



Display Technology Company

BUSINESS PLAN TOUCHTOP TECHNOLOGIES, INC.

3000 S. Washington Dr.
New York, New York 10278

This display technology company bases its success on the expertise of its founders who are pioneers in display technology, as well as the proprietary technology of its products such as flat screen monitor displays.

- EXECUTIVE SUMMARY
- USE OF PROCEEDS
- FINANCIAL SNAPSHOT
- THE ENTERPRISE—THE PRODUCT
- THE MARKET
- OPERATIONS
- THE ORGANIZATION
- KEY RISKS/TIMELINE
- PROSPECTIVE FINANCIALS

Highlights

- Management team composed of renown pioneers in display technology
- Licensing commitments from leading display manufacturers
- Extremely low cost to deploy using existing production facilities
- Highly differentiated proprietary technology insulated by substantial barriers to entry
- Ideal stage of development life cycle
- Large \$10 billion market growing rapidly

EXECUTIVE SUMMARY

"There is no end in sight as the world's top display producers continue to upgrade and expand production in efforts to capture share."

—Ernest Gallow, *The Display Insider*

The Company-The Vision-The Founders

Flat Panel Display Manufacturers have spent billions in search of a viable successor to Liquid Crystal Display technology. TouchTop Technologies, Inc. has developed a display system that exceeds the performance, cost,

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and production demands of the world's top display manufacturers. Since 1990, TouchTop Technologies' principals have been perfecting their patented Light Emitting Dry Crystal Display System, LEDCD. Upon production of full-scale prototypes, this technology will be licensed to top LCD producers worldwide. NEEC has tentatively committed to pay \$20 million for use of the technology upon TouchTop's production of a prototype that performs in accordance with claims made on the breadboard unit.

The founders of TouchTop Technologies are known internationally in the display industry. Mr. Ira Weinstein, President and CEO, directed the overall development of LCD manufacturing systems for NEEC and Hundeye during the late 1980s and early 1990s. Neither of these clients will expand production capacity without consulting Mr. Weinstein first. Mr. Di Patel, Vice President of Technology, launched his first software startup from his dormitory room at Stanford University. As a graduate student, he developed one of the first true nuero-network protocols. The technology was licensed by Inteli-Trade, a leading provider of computer based trading systems, and eventually sold to them. TouchTop Technologies' Vice President of Science, Dr. Vladimir Chenenko, has developed over 25 patented display technologies and 50 novel chemical compounds for use in a wide range of applications. Dr. Chenenko is an internationally recognized authority and pioneer in the field of display technology. His early work, *The Principals, Characteristics, and Applications of Liquid Crystal Displays*, has been translated into 4 languages and is a field manual for display developers around the world. It is this depth of expertise that has allowed TouchTop Technologies to develop the next generation display technology in only 6 years and this core team will drive the timely release and licensing of the technology within 12 months of funding.

Market Opportunity

The top five Active Matrix Liquid Crystal Display producers worldwide spent more than \$1.3 billion in 1995 for research and development of the next generation display device. Driving the rationale for continued investment is an ever increasing, and currently unsatisfied, demand for larger, thinner, clearer, and faster display devices by consumers. Over \$12 billion was spent on AMLCDs in 1996. This huge market is expected to grow over \$19 billion by the year 2000. Current estimates of growth in the AMLCD market do not take into account the possibility of traditional CRTs in desktops and televisions being replaced by AMLCDs. TouchTop Technologies' LEDCD allows display manufacturers to produce displays that offer contrast ratios 20 times higher than all viable alternatives to AMLCDs with superior viewing angles and response times that are 1000 times faster. All of these advantages are provided at 15% of the cost to manufacture AMLCDs. Management expects this advantage to translate into over \$59 million in annual revenue within three years.

USE OF PROCEEDS

The company is seeking \$2,300,000 in first round financing, in the form of convertible preferred units, to fund production and testing of 3 full-scale prototypes. The company intends to use the proceeds from equity investments as follows:



Use of Proceeds

GROSS OFFERING	\$2,300,000
LESS ESTIMATED OFFERING EXPENSES AND COMMISSIONS	0
NET PROCEEDS	2,300,000

PLANNED USES

CAPITAL EXPENDITURES

Computer equipment	90,000
Purchased software	90,000
Furniture and fixtures	70,000
Leasehold improvements	50,000

Total proceeds for capital expenditures	300,000
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WORKING CAPITAL

Salaries and wages	428,259
Occupancy	173,000
Professional services	120,000
Travel	154,059
Research and development expenses - 1998	1,102,069

Reserve	322,613
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Total proceeds for working capital and reserve	1,654,774
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Total Uses	\$2,300,000
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Use of Proceeds

GROSS OFFERING	\$2,300,000
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LESS ESTIMATED OFFERING EXPENSES AND COMMISSIONS	0
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NET PROCEEDS	2,300,000
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FINANCIAL SNAPSHOT (PROJECTED)

FINANCIAL SNAPSHOT	1997	1998	1999	2000	2001
Income					
License revenue	\$0	\$20,000,000	\$50,000,000	\$50,000,000	\$50,000,000
Support revenue	0	2,777,500	9,165,750	6,666,000	4,999,500
Royalty revenue	0	0	3,010,292	15,857,939	33,530,224
Total revenue	0	22,777,500	62,176,042	72,523,939	88,529,724
Cost of sales	0	1,468,499	2,528,601	3,142,051	3,261,376
Gross margin	0	21,309,001	59,647,441	69,381,888	85,268,348
Total operating expenses	1,629,835	7,272,631	17,842,273	21,749,635	26,596,877

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	1997	1998	1999	2000	2001
Income from operations	1,629,835	14,036,370	41,805,168	47,632,253	58,672,271
Cash Flow					
Cash flow from operations	1,417,394	9,286,037	25,844,649	29,365,325	38,365,828
Cash flow from financing activities	2,301,000	0	0	0	0
Selected Performance Measures					
Earnings to sales	NM	0.41	0.42	0.42	0.43
Gross margin percent	NM	0.94	0.96	0.96	0.96
Operating margin	NM	0.62	0.67	0.66	0.66
Pretax return on tangible equity	-1.98	1.44	1.22	0.77	0.62
Pretax return on assets (%)	-1.86	1.42	1.21	0.77	0.61
Return on assets (%)	-1.86	0.91	0.71	0.45	0.36
Asset utilization turnover	NM	0.01	0.01	0.01	0.01
RETURN on equity	NM	0.92	0.72	0.46	0.36

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Pretax return on tangible equity	-1.98	1.44	1.22	0.77	0.62
Pretax return on assets (%)	-1.86	1.42	1.21	0.77	0.61
Return on assets (%)	-1.86	0.91	0.71	0.45	0.36
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THE ENTERPRISE— THE PRODUCT

"The biggest cause for the shortage (in large screen notebook computers)...is soaring demand."

—Evan Ramstad, *Wall Street Journal*, November 20, 1996

The Company

TouchTop Technologies, Inc. develops leading-edge display technologies for license to the world's top display manufacturers. Although not incorporated until 1996, the concept for TouchTop Technologies, Inc. was conceived in January of 1990. Dr. Di Patel had just recently completed his work as chief architect of the revolutionary graphical user interface for Microsoft's Windows operating system. He and Mr. Ira Weinstein, who was in charge of establishing Hundeye's Thin Film Transistor LCD lab in Korea, were discussing the

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future of user interfaces at the Information Display Symposium in San Diego. Within moments it became clear that the two men shared a common vision for the next generation of interaction between user and computer. By the end of the symposium their discussion had evolved into a thorough functional specification for the next generation interface: a thin, flexible portable display device that mimics a desktop in scale and user interaction.

With the proposed device, users could simply touch "stacks" of full-size documents on the screen and be able to view multiple documents simultaneously. Essentially the user would interact in an environment where the "screen" provides display output and accepts input in the same manner physical objects on a desk are manipulated and at the same physical scale.

In the course of developing the technical specifications for such a device, it became clear that the existing technology could not meet all of the founder's functional requirements. This led Mr. Weinstein to consult his friend and associate Dr. Vladimir Chenenko. Dr. Chenenko literally wrote the book, actually several books, on flat screen display systems in the former Soviet Union. For most of his adult life, Dr. Chenenko has pursued development of what he calls a Light Emitting Dry Crystal Display. Although Dr. Chenenko's patented system was very promising, in its raw state it lacked the responsiveness and manufacturability to make it a viable alternative to competing display technologies. Together, Mr. Weinstein, Mr. Patel, and Dr. Chenenko transformed the Light Emitting Dry Crystal Display into the next generation of display technology.

The Founders

The principals of TouchTop Technologies, Inc. are established within the fields of information display technology, user interface devices, and artificial intelligence. They bring extensive expertise associated with comprehensive product development, marketing, manufacturing controls, and international business affairs.

Among the strengths of the four principals of TouchTop Technologies, Inc. is an aggregate of 120 years of direct experience in pioneering computer hardware and software technologies. Their renown and acclaim for product conceptualization, design, development, and manufacturing make them a most formidable competitor in the information display market.

Each principal has clearly demonstrated their prowess as skillful businessmen and engineers in independent ventures that were highly successful, including Microsoft, Goldenstar, and Fujitomo. The wisdom of each principal to plan the exit from their respective ventures provided a method for insuring their professional and financial growth by continually seeking greater challenges in their respective fields of expertise. Ultimately, their creativity, ingenuity, competence, and high level of business acumen was profitable to them, their former partners, shareholders, and clientele. Business is more than time and money to the principals of TouchTop Technologies, Inc.; it is responsiveness. This assertion is supported by their notable accomplishments, detailed in the appendix and organization sections of this plan.

The Vision

Within six months of funding, the company expects to have 3 fully functioning prototypes available for further testing. Assuming these prototypes perform in accordance with performance standards observed in the breadboard unit, the company expects to execute its first license agreement with NEEC in the amount of \$20 million. As part of the agreement, TouchTop will support commercialization and configuration of the system at an existing NEEC plant for a guaranteed maximum sum of \$3,000,000. The first LEDCD fitted products are tentatively scheduled to ship in early 2000, producing royalty revenue of \$3 million in that year. By 2001, the company expects to have similar agreements in place with other manufacturers, producing revenues of over \$72 million. The technology's performance, economy, and novelty all suggest that these target goals can be realized.



The Product/The Technology

Cathode Ray Tube display is the highest resolution display device available today. The portability of this technology is an unfortunate limitation imposed by the picture tube. This dilemma led to the design and development of the Liquid Crystal Display (LCD). Traditionally, passive matrix LCD systems are essentially a combination of a wire grid, a light source, and a liquid crystal solution. Liquid Crystal Elements control the emission or omission of light passage, which creates a viewable image. A key limitation of passive LCD systems is their inability to produce images that can be viewed from all angles. To combat this problem, the Active Matrix Liquid Crystal Display (AMLCD) was invented.

Active Matrix LCDs produce viewable images in the same manner as Passive Matrix LCDs with one added, and very expensive, component: Thin Film Transistors (TFTs). A transistor controls each and every pixel in the display. This allows the display to generate high-resolution images that are viewable from more angles. There are two limiting factors that drive the search for alternatives to AMLCDs. First, the cost of manufacturing these displays is higher than that of nearly every competing technology. Secondly, there are size constraints that limit production of very large displays, those exceeding 16" diagonal screens. TouchTop Technologies' Dry Crystal Display System overcomes these limitations with breakthrough proprietary technology.

At the heart of TouchTop's Light Emitting Dry Crystal Display (LED CD) is, as one might suspect, dry crystal elements. These synthetic elements, when electrically charged, emit light. Because the elements are transparent in their untreated state, applying TouchTop's patented Dry Crystal Dye creates a light source that produces vivid colors. These dyed elements are mounted to a controllable circuit board by an adhesive. Precisely placing each element, dyed in one of the three primary colors, would involve the construction of complex manufacturing equipment. This was the major obstacle that prevented Dr. Chenenko from producing the display years ago. To combat this threat to the commercial feasibility of the system, Mr. Patel constructed an intelligent software program that estimates the distribution of red, blue, and green elements and edits the video driver code appropriately. The end result is a visual display that literally blows away competing technologies.

Sustainable Competitive Advantage

The proprietary technology that supports Touch Top's display system exceeds the performance of existing technologies by a substantial margin.

The system was designed to allow manufacturing at existing LCD and AMLCD plants with nominal retooling. Other new display technologies, including Plasma, Field Emission Displays (FEDs) and Organic Displays, require construction of a new plant to roll out products. They offer performance improvements that are marginal when compared to those of TouchTop's LED CD. Having invested over \$6 billion in AMLCD plant construction, the world's top display producers are hard pressed to rationalize additional investment in new technologies that offer only marginal performance gains. TouchTop's Light Emitting Dry Crystal Display holds an exclusive place among display technologies available today. The extremely high demand for this technology is facilitated by a relatively modest investment required to bring its product to market.

THE MARKET

"Next years' demand for notebooks that house LCD displays will be so huge, desktop vendors won't have the materials left over to make the 12- to 18-inch panels for desktop PCs."

—IDC Analyst Eric Buckingham, Ziff Davis

The information display market is capital intensive, highly concentrated, and growing at an impressive rate. The average AMLCD plant cost over \$1 billion. Producers get a facility capable of producing about 100,000 12.1" units per month, assuming yields of around 75%. Worldwide capacity at these plants, including passive LCD plants, is currently in excess of 20 million 12.1" units per year. Liquid Crystal Displays outsell all other flat panel display systems by a margin of 10 to 1. According to the Society of Electron Devices International,



AMLCD production capacity is expected to reach 40 million 12.1" units by the year 2000.

The biggest challenges facing the AMLCD producers can be broken down into four areas:

- High Cost of Manufacturing
- Limited Viewing Angle
- Response time
- Maximum Viewing Size

As indicated previously, TouchTop Technologies' Light Emitting Dry Crystal Display System overcomes these barriers by enormous proportions. The top five AMLCD producers worldwide spent more than \$1.3 billion in 1995 for research and development of the next generation display device. Despite this sizable investment, no clear successor to AMLCD has been developed. Driving the producers' rationale for continued investment is an ever increasing, and currently unsatisfied, demand for larger, thinner, clearer, and faster display devices by consumers.

Market Potential/Growth Rate

The combined Cathode Ray Tube and Active Matrix Liquid Crystal Display markets were over \$27 billion dollars in 1996. Over \$12 billion was spent on Active Matrix Liquid Crystal Displays. This huge market is expected to grow over \$19 billion by the year 2000. Current estimates of growth in the AMLCD market do not take into account the possibility of traditional CRTs in desktops and televisions being replaced by AMLCDs.

Target Market

Only 11 firms make up TouchTop Technologies' target market. However, these firms account for nearly 90% of the LCD market. All 11 firms are in a desperate search for the next generation display technology. However, the continued and growing investment in R&D and additional AMLCD capacity are all clear signs that none of these companies have found a worthy successor to AMLCD. TouchTop Technologies has segmented the market into two categories: manufacturers that have invested in full-scale production facilities for next generation displays and those that have not.

Only two firms, Optrex and Sharpe fall into the category of companies that have invested in full-scale production facilities for next generation displays. Sharpe, using technology developed by Infinite Gain, Inc., began construction in Korea on a Field Emission Display production plant in early August of 1995. In a clear sign that Sharpe may have jumped the gun, the plant was initially budgeted at \$800 million and to date has cost the firm over a billion dollars with completion scheduled for late 1997. Sharpe has acknowledged that many of the cost overruns are the results of manufacturing difficulties discovered at its pilot facility. Optrex's investment is in a plant that will manufacture next-generation AMLCDs. The new AMLCDs produced by the plant use an in-plane switching technique that significantly increases the viewing angle. However, as with similar techniques, the costs, in addition to manufacturing, include increased power consumption and reduced speed.

The other 9 top LCD producers have not fully committed to next-generation technologies by way of new plant construction. These firms are the primary targets of TouchTop Technologies, Inc. One of the largest, NEEC, has committed to executing a license and royalty agreement upon TouchTop's delivery of a fully functioning prototype that verifies performance claims. Additionally, TouchTop's CEO has coordinated efforts with key NEEC manufacturing management to develop cost estimates, define the process architecture, and move towards detailed design for conversion of existing NEEC AMLCD manufacturing facilities. Under the NEEC agreement, licenses with other producers could be executed under the condition that production of TouchTop's LEDCD based products commenced no sooner than 24 months following NEEC's first production run.



Prospect Dispersion

The nine LCD producers TouchTop Technologies has targeted are clearly concentrated in Far East Asia and Japan. Japan alone accounts for over 41% of all LCD production, with Taiwan and Hong Kong tied for second with 20% each. Having managed design and ramp up of LCD production plants in Korea, Taiwan, and Japan, Mr. Weinstein has firsthand knowledge of the nuances of commercial decision making in these areas. Equally important, Mr. Weinstein has developed strong relationships, as a trusted advisor and friend, with 7 of the nine targets TouchTop is pursuing.

The Competition

TouchTop Technologies, Inc. competes with professional research organizations leading display technology producers and many others attempting to break into the display technology industry. Although other alternatives to AMLCD exist, none have proven their manufacturability, scientific credibility, or commercial viability. Even the most promising alternative to AMLCD technology, that is the Field Emission Display, only offers a 33% savings in production costs. TouchTop's LEDCD is designed to be manufactured by existing AMLCD facilities resulting in production savings of over 85%.

The most immediate competition to TouchTop Technologies, Inc. is the Infinite Gain Corporation of Irvine, California, and Angle Technologies, of San Pedro, California. Infinite Gain Corporation has the best-developed Field Emission Display Process (FED) in the industry. This company was founded in 1990 and its FED boasts viewing angles of up to 170 degrees, and a contrast ratio of 100 to 1. This compares with TouchTop's contrast ratio of 20,000 to 1 and viewing angle of 170 degrees.

Infinite Gain Corporation's customers include Sharpe, Toshiba, NEEC, and Hoshidenn. Infinite Gain's license and royalty agreements are negotiated on an individual basis. Each client yields \$24.25 million per year in revenue on average.

A summary of competitor profiles follows:

Competitor Name	Growth Rate	Revenue in Millions	Lic./Royt % of Rev.	Service \$ of Rev.	Gross Margin %	G. Margin Lic./Royt
Infinite Gain	110%	\$97.00	85.01%	14.99%	96.52%	98.21%
Angle Technologies	86%	\$35.11	70.12%	29.88%	97.33%	93.40%
Vision	12%	\$200.02	88.01%	11.99%	97.03%	99.13%
TouchTop 1999	180%	\$59.60	85.26%	14.74%	95.93%	99.99%

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TouchTop 1999	180%	\$59.60	85.26%	14.74%	95.93%	99.99%

Competitor Name	G. Margin Service	Operating Margin %	% Sales Mktg. Ex	% R&D Expense	% G&A Expense	Year Founded
Infinite Gain	49.54%	57.21%	13.72%	15.55%	10.95%	1989
Angle Technologies	61.09%	64.05%	9.10%	14.44%	9.74%	1992
Vision	45.08%	45.13%	21.70%	21.80%	7.30%	1990
TouchTop 1999	72.00%	70.00%	19.30%	4.89%	4.61%	1996

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Angle Technologies	61.09%	64.05%	9.10%	14.44%	9.74%	1992
Vision	45.08%	45.13%	21.70%	21.80%	7.30%	1990
TouchTop 1999	72.00%	70.00%	19.30%	4.89%	4.61%	1996



Competitor	P/E Ratio	Ticker Symbol	Major Customers	Avg. Rev. Per Cust.	Head-count	Rev. per EE
Infinite Gain	50	INFG	4	\$24.25M	130	\$746K
Angle Technologies	33	AGTC	3	\$11.70M	30	\$1.17M
Vision	29	VSNT	15	\$13.33M	220	\$909K
TouchTop 1999	N/A	N/A	3	\$19.88M	71	\$839K

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TouchTop 1999	N/A	N/A	3	\$19.88M	71	\$839K

Infinite Gain's management team is led by Dr. William Sharpes. Dr. Sharpes has written numerous texts on display technology and founded the company in 1990 with 4 key patented technologies he developed. The company has developed strong ties with its customers and managed to grow revenues by over 100% in 1997.

Angle Technologies is essentially the research arm of Optrex International. Although the firm is a public company, nearly 90% of its sales are made to its majority shareholder, Optrex. The most significant accomplishment of Optrex over the past several years has been gains made in the area of Ferroelectric Liquid Crystal Displays.

Ferroelectric Displays, FLCs, are liquid crystals that maintain their charge after the electric field is turned off. One of the advantages of this technology is that power consumption in portable devices is significantly reduced. However, controlling contrast in FLCs has consistently required counterproductive supporting technologies. All evidence suggests that the cost of manufacturing FLCs is greater than, or equal to, the cost of producing current AMLCs.

Vision, Inc. is the least threatening of TouchTop's most direct competitors. Although the company licenses technology to virtually all of the top ten LCD producers, its patents are primarily based on methods of improving existing Passive Matrix Displays. The company uses various "twisting" techniques to enhance both resolution and viewing angle. Although LCD producers acknowledge that Passive Matrix Displays have a limited future, Vision's innovative improvements to this technology benefit producers in two ways. First, firms can extend the life cycle of Passive LCDs with Vision's twisting techniques. Secondly, by using existing production facilities and mature product components, manufacturers can target the price conscious segments of the display market. Despite these strengths, the consensus opinion in the scientific community is that Vision's days are numbered and the company is essentially a cash cow.

Sales Team and Approach

TouchTop Technologies' founders recognize that to achieve the company's revenue objectives after licensing technology to NEEC, they will have to successfully convince prospects of the ROI, commercial viability, and performance improvements manufacturers will receive by licensing LEDCD technology. As a complex and break-through technology, selling LEDCD will involve convincing executives, technical divisions, and financial professionals that LEDCD is the best means to achieve competitiveness in the display market. Each member of TouchTop's executive team will play a vital role in accomplishing this task. However, direct responsibility will rest with the company's CEO, Mr. Weinstein.

Although the structure of the team is such that matrix reporting relationships are inevitable, Mr. Weinstein has successfully used this structure in the past to close technology transfer agreements ranging from \$10 million to over \$500 million. In each occurrence, the contracting party was not only satisfied with the end result, but also extremely impressed with the negotiation process. Consequently, lasting relationships were developed between the client and the offering firm. TouchTop Technologies is confident that this same approach will yield similar results in its efforts to license the Light Emitting Dry Crystal Display System.



Pricing Policy

The pricing strategy for TouchTop's LEDCD is based on the reduction in risk, and highly competitive ROI manufacturers will realize. The base price for licensing the technology is \$25 million. This fee entitles licensees to complete documentation, chemical formulas, driver software, driver editor software, and testing and tooling specifications. Technical and manufacturing support services are contracted on an hourly basis at an average rate of \$250 per hour, with the average implementation expected to take 24,800 hours of technical and manufacturing guidance. Retooling existing AMLCD manufacturing facilities will cost another \$15 million. Finally, a royalty of 20 cents per square inch of screen manufactured is payable monthly by the licensee.

As this scenario suggests, there is considerable room for TouchTop Technologies to increase its price. However, the company's marketing strategy is for quick penetration to reduce the risk of entry by yet undiscovered technology alternatives. To encourage early decisionmaking by prospects, the price of a license will increase 50% per year for each agreement executed after the year 2000. Also, under the NEEC agreement, no consulting fees would be charged but TouchTop would be reimbursed for all "direct non-salary" consulting expenses.

Promotion

Upon completion of tested, functioning prototypes, TouchTop Technologies will begin exhibiting 12.1", 27" and 50" flat screen displays based on its LEDCD system at symposiums in the United States, the Far East, and Japan. These exhibitions will fall under the direction of Mr. Weinstein and the director or business development. There is little doubt that the display community will be nothing short of shocked by what they see.

The combined executive team of TouchTop Technologies has been published in nearly every relevant trade and scientific journal in the display industry. In the course of publishing both critical and product specific articles, relationships with key media contact have developed. These relationships will be leveraged to gain third party endorsement of this breakthrough technology. In the end, however, the quantum performance improvements delivered by Light Emitting Dry Crystal Displays will speak so loudly that relevant interested parties will have to listen.

OPERATIONS

Development Advantage

Since inception, TouchTop Technologies has successfully used management's experience not only to develop the next generation of display technology, but to create and document a structured system for commanding the development process. These early development efforts have already resulted in tangible business results. The ability of the breadboard unit to prove the viability of the company's display technologies puts the unusual position of having pilot production, testing, and debugging funded by a customer in waiting. Since the first licensing agreement (contingent upon performance of certain prototypes) involves payments for consulting NEEC on retooling existing LCD facilities, TouchTop Technologies will actually earn revenue before, during, and after pilot production begins.

Clearly the most significant challenge facing the company at this stage is production of prototype units that are produced and function in accordance with performance specifications. Management has gone to great lengths to reduce the risks that prototypes will fail. One clear example of this is the company's agreement to have the prototypes constructed at NEEC's testing labs in Korea. This results in not only cost savings in producing the prototypes, but has allowed focused work to begin on manufacturing components for production. Management believes these advantages typify the company's approach to research and development.



Facilities

TouchTop Technologies' principal office space is located in New York City. The 3,000 square foot facility is occupied under a lease expiring in February of 1999. A right of first refusal exists on up to 10,000 square feet of additional space at this location. As marketing and license support activities develop, the company anticipates growing needs for office space in the Pacific Rim. Under the terms of the NEEC agreement, the company will have use of approximately 800 square feet of office space at NEEC's facilities in Korea. The vagaries of negotiation are such that management does not assume similar agreements will be obtained with other manufacturers licensing the company's technology. A provision for this additional space was considered in projecting rental expense over the next five years.

THE ORGANIZATION

Management

Executives of the company

Executive officers of the company are as follows:

Name	Age	Position
Ira Weinstein	57	President and Chief Executive Officer
Vladimir Chenenko	49	Vice President-Science
Di Patel	42	Vice President-Technology

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Ira Weinstein	57	President and Chief Executive Officer
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Di Patel	42	Vice President-Technology

Executive Profiles

Mr. Ira Weinstein, President and Chief Executive Officer of TouchTop Technologies, Inc., has advised nearly every top LCD producer worldwide, primarily in the areas of integrated product development and manufacturing. During the late 1980s and early 1990s his principal clients were NEEC and Hundeye. In both these engagements, Mr. Weinstein was responsible for the overall cross-functional development of LCD manufacturing systems. Until this day, neither of these clients will expand production capacity without consulting Mr. Weinstein. Prior to establishing his consulting practice, Mr. Weinstein held the positions of VP of Engineering, VP of Marketing, VP of New Product Development and VP of Direct Sales for Magnovuexe.

Mr. Weinstein is a graduate of Massachusetts Institute of Technology and holds a B.S. and M.S. in mechanical engineering. He graduated third in his class from MIT's Sloan School of Management, where he received his M.B.A.

Mr. Di Patel, Vice President of Technology, launched his first software startup from his dormitory room at Stanford University. As a graduate student, he developed one of the first true nuero-network protocols. The technology was licensed by Inteli-Trade, a leading provider of computer based trading systems and eventually sold to them. Mr. Patel used the proceeds to develop a graphical user interface to run on Microsoft's operating system. The company, Click and Drag, was acquired by Microsoft in 1998 and served as the key player in the total concept development.

Dr. Vladimir Chenenko, III, Vice President of Science, is an internationally recognized authority and pioneer in the field of display technology. His early work, *The Principals Characteristics, and Applications of Liquid Crystal Displays*, has been translated into four languages and is the field manual for display developers around the world. Prior to the break up of the former Soviet Union, Dr. Chenenko had developed over 25 patented



display technologies and 50 novel chemical compounds for use in a wide range of applications. In 1991, Dr. Chenenko founded PhysiChem, a contract research and consulting group. In 1994, PhysiChem was purchased by Dow Labs International. Since that time Dr. Chenenko has focused nearly all of his efforts on completed development of his Light Emitting Dry Crystal Display.

Dr. Chenenko hold Ph.Ds. in chemistry and physics and a master of applied physics from the Moscow Institute of Technology.

Proposed Officer Compensation

Name and Principal Position	<i>Annual Salary</i>		
	1997	Bonus	Total Compensation
Ira Weinstein President/Chief Executive Officer	\$70,000	0	\$70,000
Vladimir Chenenko Vice President, Science	\$70,000	0	\$70,000
Di Patel Vice President, Technology	\$70,000	0	\$70,000

Name and Principal Position	<i>Annual Salary</i>		
	1997	Bonus	Total Compensation
Ira Weinstein President/Chief Executive Officer	\$70,000	0	\$70,000
Vladimir Chenenko Vice President, Science	\$70,000	0	\$70,000
Di Patel Vice President, Technology	\$70,000	0	\$70,000

Compensation Criteria

The proposed officer compensation represents less than a third of each principal's current annual income.

The U.S. Department of Labor's Occupational Compensation Survey reflects the average annual salaries for software development product managers as stated above.

Supporting Professionals & Consultants

Accountants/Auditors	Arthur Andersen Young 1 Big Six Way San Jose, California
Attorneys	Goodwin Procter Hoar and Co. 6 Filing Way San Jose, California
Public Relations	Sachi, Burns and Ogilvy 4 Publicity Dr. San Jose, California

Accountants/Auditors	Arthur Andersen Young 1 Big Six Way San Jose, California
Attorneys	Goodwin Procter Hoar and Co. 6 Filing Way San Jose, California
Public Relations	Sachi, Burns and Ogilvy 4 Publicity Dr. San Jose, California



Headcount Forecast

Department	Q1 1997	Q2 1997	Q3 1997	Q4 1997	1997
Consulting - Direct	0	0	0	0	0
Sales & Marketing	0	0	0	0	0
Research & Development	3	5	6	6	6
General & Administrative	6	7	7	7	7
	Q1 1998	Q2 1998	Q3 1998	Q4 1998	1998
Consulting - Direct	14	14	14	14	14
Sales & Marketing	1	7	7	7	7
Research & Development	6	9	9	9	9
General & Administrative	7	10	10	10	10
	Q1 1999	Q2 1999	Q3 1999	Q4 1999	1999
Consulting - Direct	19	19	19	19	19
Sales & Marketing	13	13	13	14	14
Research & Development	9	9	11	11	11
General & Administrative	24	24	27	27	27
	Q1 2000	Q2 2000	Q3 2000	Q4 2000	2000
Consulting - Direct	23	23	23	23	23
Sales & Marketing	19	19	21	21	21
Research & Development	11	12	12	12	12
General & Administrative	27	27	27	27	27
	Q1 2001	Q2 2001	Q3 2001	Q4 2001	2001
Consulting - Direct	23	23	23	23	23
Sales & Marketing	27	27	27	27	27
Research & Development	13	13	13	13	13
General & Administrative	27	27	27	27	27

Department	Q1 1997	Q2 1997	Q3 1997	Q4 1997	1997
Consulting - Direct	0	0	0	0	0
Sales & Marketing	0	0	0	0	0
Research & Development	3	5	6	6	6
General & Administrative	6	7	7	7	7
	Q1 1998	Q2 1998	Q3 1998	Q4 1998	1998
Consulting - Direct	14	14	14	14	14
Sales & Marketing	1	7	7	7	7
Research & Development	6	9	9	9	9
General & Administrative	7	10	10	10	10
	Q1 1999	Q2 1999	Q3 1999	Q4 1999	1999
Consulting - Direct	19	19	19	19	19
Sales & Marketing	13	13	13	14	14
Research & Development	9	9	11	11	11
General & Administrative	24	24	27	27	27
	Q1 2000	Q2 2000	Q3 2000	Q4 2000	2000
Consulting - Direct	23	23	23	23	23
Sales & Marketing	19	19	21	21	21
Research & Development	11	12	12	12	12
General & Administrative	27	27	27	27	27
	Q1 2001	Q2 2001	Q3 2001	Q4 2001	2001
Consulting - Direct	23	23	23	23	23
Sales & Marketing	27	27	27	27	27
Research & Development	13	13	13	13	13
General & Administrative	27	27	27	27	27



KEY RISKS/TIMELINE

Risk of Defects and Development Delays

TouchTop Technologies may experience schedule overruns in product and software development triggered by factors such as insufficient staffing or the unavailability of development-related software, hardware, components, materials, or technologies. Further, when developing new products, the company's development schedules may be altered as a result of the discovery of software bugs, performance problems, or changes to the product specification in response to customer requirements, market developments, or company initiated changes. Changes in product specifications may delay completion of documentation, packaging, or testing, which may, in turn, affect the release schedule of the product. When developing complex display devices, the technology market may shift during the development cycle requiring the company either to enhance or change a product's specifications to meet a customer's changing needs. These factors may cause a product to enter the market behind schedule, which may adversely affect market acceptance of the product or place it at a disadvantage to a competitor's product that has already gained market share or market acceptance during the delay.

As indicated in the Marketing, R&D and Enterprise sections of this plan, tests on the breadboard design of TouchTop's LEDCD and testing on its alpha version display driver and intelligent driver editing code considerably reduce the risk that development delays will occur.

Management of Growth

TouchTop Technologies anticipates rapid and substantial growth in the number of its employees and the scope of its operations, resulting in increased responsibilities for management and added pressure on the company's operating and financial systems. To manage growth effectively, TouchTop Technologies will need to continue to improve its operational, financial, and management information systems and will need to hire, train, motivate, and manage a growing number of employees. Competition is intense for qualified technical, marketing, and management personnel. There can be no assurance that TouchTop Technologies will be able to achieve or manage any future growth, and its failure to do so could delay product development cycles and marketing efforts or otherwise have a material adverse effect on TouchTop Technologies' business, financial condition, and results of operations.

TouchTop Technologies' founders have participated in a number of successful ventures. They have proven their ability to manage growth and take a product from cradle to grave, meeting the demands of rapid growth time and time again.

Competition

Because of the rapid expansion of the information display market, TouchTop Technologies will face competition from existing and new entrants, possibly including TouchTop Technologies' customers. There can be no assurance that the company's competitors will not develop information display products that may be more effective than TouchTop Technologies' current or future products or that the company's technologies and products would not be rendered obsolete by such developments.

Many of TouchTop Technologies' current and potential competitors have longer operating histories, greater name recognition, larger installed customer bases, and significantly greater financial, technical, and marketing resources than the company. As a result, they may be able to adapt more quickly to new or emerging technologies and changes in customer requirements, or to devote greater resources to the promotion and sale of their products than TouchTop Technologies. There can be no assurance that the company's customers will not perceive the products of such other companies as substitutes for TouchTop Technologies products.

As with most competitive software offerings, the principal competitive factors affecting the market for



information display include effectiveness, scope of product offerings, technical features, ease of use, reliability, customer service and support, name recognition, distribution resources, and cost. Current and potential competitors have established, or may establish in the future, strategic alliances to increase their ability to compete for TouchTop Technologies' prospective customers. Accordingly, it is possible that new competitors or alliances may emerge and rapidly acquire significant market share. Such competition could materially adversely affect the TouchTop Technologies' business, financial condition, and results of operations.

Management believes that this risk is significantly mitigated by the development life cycle for display technologies. As indicated in previous sections of this plan, all other known viable alternatives to LCD require significant capital expenditures and offer only marginal performance improvements.

Dependence on Key Personnel

TouchTop Technologies' success will depend, to a large extent, upon the performance of its founders and the senior management team and technical, marketing, and sales personnel the company will recruit in the early stages. There is shrewd competition in the software industry to hire and retain qualified personnel, and TouchTop Technologies will actively search for additional qualified personnel as the company grows. TouchTop Technologies' success will depend upon its ability to retain and hire additional key personnel. The loss of the services of key personnel, or the inability to attract additional qualified personnel, could have a material adverse effect upon the company's results of operations and product development efforts.

TouchTop Technologies currently plans to put \$700,000 "key man" life insurance policies on the lives of each of its founders. As the company grows, or if directed to do so by interested parties, this coverage will be increased appropriately.

Risk of Errors or Failures; Product Liability Risks

A malfunction or the inadequate design of products produced using TouchTop Technologies' LEDCD technology could result in tort or warranty claims. While the company will attempt to reduce the risk of such losses through warranty disclaimers and liability limitation clauses in its license agreements, and by maintaining product liability insurance, there can be no assurance that such measures will be effective in limiting TouchTop Technologies' liability for any such damages. The company currently intends to purchase product liability insurance and it may seek additional insurance coverage as it commences commercialization of its products. There can be no assurance that adequate additional insurance coverage will be available at an acceptable cost, if at all. More importantly, a publicized actual or perceived product defect could adversely affect the market's perception of TouchTop Technologies' products. This could result in a decline in demand for TouchTop Technologies' products, which could have a material adverse effect on the company's business, financial condition, and results of operations.

Liquidity and Capital Requirements; Dependence on First Round Financing and Cash Flow From Operations

TouchTop Technologies anticipates that its cash flows in from operations and cash generated from first round financing of approximately \$2.3 million will be adequate to satisfy its capital requirements based on the plan presented herein. TouchTop Technologies' future capital requirements, however, will depend on many factors, including its ability to successfully market and license its technology. To the extent that the funds generated by this offering and from TouchTop Technologies' ongoing operations are insufficient to fund TouchTop Technologies' future operating requirements (it may be necessary to raise additional funds, through public or private financing), could result in dilution to TouchTop Technologies' shareholders. If adequate capital is not available, TouchTop Technologies may be required to curtail its operations significantly.

These risks are not unique to TouchTop Technologies, Inc. However, the tentative agreement with NEEC to license TouchTop Technologies' LEDCD system significantly reduces this risk.



International Operations

A core component of TouchTop Technologies' development plan is overseas licensing of its technology. To the extent TouchTop Technologies expands international operations, currency fluctuations could make TouchTop Technologies' contribute to fluctuations in TouchTop Technologies' operating results. Political instability, difficulties in staffing and managing international operations also pose risks to the development of international development efforts. Moreover, the laws of Japan or Korea or the enforcement thereof, may not protect the TouchTop Technologies' products and intellectual property rights to the same extent as the laws of the United States. There can be no assurance that these factors will not have a material adverse effect on TouchTop Technologies' business, financial condition, and results of operations.

The risk of currency fluctuation is mitigated, to a large extent, by the company's intention to transact business in U.S. dollars.

Timeline

Milestone	Target Date	Status
Concept Development - Functional Specifications - LEDCD	Oct-93	Completed
Detailed Design - LEDCD	Jan-96	Completed
Breadboard	Feb-96	Completed
Functional Specifications - Display Driver Code	Feb-96	Completed
Functional Specifications - Intelligent Driver Editor	Feb-96	Completed
Detailed Design - Display Driver Code	Jun-96	Completed
Detailed Design - Intelligent Driver Editor	Jun-96	Completed
Testing - Display Driver Code and Intelligent Driver Editor	Jul-96	Completed
Tentative Commitment from NEEC	Mar-96	Completed
Detailed Design of Manufacturing Components/Retrofitting	Oct-96	In Process
1st Round Funding	Jan-97	Open
Full Scale Prototypes Constructed	Jun-97	Open
Testing, Q&A and Documentation	Sep-97	Open
Agreement with NEEC finalized \$25 million	Jan-98	Open
Two \$25 million Licenses Executed	Jan-99	Open
One \$50 million Licenses Executed	Jan-2000	Open
First Royalties Realized	Jan-99	Open
Next Generation Screen/Interface Development Completed	Sep-2001	Open

Milestone	Target Date	Status
Concept Development - Functional Specifications - LEDCD	Oct-93	Completed
Detailed Design - LEDCD	Jan-96	Completed
Breadboard	Feb-96	Completed
Functional Specifications - Display Driver Code	Feb-96	Completed
Functional Specifications - Intelligent Driver Editor	Feb-96	Completed
Detailed Design - Display Driver Code	Jun-96	Completed
Detailed Design - Intelligent Driver Editor	Jun-96	Completed
Testing - Display Driver Code and Intelligent Driver Editor	Jul-96	Completed
Tentative Commitment from NEEC	Mar-96	Completed
Detailed Design of Manufacturing Components/Retrofitting	Oct-96	In Process
1st Round Funding	Jan-97	Open
Full Scale Prototypes Constructed	Jun-97	Open
Testing, Q&A and Documentation	Sep-97	Open
Agreement with NEEC finalized \$25 million	Jan-98	Open
Two \$25 million Licenses Executed	Jan-99	Open
One \$50 million Licenses Executed	Jan-2000	Open
First Royalties Realized	Jan-99	Open
Next Generation Screen/Interface Development Completed	Sep-2001	Open



PROSPECTIVE FINANCIALS

Summary of Significant Assumptions and Accounting Policies Employed in Preparation of Projected Financial Statements

Assuming Equity Financing of Approximately \$2.3 million January 1, 1997 For Each Year in the Five-Year Period Ending December 31, 2001

This financial projection of financial position, results of operations, and cash flow, assuming equity financing of approximately \$2.3 million on January 1, 1997, represents to the best of management's belief, the expected results of operations and cash flow for the projection period if said alternative were to commence on or about January 1, 1997. Accordingly, the projection reflects management's judgment as of August 15, 1996, the date of this projection, of the expected conditions and its expected course of action. The assumptions disclosed herein are those that management believes are significant to the projection. There will usually be differences between projected and actual results, because event and circumstances frequently do not occur as expected, and those differences may be material.

a. Summary of Significant Accounting Policies.

Basis of Accounting—The projection has been prepared using generally accepted accounting principles that the company expects to use when preparing its historical financial statements.

Hypothetical Assumption—Equity Financing of Approximately \$2.3 million in the Form of Convertible Preferred Stock.

b. Sales. The company's revenue projection by class is as follows:

Projected Number of Units

Revenue Classification	Revenue per Unit	Average (000's)		December 31 (000's omitted)*		
		1997	1998	1999	2000	2001
License 1 revenue	\$20,000/Lic.	0	1	2	0	0
License 2 revenue	\$50,000/Lic.	0	0	0	1	1
Royalty revenue	\$0.25/Sq. Inc.	0	0	12,041	63,432	134,122
Service revenue	\$250/Hour	0	11	37	27	20

*except licenses

	Average (000's)			December 31 (000's omitted)*		
Revenue Classification	Revenue per Unit	1997	1998	1999	2000	2001
<i>*except licenses</i>						
License 1 revenue	\$20,000/Lic.	0	1	2	0	0
License 2 revenue	\$50,000/Lic.	0	0	0	1	1
Royalty revenue	\$0.25/Sq. Inc.	0	0	12,041	63,432	134,122
Service revenue	\$250/Hour	0	11	37	27	20

The company's revenues will be derived from license fees, royalties, and charges for services, including consulting and maintenance support. For all prospective periods presented, the company has projected revenue recognition in accordance with Statement of Position 91-1 entitled "Software Revenue Recognition," dated December 12, 1991, issued by the American Institute of Certified Public Accountants. License fee revenues consist of revenues from initial licenses for the company's products, sales of licenses to existing customers for additional users of the company's products, product documentation and fees from sublicenses of third-party software products. The company will recognize initial license fee revenues only after delivery and installation of software products and if there are no remaining significant post-installation obligations. If significant post-installation obligations exist or if a product is subject to customer acceptance, revenues will be deferred until no significant obligations remain or until acceptance has occurred. Service revenues will consist primarily of maintenance support and consulting revenues. Maintenance support revenues will be recognized over the term of the support period, which typically will be a twelve-month period. Consulting revenues will be recognized when the services are performed.



Failure of these assumptions to materialize will likely have a material adverse effect on actual results. Therefore, the prospective results of the company are sensitive to differences between actual and projected sales. Specifically, a 1% drop in actual sales will result in a 0.57%, and a 4.41% drop in pretax earnings for years ending 1998 and 1999 respectively.

c. Cost of Sales.

Cost of Product Revenue. Cost of product revenue consists primarily of the costs of royalties paid to third-party vendors, product media and duplication, manuals, packaging materials, personnel-related costs, and shipping expenses. Because all development costs incurred in the research and development of software products and enhancements to existing software products will be expressed as incurred, cost of product revenue includes no amortization of capitalized software development costs.

Cost of Maintenance and Service Revenue. Cost of maintenance and service revenue consists primarily of personnel-related costs incurred in providing telephone support, consulting, and training to customers. The primary component of the cost of sales is labor. Skilled, professional personnel used directly in the company's operations are expected to be readily available, and the company has generally used higher average cost of sales estimates based on industry reports of companies of similar size in the software development industry and per the Department of Labor's Occupational Compensation Survey.

d. Property and Equipment.

Property and equipment are stated at projected cost.

Projected depreciation and amortization are computed under the straight-line method in amounts that allocate the cost of all assets over the following estimated useful lives:

Asset Classification	Useful Life	Projected Additions December 31 (000's omitted)				
		1997	1998	1999	2000	2001
Computer Equipment	3	90	500	250	750	450
Purchased Software	5	90	250	500	750	500
Furniture & Fixtures	7	70	100	0	200	250
Leasehold Improvements	Lease Term-7	50	80	200	300	400
Total Additions		300	930	950	2,000	1,600

Asset Classification	Useful Life	Projected Additions December 31 (000's omitted)				
		1997	1998	1999	2000	2001
Computer Equipment	3	90	500	250	750	450
Purchased Software	5	90	250	500	750	500
Furniture & Fixtures	7	70	100	0	200	250
Leasehold Improvements	Lease Term-7	50	80	200	300	400
Total Additions		300	930	950	2,000	1,600

e. Selling and Marketing Expenses. The principal types of expenses within this category are salaries, promotion, and professional services. Salaries are projected on an individual-by-individual basis, using expected salary rates throughout the projection period. Promotion expense is projected at 12% of revenue throughout the projection period. This percentage is significantly higher than that of similar companies in comparable industries. Professional services are projected at \$3,000 per marketing employee per month.

f. Research and Development Costs. The principal types of expenses within this category are salaries, rent, telephone, travel, supplies, and professional services. Salaries are projected on an individual-by-individual basis, using expected salary rates throughout the projection period. Rent expense was determined by comparing the company quoted local market rates with additional space requirements according to Time Saver Standards for Building Types. Insurance, telephone, supplies, and professional services were projected on a per employee basis at rates \$100, \$125, \$220, and \$80 per employee respectively. Generally, management expects to charge research and development expenditures to operations as incurred, in accordance with Statement of Financial Standards No. 86. SAS 86 requires capitalization of certain software development costs subsequent to



establishing technological feasibility. Therefore, the company will capitalize eligible computer software development costs upon completion of a working model. For the projection periods presented, no costs were eligible for capitalization, therefore, the company charged all software development costs to research and development expense.

g. General and Administrative Expenses. The principal types of expenses within this category are salaries, facilities and occupancy, travel, professional services, and insurance. Salaries are projected on an individual-by-individual basis, using expected salary rates throughout the projection period. Facilities expense was determined by comparing the company quoted local market rates with additional space requirements according to Time Saver Standards for Building Types. Supplies expense is projected at \$275 per administrative employee per month. Professional services are projected at \$120,000 for 1997 and 0.75% of revenue thereafter. Insurance under the G&A caption primarily reflects the company's expected costs for property, liability, and casualty insurance and is consistent with industry norms for similar firms. The prospective results of the company are sensitive to differences between actual and projected selling and marketing, system, and general administrative expense, excluding depreciation. Specifically, a 1% increase in the actual operating expenses experienced, will result in a 0.48% drop in pretax earnings in 1999.

h. Bank Credit Facility. The projections assume that TouchTop Technologies, Inc. will pay cash for all additions to property and equipment. The company's interest in property and equipment is expected to act as a borrowing base to secure a line of credit in 1998 in the amount of \$100,000. As the company grows, this amount is expected to increase.

i. Nominal rate of 8.5%. Differences between the nominal and effective rates are expected to be immaterial.

j. Miscellaneous Income. The forecast assumes that excess cash is invested at market rates of approximately 4%.

k. Accounts Receivable. The forecast assumes that proceeds from license agreements, royalty settlements, and payments for consulting services are collected within 40 days.

l. Responsible Party. The projections herein are the responsibility of the officers and founders of TouchTop Technologies, Inc. as identified in this business plan, and, to the best of management's knowledge and belief, are in conformity with generally accepted accounting principles. The company believes all of the assumptions underlying the projections are reasonable and appropriate. Management further states that these projections were not compiled or examined by independent public accountant and should not be viewed as if so compiled or examined.

Projected Balance Sheet

Assuming Equity Financing of Approximately \$2.3 million on January 1, 1997

For Each of the Five Years Ending December 31, 2001

ASSETS	1997	1998	1999	2000	2001
Current assets:					
Cash and equivalents	\$583,606	\$3,939,643	\$18,834,292	\$31,199,617	\$47,965,445
Marketable securities	0	5,000,000	15,000,000	30,000,000	50,000,000
Accounts receivable	0	370,333	1,265,667	3,546,470	4,494,598
Total Current assets	583,606	9,309,976	35,099,959	64,746,087	102,460,043
Property, plant, and equipment:					
Purchased software	90,000	340,000	840,000	1,590,000	2,090,000
Computer equipment	90,000	590,000	840,000	1,590,000	2,040,000
Furniture and fixtures	70,000	170,000	170,000	370,000	620,000
Leasehold improvements	50,000	130,000	330,000	630,000	1,030,000
Total property, plant, and equipment	300,000	1,230,000	2,180,000	4,180,000	5,780,000
Less Accumulated depreciation	60,166	325,594	849,023	1,809,881	3,036,928
Net Property, plant, and equipment	239,834	900,406	1,330,977	2,370,119	2,743,072
Total assets	\$823,440	\$10,210,382	\$36,430,936	\$67,116,206	\$105,203,115

ASSETS	1997	1998	1999	2000	2001
Current assets:					



ASSETS	1997	1998	1999	2000	2001
Cash and equivalents	\$583,606	\$3,939,643	\$18,834,292	\$31,199,617	\$47,965,445
Marketable securities	0	5,000,000	15,000,000	30,000,000	50,000,000
Accounts receivable	0	370,333	1,265,667	3,546,470	4,494,598
Total Current assets	583,606	9,309,976	35,099,959	64,746,087	102,460,043
Property, plant, and equipment:					
Purchased software	90,000	340,000	840,000	1,590,000	2,090,000
Computer equipment	90,000	590,000	840,000	1,590,000	2,040,000
Furniture and fixtures	70,000	170,000	170,000	370,000	620,000
Leasehold improvements	50,000	130,000	330,000	630,000	1,030,000
Total property, plant, and equipment	300,000	1,230,000	2,180,000	4,180,000	5,780,000
Less Accumulated depreciation	60,166	325,594	849,023	1,809,881	3,036,928
Net Property, plant, and equipment	239,834	900,406	1,330,977	2,370,119	2,743,072
Total assets	\$823,440	\$10,210,382	\$36,430,936	\$67,116,206	\$105,203,115

	1997	1998	1999	2000	2001
LIABILITIES					
Current liabilities:					
Accounts payable	50,259	140,202	312,992	640,920	777,714
Total current liabilities	50,259	140,202	312,992	640,920	777,714
EQUITY					
Owner's equity:					
Contributed capital:					
Preferred stock	10,000	10,000	10,000	10,000	10,000
Additional paid-in capital - preferred	2,290,000	2,290,000	2,290,000	2,290,000	2,290,000
Common stock	1,000	1,000	1,000	1,000	1,000
Total contributed capital	2,301,000	2,301,000	2,301,000	2,301,000	2,301,000
Retained earnings	1,527,819	7,769,180	33,816,944	64,174,286	102,124,401
Net Owners' equity	773,181	10,070,180	36,117,944	66,475,286	104,425,401
Total liabilities and equity	\$823,440	\$10,210,382	\$36,430,936	\$67,116,206	\$105,203,115

	1997	1998	1999	2000	2001
LIABILITIES					
Current liabilities:					
Accounts payable	50,259	140,202	312,992	640,920	777,714
Total current liabilities	50,259	140,202	312,992	640,920	777,714
EQUITY					
Owner's equity:					
Contributed capital:					
Preferred stock	10,000	10,000	10,000	10,000	10,000
Additional paid-in capital - preferred	2,290,000	2,290,000	2,290,000	2,290,000	2,290,000
Common stock	1,000	1,000	1,000	1,000	1,000
Total contributed capital	2,301,000	2,301,000	2,301,000	2,301,000	2,301,000
Retained earnings	1,527,819	7,769,180	33,816,944	64,174,286	102,124,401
Net Owners' equity	773,181	10,070,180	36,117,944	66,475,286	104,425,401
Total liabilities and equity	\$823,440	\$10,210,382	\$36,430,936	\$67,116,206	\$105,203,115

Expense Detail, Chart I

Assuming Equity Financing of Approximately \$2.3 million on January 1, 1997 For Each of the Five Years Ending December 31, 2001



Sales	1997	1998	1999	2000	2001
Gross sales:					
License revenue	\$0	\$20,000,000	\$50,000,000	\$50,000,000	\$50,000,000
Support revenue	0	2,777,500	9,165,750	6,666,000	4,999,500
Royalty revenue	0	0	3,010,292	15,857,939	33,530,224
Total Revenue	0	22,777,500	62,176,042	72,523,939	88,529,724
Cost of sales	0	1,468,499	2,528,601	3,142,051	3,261,376
Gross margin	0	21,309,001	59,647,441	69,381,888	85,268,348
Operating expenses:					
Sales & Marketing	0	4,503,393	12,049,966	14,888,936	19,045,587
Research & Development	756,971	1,102,069	3,040,423	3,334,028	3,480,840
General and Admin.	872,864	1,667,169	2,751,884	3,526,671	4,069,650
Total Operating expenses	1,629,835	7,272,631	17,842,273	21,746,635	26,596,077
Income from operations	1,629,835	14,036,370	41,805,168	47,632,253	58,672,271
Earnings before interest and taxes	1,629,835	14,036,370	41,805,168	47,632,253	58,672,271
Interest expense (income):					
Interest expense	708	45,994	2,664	27,996	69,336
Interest income	102,724	545,973	2,379,945	3,888,137	5,768,388
Net interest expense (income)	102,016	499,979	2,377,281	3,860,141	5,699,052

Sales	1997	1998	1999	2000	2001
Gross sales:					
License revenue	\$0	\$20,000,000	\$50,000,000	\$50,000,000	\$50,000,000
Support revenue	0	2,777,500	9,165,750	6,666,000	4,999,500
Royalty revenue	0	0	3,010,292	15,857,939	33,530,224
Total Revenue	0	22,777,500	62,176,042	72,523,939	88,529,724
Cost of sales	0	1,468,499	2,528,601	3,142,051	3,261,376
Gross margin	0	21,309,001	59,647,441	69,381,888	85,268,348
Operating expenses:					
Sales & Marketing	0	4,503,393	12,049,966	14,888,936	19,045,587
Research & Development	756,971	1,102,069	3,040,423	3,334,028	3,480,840
General and Admin.	872,864	1,667,169	2,751,884	3,526,671	4,069,650
Total Operating expenses	1,629,835	7,272,631	17,842,273	21,746,635	26,596,077
Income from operations	1,629,835	14,036,370	41,805,168	47,632,253	58,672,271
Earnings before interest and taxes	1,629,835	14,036,370	41,805,168	47,632,253	58,672,271
Interest expense (income):					
Interest expense	708	45,994	2,664	27,996	69,336
Interest income	102,724	545,973	2,379,945	3,888,137	5,768,388
Net interest expense (income)	102,016	499,979	2,377,281	3,860,141	5,699,052

	1997	1998	1999	2000	2001
Net income before taxes	1,527,819	14,536,349	44,182,449	51,492,394	64,371,323
Taxes:					
Federal taxes	0	4,029,557	14,025,717	16,346,259	20,434,675
State taxes	0	1,209,793	4,108,968	4,788,793	5,986,533
Total taxes	0	5,239,350	18,134,685	21,135,052	26,421,208
Net income	\$1,527,819	\$9,296,999	\$26,047,764	\$30,357,342	\$37,950,115

	1997	1998	1999	2000	2001
Net income before taxes	1,527,819	14,536,349	44,182,449	51,492,394	64,371,323
Taxes:					
Federal taxes	0	4,029,557	14,025,717	16,346,259	20,434,675
State taxes	0	1,209,793	4,108,968	4,788,793	5,986,533
Total taxes	0	5,239,350	18,134,685	21,135,052	26,421,208
Net income	\$1,527,819	\$9,296,999	\$26,047,764	\$30,357,342	\$37,950,115



Operating Expenses

Statement of Projected Results of Operations-Common Size

Assuming Equity Financing of Approximately \$2.3 million on January 1, 1997

For Each of the Five Years Ending December 31, 2001

Operating expenses:	1997	1998	1999	2000	2001
Sales & Marketing:					
Salaries	NM	2.7%	2.5%	3.3%	3.9%
Benefits	NM	0.7%	0.6%	0.8%	0.9%
Telephone	NM	1.0%	1.0%	1.0%	1.0%
Supplies	NM	1.5%	1.5%	1.5%	1.5%
Travel	NM	0.7%	0.7%	0.7%	0.7%
Promotion	NM	12.0%	12.0%	12.0%	12.0%
Professional services	NM	0.9%	0.8%	0.9%	1.1%
Miscellaneous expenses	NM	0.3%	0.3%	0.4%	0.4%
Total Sales & Marketing	NM	19.8%	19.4%	20.5%	21.5%
Research & Development:					
Salaries	NM	3.2%	3.4%	3.2%	2.8%
Benefits	NM	0.9%	0.9%	0.8%	0.7%
Insurance	NM	0.0%	0.0%	0.0%	0.0%
Telephone	NM	0.1%	0.1%	0.1%	0.0%
Supplies	NM	0.1%	0.1%	0.1%	0.1%
Travel	NM	0.4%	0.2%	0.2%	0.2%
Professional services	NM	0.0%	0.0%	0.0%	0.0%
Miscellaneous expenses	NM	0.1%	0.1%	0.1%	0.1%
Total Research & Development	NM	4.8%	4.9%	4.6%	3.9%
General & Administrative:					
Salaries	NM	1.9%	0.9%	1.0%	0.9%
Benefits	NM	0.6%	0.3%	0.3%	0.3%
Rent	NM	1.0%	0.6%	0.5%	0.4%
Insurance	NM	0.4%	0.3%	0.2%	0.2%
Utilities	NM	0.2%	0.1%	0.1%	0.1%
Telephone	NM	0.3%	0.1%	0.1%	0.1%
Supplies	NM	0.1%	0.1%	0.1%	0.1%
Travel	NM	0.6%	0.3%	0.3%	0.3%
Professional services	NM	0.8%	0.8%	0.8%	0.8%
Depreciation	NM	1.2%	0.8%	1.3%	1.4%
Miscellaneous expenses	NM	0.3%	0.3%	0.3%	0.3%
Total General & Administrative	NM	7.3%	4.4%	4.9%	4.6%

Operating expenses:	1997	1998	1999	2000	2001
Sales & Marketing:					
Salaries	NM	2.7%	2.5%	3.3%	3.9%
Benefits	NM	0.7%	0.6%	0.8%	0.9%
Telephone	NM	1.0%	1.0%	1.0%	1.0%
Supplies	NM	1.5%	1.5%	1.5%	1.5%
Travel	NM	0.7%	0.7%	0.7%	0.7%
Promotion	NM	12.0%	12.0%	12.0%	12.0%
Professional services	NM	0.9%	0.8%	0.9%	1.1%
Miscellaneous expenses	NM	0.3%	0.3%	0.4%	0.4%
Total Sales & Marketing	NM	19.8%	19.4%	20.5%	21.5%
Research & Development:					
Salaries	NM	3.2%	3.4%	3.2%	2.8%
Benefits	NM	0.9%	0.9%	0.8%	0.7%
Insurance	NM	0.0%	0.0%	0.0%	0.0%
Telephone	NM	0.1%	0.1%	0.1%	0.0%
Supplies	NM	0.1%	0.1%	0.1%	0.1%
Travel	NM	0.4%	0.2%	0.2%	0.2%
Professional services	NM	0.0%	0.0%	0.0%	0.0%
Miscellaneous expenses	NM	0.1%	0.1%	0.1%	0.1%
Total Research &	NM	4.8%	4.9%	4.6%	3.9%



Operating expenses: 1997 1998 1999 2000 2001

Development

General & Administrative:

Salaries	NM	1.9%	0.9%	1.0%	0.9%
Benefits	NM	0.6%	0.3%	0.3%	0.3%
Rent	NM	1.0%	0.6%	0.5%	0.4%
Insurance	NM	0.4%	0.3%	0.2%	0.2%
Utilities	NM	0.2%	0.1%	0.1%	0.1%
Telephone	NM	0.3%	0.1%	0.1%	0.1%
Supplies	NM	0.1%	0.1%	0.1%	0.1%
Travel	NM	0.6%	0.3%	0.3%	0.3%
Professional services	NM	0.8%	0.8%	0.8%	0.8%
Depreciation	NM	1.2%	0.8%	1.3%	1.4%
Miscellaneous expenses	NM	0.3%	0.3%	0.3%	0.3%
Total General & Administrative	NM	7.3%	4.4%	4.9%	4.6%

	1997	1998	1999	2000	2001
Total Operating expenses	NM	31.9%	28.7%	30.0%	30.0%
Total Taxes	0.00%	23.0%	29.2%	29.1%	29.8%
Net income	N/A	40.8%	41.9%	41.9%	42.9%

	1997	1998	1999	2000	2001
Total Operating expenses	NM	31.9%	28.7%	30.0%	30.0%
Total Taxes	0.00%	23.0%	29.2%	29.1%	29.8%
Net income	N/A	40.8%	41.9%	41.9%	42.9%

Statement of Projected Cash Flow

Statement of Projected Results of Operations

Assuming Equity Financing of Approximately \$2.3 million on January 1, 1997

For Each of the Five Years Ending December 31, 2001



	1997	1998	1999	2000	2001
Cash flows from operating activities:					
Net income	(\$1,527,819)	\$9,296,999	\$26,047,764	\$30,357,342	\$37,950,115
Reconciliation of net income to cash from operations:					
Depreciation and amortization	60,166	269,428	519,429	960,858	1,227,047
Gains and losses on sale of assets	0	0	0	0	0
Changes in operating assets and liabilities:					
Accounts receivable	0	-370,333	-895,334	-2,280,803	-948,128
Accounts payable	50,259	89,943	172,790	327,928	136,794
Total changes in operating assets and liabilities	50,259	-280,390	-722,544	-1,952,875	-811,334
Net cash provided (used) by operations	-1,417,394	9,286,037	25,844,679	29,365,325	38,365,828
Cash from investing activities:					
(Purchases) sales of investments	0	-5,000,000	-10,000,000	-15,000,000	-20,000,000
Purchases of property, plant, and equipment	-300,000	-930,000	-950,000	-2,000,000	-1,600,000
Total cash from investing activities	-300,000	-5,930,000	-10,950,000	-17,000,000	-21,600,000
Cash from financing activities:					
Issuance (Retirement) of stock:					
Change in preferred stock	10,000	0	0	0	0
Change in additional paid-in capital - preferred	2,290,000	0	0	0	0
Change in common stock	1,000	0	0	0	0
Total issuance (Retirement) of stock	2,301,000	0	0	0	0
Total cash from financing activities	2,301,000	0	0	0	0
Net increase (decrease) in cash and equivalents	\$83,606	3,356,037	14,894,649	12,365,325	16,765,828
Cash and equivalents, beginning	0	\$83,606	3,939,643	18,834,292	31,199,617
Cash and equivalents, ending	\$83,606	\$3,939,643	\$18,834,292	\$31,199,617	\$47,965,445

Cash flows from	1997	1998	1999	2000	2001
operating activities:					
Net income	(\$1,527,819)	\$9,296,999	\$26,047,764	\$30,357,342	\$37,950,115
Reconciliation of net income to cash from operations:					
Depreciation and amortization	60,166	269,428	519,429	960,858	1,227,047
Gains and losses on sale of assets	0	0	0	0	0
Changes in operating assets and liabilities:					
Accounts receivable	0	-370,333	-895,334	-2,280,803	-948,128
Accounts payable	50,259	89,943	172,790	327,928	136,794
Total changes in operating assets and liabilities	50,259	-280,390	-722,544	-1,952,875	-811,334
Net cash provided (used) by operations	-1,417,394	9,286,037	25,844,679	29,365,325	38,365,828
Cash from investing activities:					
(Purchases) sales of investments	0	-5,000,000	-10,000,000	-15,000,000	-20,000,000
Purchases of property, plant, and equipment	-300,000	-930,000	-950,000	-2,000,000	-1,600,000
Total cash from investing activities	-300,000	-5,930,000	-10,950,000	-17,000,000	-21,600,000
Cash from financing activities:					
Issuance (Retirement) of stock:					
Change in preferred stock	10,000	0	0	0	0
Change in additional paid-in capital - preferred	2,290,000	0	0	0	0
Change in common stock	1,000	0	0	0	0
Total issuance (Retirement) of stock	2,301,000	0	0	0	0
Total cash from financing activities	2,301,000	0	0	0	0



Cash flows from	1997	1998	1999	2000	2001
Net increase (decrease) in cash and equivalents	583,606	3,356,037	14,894,649	12,365,325	16,765,828
Cash and equivalents, beginning	0	583,606	3,939,643	18,834,292	31,199,617
Cash and equivalents, ending	\$583,606	\$3,939,643	\$18,834,292	\$31,199,617	\$47,965,445

Expense Detail, Chart II

Assuming Equity Financing of Approximately \$2.3 million For Each of the Five Years Ending December 31, 2001

Assuming Equity Financing of Approximately \$2.3 million
For Each of the Five Years Ending December 31, 2001

Operating expenses:	1997	1998	1999	2000	2001
Sales & Marketing:					
Salaries	0	612,720	1,576,968	2,364,291	3,487,424
Benefits	0	151,293	367,040	547,607	791,245
Telephone	0	227,780	621,760	725,241	885,298
Supplies	0	341,660	932,640	1,087,859	1,327,946
Travel	0	159,440	435,233	507,667	619,707
Promotion	0	2,733,300	7,461,125	8,702,871	10,623,567
Professional services	0	198,000	468,000	681,000	936,000
Miscellaneous expenses	0	79,200	187,200	272,400	374,400
Total Sales & Marketing	0	4,503,393	12,049,966	14,888,936	19,045,587
Research & Development:					
Salaries	492,600	729,882	2,139,708	2,349,612	2,443,620
Benefits	138,587	206,665	571,004	612,722	628,830
Insurance	8,100	11,100	30,600	32,400	32,400
Telephone	10,125	13,875	38,250	40,500	40,500
Supplies	17,820	24,420	67,320	71,280	71,280
Travel	67,059	85,047	107,361	136,794	173,490
Professional services	6,480	8,880	24,480	25,920	25,920
Miscellaneous expenses	16,200	22,200	61,200	64,800	64,800
Total Research & Development	756,971	1,102,669	3,040,423	3,334,028	3,480,840
General & Administrative:					
Salaries	290,988	438,728	550,965	692,094	753,072
Benefits	88,060	137,703	172,717	207,794	226,444
Rent	120,000	230,000	350,000	350,000	350,000
Insurance	35,000	80,000	160,000	160,000	160,000
Utilities	18,000	34,500	52,500	52,500	52,500
Telephone	37,700	63,700	78,650	91,650	99,450
Supplies	15,950	26,950	33,275	38,775	42,075
Travel	87,000	147,000	181,500	211,500	229,500
Professional services	120,000	170,830	466,320	543,930	663,973
Depreciation	60,166	269,428	519,429	960,858	1,227,047
Miscellaneous expenses	0	68,330	186,528	217,570	265,589
Total General & Administrative	872,864	1,667,169	2,751,884	3,526,671	4,069,680
Total Operating Expenses	1,629,835	7,272,631	17,842,273	21,749,635	26,596,077

Operating expenses:	1997	1998	1999	2000	2001
Sales & Marketing:					
Salaries	0	612,720	1,576,968	2,364,291	3,487,424
Benefits	0	151,293	367,040	547,607	791,245
Telephone	0	227,780	621,760	725,241	885,298
Supplies	0	341,660	932,640	1,087,859	1,327,946
Travel	0	159,440	435,233	507,667	619,707
Promotion	0	2,733,300	7,461,125	8,702,871	10,623,567
Professional services	0	198,000	468,000	681,000	936,000
Miscellaneous expenses	0	79,200	187,200	272,400	374,400
Total Sales & Marketing	0	4,503,393	12,049,966	14,888,936	19,045,587
Research & Development:					
Salaries	492,600	729,882	2,139,708	2,349,612	2,443,620
Benefits	138,587	206,665	571,004	612,722	628,830
Insurance	8,100	11,100	30,600	32,400	32,400
Telephone	10,125	13,875	38,250	40,500	40,500
Supplies	17,820	24,420	67,320	71,280	71,280



Operating expenses:	1997	1998	1999	2000	2001
Travel	67,059	85,047	107,861	136,794	173,490
Professional services	6,480	8,880	24,480	25,920	25,920
Miscellaneous expenses	16,200	22,200	61,200	64,800	64,800
Total Research & Development	756,971	1,102,069	3,040,423	3,334,028	3,480,840
General & Administrative:					
Salaries	290,988	438,728	550,965	692,094	753,072
Benefits	88,060	137,703	172,717	207,794	226,444
Rent	120,000	230,000	350,000	350,000	350,000
Insurance	35,000	80,000	160,000	160,000	160,000
Utilities	18,000	34,500	52,500	52,500	52,500
Telephone	37,700	63,700	78,650	91,650	99,450
Supplies	15,950	26,950	33,275	38,775	42,075
Travel	87,000	147,000	181,500	211,500	229,500
Professional services	120,000	170,830	466,320	543,930	663,973
Depreciation	60,166	269,428	519,429	960,858	1,227,047
Miscellaneous expenses	0	68,330	186,528	217,570	265,589
Total General & Administrative	872,864	1,667,169	2,751,884	3,526,671	4,069,650
Total Operating Expenses	1,629,835	7,272,631	17,842,273	21,749,635	26,596,077