Symbol Tech	SBL	Y2002	1320.1	1886.14		1693.9			21.16788	PHOTO-OPTICA EQUIPMENT
Uniroyal Tech. Corp	UTCIQ	Y2002		0.14					5900	CHEMICALS

variable mean:	8557.197086	24210.58929	1352.313374	14746.2105	0.48809044	3491.32048 1	130.7671809

2000 loss's										
Company	**Ticker**	**Curr. Year**	**Sales**	**Market Cap.**	**Debts**	**Assets**	**Net Income**	**Retained Earnings**	**Price Trend Year to Date**	**Industry Name**
			x 1,000,000	**x 1,000,000**	**x 1,000,000**	**x 1,000,000**	**x 1,000,000**	**x 1,000,000**		
Corel	COR-T	Y2000	151.651959	121.923427	9.987616	217.35249	-53.297305	-213.970683	4.8	EAFE DATA PROCESSING
Emulex	ELX	Y2000	139.772		0	229.995	32.814	43.014	14.8248	OTHER COMPUTE
Entrust Tech	ENTU	Y2000	148.377	814.06	0.575	734.106	-82.26	-101.518	-31.25	ELECTRONIC SYST/DEVICES
Quantum Corp.	DSS	Y2000	1418.871	1971.92	247.681	1086.004	145.614	571.152		OTHER COMPUTE
Inacom	ICOPQ	Y2000							0	RETAILING - GOO
Motorola	MOT	Y2000	37580	44233.4	11169	42343	1320	9727	-7.51445	OFFICE/COMM EQ
Hewlett Packard	HPQ	Y2000	48782	62430.62	4957	34009	3728	14097	-11.86636	COMPUTER MFR
Hewlett Packard	HPQ	Y2000	48782	62430.62	4957	34009	3728	14097	-11.86636	COMPUTER MFR
2001 losses										
Company	**Ticker**	**Curr. Year**	**Sales**	**Market Cap.**	**Debts**	**Assets**	**Net Income**	**Retained Earnings**	**Price Trend Year to Date**	**Industry Name**

			x 1,000,000	x 1,000,000	x 1,000,000	x 1,000,000	x 1,000,000	x 1,000,000		
Caliper Tech	CALP	Y2001	29.588	376.68	5.776	222.543	3.823	-44.602	8.07432	SEMICONDUCTOF COMPONENT
Akamai Technologies	AKAM	Y2001	163.214	683.69	300.518	424.82	-2435.512	-3379.878	-19.07514	SOFTWARE & ED SERVICES
Worldgate Communications	WGAT	Y2001	16.847	58.91	0.001	33.792	-31.346	-170.028	-26.19048	COMMUNICATIOI
Agilent	AGIL	Y2001	87.059	825.18	0.493	355.819	-125.336	-187.062	-12.1447	COMMUNICATIOI
Apple Computer Company	AAPL	Y2001	5363	7702.73	317	6021	-37	2260	-7.88555	COMPUTER MFR
Copper Mountain	CMTN	Y2001	22.425	89.96	6.654	96.469	-181.055	-190.673	40.84507	OFFICE/COMM EQ
ePresence Inc	EPRE	Y2001	67.737	98.3	2.875	171.491	-36.841	-25.222	-2.06186	OTHER COMPUTE
Expedia Inc.	EXPE	Y2001	322.48	2055.64	0	404.555	0.944	-190.946	55.38576	RETAILING - GOO
Methode Electronics	METHA	Y2001	359.71	278.56	0	294.93	19.352	190.591	-22.33364	SEMICONDUCTOF COMPONENT
NCR Corp	NCR	Y2001	5917	3581.57	148	4855	221	861	-15.54339	OTHER COMPUTE
New Paradigm Software Corp	NPSC	Y2001	6.190389	0.04	0.549	2.227	-0.80543	-10.497		
Rambus	RMBS	Y2001	117.16	803.24	0	193.515	31.271	-91.861	130.10432	SEMICONDUCTOF COMPONENT
2002 loss										
Company	**Ticker**	**Curr. Year**	**Sales**	**Market Cap.**	**Debts**	**Assets**	**Net Income**	**Retained Earnings**	**Price Trend Year to Date**	**Industry Name**
			x 1,000,000	x 1,000,000	x 1,000,000	x 1,000,000	x 1,000,000	x 1,000,000		
Computer Assocs. Int'l, Inc.	CA	Y2002	2964	7798.97	3842	12226	-1102	2335	0.88889	SOFTWARE & ED SERVICES
Mutual Risk Management Limited	MLRMF	Y2002		1.46					-42.85714	INSURANCE
Quadramed Corp.	QMDC	Y2002		71.1					-58.77863	SOFTWARE & ED SERVICES
Rayovac Corp	ROV	Y2002	572.736	427.01	201.871	525.095	29.237	149.221	-16.50413	HOME PRODUCT
SunMicrosytems	SUNW	Y2002	12496	9751.1	1654	16367	-587	6298	6.43087	COMPUTER MFR
Intergraph Corp.	INGR	Y2002	501.177	830	0.169	835.64	377.752	206.888	5.01126	OTHER COMPUTE
Broadcom Corp.	BRCM	Y2002	1082.948	3029.51		2229	-2236.576		-13.14741	SEMICONDUCTOF COMPONENT
Teradyne	TER	Y2002	1222.236	2381.56		1894.677	-718.469		-8.76249	ELECTRONIC SYST/DEVICES
Pitney Bowes	PBI	Y2002	4409.758	7785.55	4274.182	8732.314	437.706	3848.562	0.97979	OFFICE PRODUC
Computronics Inc.	CPS-AU	Y2002	5.943833		1326.166262	7275.892637	0.192551	214.809366		
SeaChange Int'l, Inc.	SEAC	Y2002	133.848	163.84		170.738			26.82927	SOFTWARE & ED SERVICES

variable mean:	6173.704614	7885.612265	1336.859915	6284.32054	90.67436356	2011.719187	-0.485977857
F-Test:	0.648568935	1.03995E-08	0.040491419	3.76544E-08	0.04346517	0.001907373	5.81146E-32
T-Test:	0.253838601	0.071568782	0.493072103	0.113199047	0.412828561	0.204790813	0.212101026

Appendix B summary

	Win	Loss	F-Test	T-Test
	X 1,000,000	X 1,000,000	X 1,000,000	X 1,000,000
Ave. Sales	8557.197086	6173.704614	0.648568935	0.253838601
Market Cap.	24210.58929	7885.612265	1.03995E-08	0.071568782
Debts	1352.313374	1336.859915	0.040491419	0.493072103
Assets	14746.2105	6284.32054	3.76544E-08	0.113199047
Net Income	0.488090444	90.67436356	0.04346517	0.412828561
Retained Earnings	3491.320481	2011.719187	0.001907373	0.204790813

Appendix C: Market Capital for Case Type

Patent Infringement		
Case	Plaintiff	Defendant
1	1.39*3	218.86*3
2	373.55	N/A
3	546.2	N/A
4	75.93*3	74.74*3
5	201.4	N/A
6	211092.31	3029
7	1984.5	N/A
8	1213.09	N/A
9	52973.36	2381.56
10	44233.4	239.49
11	N/A	7702.73
12	7702.73	N/A
13	N/A	N/A
14	384.79	52973.36
15	2227.54	600.61
16	N/A	81.07
17	N/A	1282.22
18	N/A	N/A
19	803.24	14501.34
20	N/A	1886.14

Breach Of Contract		
Case	Plaintiff	defendant
1	546.2	1971.92
2	N/A	N/A
3	N/A	N/A
4	N/A	45.7
5	N/A	22.95
6	N/A	388
7	98.3	15.11
8	2055	N/A
9	0.04	N/A
10	N/A	10859.67
11	N/A	15.58

Discrimination		
Case	Plaintiff	Defendant
1	N/A	572.7
2	N/A	899.35
3	52973.36	899.35
4	0	8852.11
5	0	230.17

Trademark Infringement		
Case	Plaintiff	Defendant
1	N/A	121.92
2	44233.4	239.49
3	N/A	7702.73

Discrimination		
Case	Plaintiff	Defendant
1	N/A	572.7
2	N/A	899.35
3	52973.36	899.35
4	0	8852.11
5	0	230.17

Trademark Infringement		
Case	Plaintiff	Defendant
1	N/A	121.92
2	44233.4	239.49
3	N/A	7702.73

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