CSC 454F

Business Plan v.2

The PeopleFinder

PeopleFinder Technologies

November 3, 1997

Group Members:
Allan Livingston
Effi Ofer
Saif Syed
Derek Truong
Robertson Velez

Table of Contents

1. Executive Summary

The tourist and entertainment business is a multi-billion dollar industry. A large portion of this money is spent on providing for the security of the visitors, but people still have the common problem of losing their companions or their children within a crowded area. This problem presents an opportunity for the *PeopleFinder* system to provide a solution which quickly and safely determines each visitor's location.

The Radio Frequency Identification (RFID) technology, which is utilized in the *PeopleFinder* system, has been available for many years, but only recently has the market matured enough to present a potential for profit. The technology involves utilizing radio waves in a system to track button-sized tags. These buttons, when given to visitors, transmit information that is picked up by receiver systems (RFID Interrupters). By deciphering the signals, our proprietary software system is capable of pinpointing the location of each visitor.

The market for the *PeopleFinder* system is quite large. The long-term strategy involves selling the product to companies who manage amusement parks, museums and malls. This service is similar to what is offered by companies who provide surveillance system services.

We wish to raise a sum of $1,400,000 through venture capital. This fund will be sufficient to carry the company through the first year of operation to production and profitability.

By the end of the first year the return on investment will be 40% compounded yearly, by the end of the third year. The return will be paid in yearly installments, with the majority being paid in the third year. It is demonstrated in the financial section that the dividends paid during the second and third year are quite substantial and justify the initial investment.

2. The Company

2.1 Mission Statement

Our mission is to be the quality, technical, and service leader for the amusement park tourist monitoring industry with the *PeopleFinder* system, and to be earning annual revenues of $10,000,000 by the year 2000.

2.2 Objectives

2.2.1 Short Term

The short term objectives of PeopleFinder Technologies is to penetrate the Canadian and northeastern United States market with the PeopleFinder system. The Paramount Wonderland theme parks are the first intended targets for sales, especially the Canada's Wonderland park in Toronto.

We are aiming to have three systems installed in 1998 and ten in 1999. A major portion of the profits will be used to pay off portions of venture capital. Company size will remain relatively constant, with a shift in focus towards sales in the second year. The primary objective in the first year will be to develop the software and deploy three systems.

2.2.2 Long Term

The long term goals of the company include gaining the greater United States amusement park market, as well as branching out into Europe and Asia. As the amusement park industry becomes saturated, we will shift focus towards smaller tourist areas, such as museums and exhibitions, as well as schools. We expect to be earning annual revenues of $10,000,000 by the year 2000.

By providing superior service and completely integrated systems, and having a head start on competition, we hope to create a barrier to entry for competitors. Our reputation will allow us to penetrate smaller markets with scaled-down versions of the PeopleFinder System. This shift in market focus, will allow us to keep high revenues, as the amusement park market saturates.

In the long-term, the company size will increase in proportion with the number of sales per year. Additional sales support will be added after the third year, because of the increased number of sales expected in a larger international market. The research and development department may also expand, in order to accommodate the design work and customization required for each park. However, company size should stabilize to a number of employees no greater than 20, by the year 2002. We expect annual revenues to remain at a constant level thereafter.

2.3 The Management Team

The current management team consists of five engineers with diverse backgrounds in the software and hardware industry.

Roberston Velez, a masters student in Computer Engineering, has worked for ATI Technologies Inc. for the past two years, where he has gained experience in research and development of both software and hardware. This blend of experience makes Mr. Velez the suitable choice for Manager of the Research and Development Department of PeopleFinder Technologies. Efi Ofer and Derek

Truong, also masters students in Computer Engineering, have several years of software development experience at IBM, and will work under Mr. Velez, to complete the R&D team.

In addition Mr. Ofer's financial experience in a number of business-related school courses, will allow him to serve as chief financial officer for PeopleFinder Technologies.

Currently, the management team lacks an experienced salesperson, with knowledge of the amusement park industry. As discussed in the Selling section below, we intend to hire a qualified person, before commencing the first project. We are willing to offer an initial salary of $60,000, which will increase to $100,000 by the second year. In addition, there will be lucrative commissions available for each sale, as shown in the Financial section below. Hence, we are confident that we can attract a well-qualified salesperson within the next two months.

Allan Livingston and Saif Syed both completed their Bachelors in Electrical Engineering at the University of Waterloo. Mr. Livingston's industry experience includes working for several computer consulting firms, including Fulcrum Technologies and OpenText, in providing custom software solutions based on customer needs. Mr. Syed has worked for small consulting firms in the Cayman Islands and Toronto, over the past couple of years. Several projects involved negotiating sales with clients, which has given Mr. Syed experience in selling issues. Because of their sales experience, Mr. Livingston and Mr. Syed will assist the above-mentioned salesperson, providing technical support and expertise required in making sales.

3. Markets and Competition

3.1 Present Market

There are an estimated 700 (NOTE: source?) number of amusement parks in Canada. During normal days, many of these amusement parks have large numbers of customers visiting the premises. But on special occasions like Canada Day, or the start of summer vacation, these regularly busy places become saturated with people.

In such a hectic environment, it's not hard to imagine a child can easily be separated from their parents or a group of friends can be separated from each other. For parents, the anxiety associated with the fear of losing a child within the crowd could make the visit an unpleasant experience. For a group of friends, the waste of time trying to find one another could make the visit extremely frustrating.

Currently, there are very primitive and rather ineffective methods which try to address this problem. For example, at paramount Canada's Wonderland, there is a guest-services that can be contacted whenever someone is lost. The security staff is then asked to search for the individual thorough the park. This approach falls sort for a couple of reasons. Firstly, the park is huge and filled with people. It's hard to search the park thoroughly without an army of security guards. Secondly, this process takes a long time. You can imagine a parent's worry as minutes turn to hours.

To prove that a need for such a device exists, we have surveyed parents of children between the ages of four to nine and found that majority claim they would be willing to rent such a device. When asked how much they are willing to spend, 50% were willing to spend up to $5.

<Dear Philip, we have actually only talked to about half a dozen parents. Is this a large enough sample for the purposes of this course?>

3.2 User Benefit

The PeopleFinder system is going to be sold to amusement parks. The parks in turn will allow visitors to rent the devices. We therefore consider amusement parks as our customers, while the users are the people who actually use the devices. For a customer like Wonderland, this system can increase revenue in two ways. The primary benefit comes from the rental fees that the park can charge for use of the system. As will be shown in the financial section, the cost of the device can be recovered within a year of operation, after which the devices are cost free and represent a cash cow for the parks.

A second customer benefit is going to be developed after these devices become established. Customers will start demanding this service because of the increased feeling of security. Parks such as Canada's Wonderland will have no choice but to offer these services if they wish to remain compete amusement locations.

3.3 Market, Near-Term and Long-Term

The PeopleFinder system will be sold in medium and large amusement parks. Small, mom and pop, park operations will not benefit much from our system, since these type of locations are generally small geographically. We have looked up and found that in North America about seven hundred parks exists (footnote with source). Out of these seven hundred parks about 100 (prove

later) reach our size estimate. We therefore are going to concentrate on the medium parks (more than 1,000 on an visitors day) and the large parks (over 10,000 visitors per day).

To simplify our estimation, we have based our calculation on assumption that the average park is the size of Canada's wonderland which has an average of 13,000 visitors per day. Some parks such as DisneyLand will be much larger amounts, and there will be parks that will be smaller.

From now on a typical system refers to a system installed in a park such as Canada's Wonderland. For a park of such magnitude 2000 tags are needed. We are assuming 30 percent of the visitors are between the ages of 4-9 and 30% will rent these devices. This accounts for 1000 tags that are needed for the average day; however, there will be peak days where there is need is doubled.

The initial focus market is within Ontario. We intend the first location to be Canada's Wonderland with whom we're currently in negotiation. Once the Canada's Wonderland project is completed, we intend to use it as a showcase for referrals. Within the first year of operation, the PeopleFinder system will be installed within at least three parks. Three sites will provide us with a three percent market penetration in the first year. This will be accomplished through executive selling. We know that our vice president of sales and marketing will be of great help in finding the initial prospects, due to his rich experience as well as large number of personal connections in the field.

We intend to sell a minimum of ten systems in the second year for a 13% market penetration. In the third year we shall obtain 33% of the market by setting up twenty more parks. We intend to increase the number of installation sites by hiring additional sales people and using more advanced selling techniques, as described in the selling section.

3.4 Competition

We have several competitors. The first line of competition comes from companies that are already out there providing this services to amusements. We've been able to locate two companies who sell similar systems. The first company is called ParkPal and the second is ChildFind. Both of these companies use the same technologies as we do; as a matter of fact they are purchasing it from the same supplier. However, they lack our proprietary innovation in the software design. Neither of these companies can locate the exact location of a person. They can only tell that a tag is within three-hundred feet of a interruptor. We believe that our technologies is far superior. Not only can we tell exactly where the person, but we can also keep track of where they have been and analyze the trends that can be mined from this information.

We tried to find out the revenue of these companies, but they are private companies. Consequently, they were not willing to disclose these figures to us.

Our second line of competition comes from manufacturers of child leashes. We believe that this industry is a competitor of ours because this product serves the same purpose as the PeopleFinder. There are two reasons why the PeopleFinder is better than the leash product. The first is that the leash does not give enough room for the child to maneuver. It's not hard to see that parents could get tangled up in the cord. The second is that it is rather demeaning for the parent to have the child on the leash. It's as if the child were a pet or a criminal.

Our third line of competition does not exist at this point in time but could be a potential threat in the future. Once the PeopleFinder system becomes successful and others realize the potential revenue for this venture, we believe the manufacturers of the RFID devices will go into business of setting up these devices themselves. We believe that we will be able to combat these competition because of the barrier to entry that our proprietary software product will provide.

4. The Product

The PeopleFinder system is an integrated system solution for tracking people in large, open areas where there is a congestion of people. Ideal locations are amusement parks and shopping malls, where people, children in particular, are constantly mis-locating themselves to the frustration of their parents.

4.1 Product Description

The *PeopleFinder* system is based on Radio Frequency Identification (RFID) technology to enable the accurate tracking of special *RFID tags*. The system is set up by implementing a network of Interrupters in the area to be covered. This network can track the location of the *RFID tags* anywhere within the specified area. By distributing these tags to people, say at the entrance to a park, any person carrying the tag can be located anywhere within the vicinity of the park.

So if a mother misplaces her child, for example, she will be able to pinpoint the location of her child by calling security services, who can locate the missing person with the PeopleFinder tracking software, or by accessing a special kiosk made available throughout the park, if available.

4.2 Theory of Operation

The *PeopleFinder* system consists of the following components for each site:

1. The RFID Interrupter network
2. The RFID tags
3. The *PeopleFinder* tracking software
4. The computer network — including terminals for security operators and optional kiosks for general users

The company's proprietary technology will be in the RFID Interrupter network, which will be developed to meet specialized requirements, and the *PeopleFinder* tracking software, which will be customized to work with the RFID Interrupter network to provide an integrated solution for tracking people within the covered area.

A third party vendor with the expertise and capacity to produce them in volume will develop the RFID tags, and the computer network will be assembled from readily available off-the-shelf components.

The RFID Interrupter Network

The RFID Interrupter network is a collection of electronic devices capable of sending and receiving signals from the RFID tags within a certain range.

These devices would be strategically placed within the area to be covered to achieve the maximum coverage. The exact topology would depend on the nature of the area and would be specific to each site.

In order to locate a particular *RFID tag*, the Interrupters would broadcasts a query with a code specific to the desired tag, and wait for a response from the tag. When the response is received, the

signal can be analyzed, using proprietary algorithms that take into account the signal strength and various sources of interference, to pinpoint its source.

The RFID Tag

The *RFID tag* will be a fairly small device that can be packaged as a button, badge, clip-on or a wristband. The device, being packaged in a hermetically sealed casing, is fairly robust and can operate in harsh environments.

There are several manufacturers of *RFID tags* that could provide devices suitable for the application, such as *Micron Communications* and *Sovereign Technologies*. One such device from *Micron Communications* (the *MicroStamp 10*) has the feature of being small (37mm x 34mm x 2.3mm) and light (6 grams).

The RFID tag would consist of an integrated circuit (IC), a battery, and an antenna. In the normal mode of operation, the unit sits in an idle, low-power state until it receives a query signal from the RFID Interrupters with its unique code, at which point it powers on and transmits a unique code in reply.

The PeopleFinder Software System

The PeopleFinder software system is a proprietary system that communicates with the RFID Interrupter network in order to query the location of the tag in question.

The software would use proprietary software algorithms to pinpoint the location of the tags once their signals have been received by the Interrupters. These algorithms would take into account the following factors in determining the source of the signal:

- the strength of the signal to at least three Interrupter stations
- various sources of interference introduced by terrain or obstructions

The software would also incorporate a database system to hold information about the person who has been assigned the tag. It would also hold information about the location of the tags at various times of the day, which would be useful in gathering data about patterns in park usage which might otherwise be difficult to obtain.

A graphical user interface would be integrated into the software package, making the system extremely simple to access for park operators. As an option, the system may be made available to guests through special kiosks that can be tied into the system.

The Computer Network

The computer network would be provided as part of the PeopleFinder integrated system. The system would consist of a main server connected to the RFID Interrupter network, with terminals provided for use by park operators.

As an option, special kiosks may be installed with the system in order to allow guests in the park to access the locations of lost members in their party themselves.

4.2.1 System Operation

The configuration of the *PeopleFinder* system would vary depending on factors such as the size of the target area, whether it is an indoor or outdoor setting, and the required coverage. The most basic setup would consist of the host computer and several RFID Interrupter units scattered throughout the target area. When the user requests the location of a person or object carrying a valid tag, the following sequence of events is followed:

1. The PeopleFinder software system sends a request, with an identification code corresponding to the tag, to the RFID Interrupter system for a location
2. The RFID Interrupter system broadcasts the identification code of the target tag to all the tags within range.
3. Once the target tag receives and identifies its code, it will transmit its own unique signature signal to the Interrupters.
4. Based on the strength of the received signal from the target tag to various Interrupters, as well as taking interference factors into account, the location of the target tag can be pinpointed.

Using this scheme, the cost of implementation is controlled, since not too many Interrupters would be required, and also provides a wide coverage.

4.3 Product Application

As an example of implementing the infrastructure of the *PeopleFinder* system, we considered the case of the Wonderland Amusement Park, located in Toronto, Ontario.

4.3.1 Infrastructure Requirements

The Wonderland Amusement park is a 300 acre (1.2 sq km) theme park featuring attractions such as rides, a water park, and various shows and special events.

In terms of the breakdown of the total area of the park, we estimate that approximately half is physically inaccessible, for various reasons such as obstructions, water, or construction. Of the remaining area, we assume that half is so far out of the normal route of visitors that it would not be worthwhile to track people there. That leaves about .3 sq km of area to cover.

We will assume the coverage for each of the RFID Interrupter will be .01 sq km. This means that we would require 30 Interrupter tags throughout the park to cover the desired area of the park.

4.3.2 Product Economics

The cost of implementing the PeopleFinder system for a park the size of Wonderland would break down as follows:

Item	Cost
RFID Interrupters	$150,000
Installation	$24,000
Computer System (including optional PeopleFinder Kiosks)	$30,000
RFID Tags	$50,000
Total	$254,000

RFID Interrupters

The cost of the RFID Interrupter network, which is the most expensive component, is based on the assumption that the park would require 30 such devices to cover the desired area.

The cost of each RFID Interrupter is assumed to be $5,000, and is based on a comparison of similar products available from various vendors, such as Micron Communications Inc.

Installation

The cost of installing the system in a park the size of Wonderland is assumed to be $24,000. This is based on the assumption that it would take approximately 30 man-days to complete the job of installing the network, billed at $100 per man-hour (30 days * 8 hours per day * $100/hour = $24,000).

The 30-man day figure is arrived as follows:

Item	Man-Days
RFID Interrupter Network Installation (2 RFID Interrupters installed and tested per day)	15
Computer Network Installation (including optional kiosks)	5
Integrated System Testing	10

The work would mainly be carried out by sub-contractors that would be available for the job within the city that the park is located in, thus reducing the costs of retaining a large staff of technicians.

Computer System

The computer system, which would be customized from off-the-shelf components, would cost approximately $10,000.

Computer kiosks, if desired, can be manufactured to the specifications of the park to satisfy its aesthetic and reliability requirements for approximately $4,000 each. Installing 5 such booths would cost $20,000.

RFID Tags

The RFID tags, in sufficient quantity, can be purchased for $20 each. This cost is based on a quotation for the MicroStamp 10 RFID tag from Micron Communications Inc. Customization of the tags for each park would probably be required and may add $5 to the cost.

A park the size of Wonderland would need about 2000 such tags at $25 each, for a total cost of $50,000.

5. Product Development

The development of the product is an ongoing concern of the company. An initial heavy investment in research and development is required in order to acquire and refine the technology to the point where it can be easily applied to various sites with minimal customization.

After the initial development, the technology would need to constantly be upgraded and improved as the technology advances and the customer needs change. Each site would require custom engineering requirements that would need to be addressed, although every effort would be made to control the amount of customization in order to streamline the workflow. An annual budget of $50,000 has been assigned to the research and development of the product.

5.1 Component Purchasing and Availability

Several vendors have been identified that can provide the necessary hardware required for this technology. Two such vendors are:

Micron Communications Inc.
Sovereign Technologies Inc.

Hardware development efforts would be required to refine the technology, though, in order to satisfy the requirements of the PeopleFinder product in terms of its range and accuracy.

5.2 Software Development

The development of the PeopleFinder system will require substantial investment in software development, since the PeopleFinder software forms the heart of the company's propriety technology.

We expect that the software development will take 6 months to complete. We have allotted a budget of $20,000 to the purchase of hardware and software tools per year to support the ongoing development of the PeopleFinder software.

5.3 Hardware Engineering and Support

The customization of the hardware required for the PeopleFinder system requires expertise in the area of hardware design, RF communications, and computer interfacing.

We expect that the initial customization work would require six months and we have budgeted $30,000 for the purchase of equipment.

5.4 Quality Control

Strict control of the final product quality is of the utmost importance in guaranteeing the success of the PeopleFinder system. This involves qualification of the parts as they are received from the

manufacturers, as well as extensive testing of the hardware and software system, both on-site in project installations, as well as off-site in laboratory experiments.

5.5 Human Resources

The engineering department will be staffed by three engineers in the areas of Software Development, Hardware Engineering, and Quality Control. These will consist of three of the owners, who will concentrate on these job functions exclusively. Since the owners have a stake in the growth of the company, their salaries can be capped at a below-industry rate of $50,000 each.

Additional manpower required for engineering support, such as installation of the system at the customer sites, will be acquired through contractors. The cost of such contract work has been taken into account in the product cost.

6. Selling

Selling methods and the sales costs associated with each sale are important in determining whether a product is a viable business opportunity or if there is no chance of profitability. We believe that the sales approach we have developed represents a reasonable and profitable approach for selling the PeopleFinder system.

6.1 Current Selling Approach

The complete PeopleFinder system: tags, transmitters and monitoring terminals will be sold to amusement parks. Installation will be included in the system price. The amusement park will be responsible for distributing and collecting the transmitter tags to and from patrons. The park will also be responsible for operating the PeopleFinder system.

The PeopleFinder system is expensive, costing approximately $500,000 for the average implementation. Because of the high costs associated with the product, we can afford, and should expect to spend a reasonably large amount of time completing each sale. The most appropriate approach would be selling the product directly, initially using top executives.

We will be hiring an experienced sales person with contacts in the amusement park industry to be our lead salesperson. We think we can attract an experienced, talented salesperson because of the potential for lucrative commissions and some share of company ownership. Two of the company founders will also be involved in selling the product. These two other sales associates will bring technical expertise that will assists the salesperson in making sales.

Initially we will target North American amusement parks and other large attractions. By tightly focusing our target customer we can concentrate on our most lucrative sales, these sales will have a large custom engineering component. By deploying a number of large systems, we will gain experience, helping us refine our product and streamline custom implementation. This more refined product will be easier to sell to sites where we would like to minimize our sales costs: foreign amusement parks smaller domestic attractions.

6.2 Long Term Selling Methods

After we establish a firm base with North American amusement parks, we would expand our market to include overseas amusement parks and outdoor attractions.

After we have completed a few projects, making additional sales should be easier because of the positive references our existing customers will provide.

Once we have expanded our target market geographic location, we will hire additional salespeople in certain foreign markets. We will expect our new salespeople to bring valuable contacts in our new markets. Once we are established, it should not be terribly difficult attracting talented salespeople because of our proven ability to compensate our salespeople generously. We don't foresee the sales organization growing particularly large, so administration of this group should not be an issue.

We expect to devote some funds to advertising in trade publications in the second and third years of operation.

6.3 Pre Sales Expenses

There are certain costs associated with making each PeopleFinder sale. We expect that significant travel, legal, sales commission and pre-sales engineering expenses will be encountered for each sale.

Because each PeopleFinder implementation is unique, engineering effort must go into producing implementation estimates. We will have three full time R & D employees who will be responsible for addressing any custom engineering requirements, including implementation estimates for each site. We have not broken down the pre-sales engineering costs down on a per-sale basis because we expect that as more sales are made, the custom engineering time required for each sale will decrease. The R & D employees will also be responsible for creating PeopleFinder demonstrations that can be used to prove the products feasibility and usefulness.

We expect that in the first year, our salesperson and support staff will spend $20,000 on travel. Initially, we will focus on parks close to Toronto, so travel costs should be kept reasonably low. In the second year, as we expand the geographic scope of our market, travel costs will increase to $100,000 and will remain at $100,000 in the third year.

We expect that approximately $5,000 in legal fees will be spent on competing each PeopleFinder contract. We expect this number to remain constant because the legal circumstances of each sale will probably be unique.

Sales commission paid out for each sale will vary because of incentives and quota issues, but we expect it to average $50,000 or 10% of the sale price.

6.4 Custom Engineering Requirements

Each PeopleFinder installation will require custom engineering for system layout and bandwidth acquisition. The full time R & D staff will be required to layout each system. Bandwidth will have to be acquired for each PeopleFinder system. Any costs incurred in bandwidth acquisition will be passed on to the buyer in an increased sales price. Actual physical installation of each system will be contracted out to electricians and has been factored into the sales price. Technical staff from PeopleFinder will be required to supervise some portions of installation; these cost have also be factored into the sales price.

6.5 People Finder Pricing and Services

A typical installation will be sold for $500,000 this is a significant markup from the materials and installation cost of $254,000 as outlined in section 4.3.2. The markup is to cover sales related costs, fixed costs and profits. The product pricing will vary depending on the installation, but we expect to charge a markup of approximately 100% compared to materials and installation costs.

An average of two free support visits will be included with each sale. The number of free support visits will vary depending on the sales price. After the free support visits, we will charge at a rate of $150 per hour plus travel expenses. Because of the reliability of the internal PeopleFinder components, we do not expect that will have to make many paid service calls. Routine servicing can be more effectively and inexpensively be provided by local electricians, so we do not expect many parks hire us to do routine maintenance. We expect each support visit to cost us approximately $5000 dollars. We associate a support cost of $10,000 with each sale to cover the two free support calls.

7. Financial Data

7.1 Projected Profit and Loss Statement

Projected Profit and Loss Statement
Year Ending 1998, 1999, 2000

Revenue	1998	1999	2000
Sales	$1,500,000	$5,000,000	$10,000,000
Cost of Sales	$762,000	$2,540,000	$5,080,000
Cost of Support	$30,000	$100,000	$200,000
Gross Profit	$708,000	$2,360,000	$4,720,000
Operating Expenses			
Selling			
Salaries and Wages	$160,000	$250,000	$250,000
Commission	$150,000	$500,000	$500,000
Travel and Expenses	$20,000	$100,000	$100,000
Advertisement	$0	$50,000	$50,000
Total Selling Expenses	$330,000	$900,000	$900,000
R&D Expenses			
Salaries and Wages	$150,000	$150,000	$150,000
Equipment	$50,000	$50,000	$50,000
Total R&D Expenses	$200,000	$200,000	$200,000
General and Administrative			
Salaries and Wages	$0	$30,000	$30,000
Legal and Accounting	$15,000	$50,000	$100,000
Office Supplies	$5,000	$5,000	$5,000
Telephone	$2,000	$7,000	$7,000
Utilities	$3,000	$3,000	$3,000
Rent	$24,000	$24,000	$24,000
Total General and Administrative	$49,000	$119,000	$169,000
Total Operating Expenses	$579,000	$1,219,000	$1,269,000
Net Income Before Taxes	$129,000	$1,141,000	$3,451,000
Income Taxes (20%)	$25,800	$228,200	$690,200
Net Income	$103,200	$912,800	$2,760,800

As is evident from the above figures, a small profit will be made in the first year of operation, with profits increasing throughout subsequent years.

7.2 Projected Cash Flow Statement

Projected Cash Flow Statement
Year Ending 1998, 1999, 2000

Revenue	1998	1999	2000
Beginning Cash Balance	$1,400,000	$1,103,200	$916,000
Cash Receipts			
Cash	$1,200,000	$4,800,000	$9,500,000
Accounts Receivable	$300,000	$500,000	$1,000,000
Total Cash Receipts	$1,500,000	$5,300,000	$10,500,000
Cash Disbursements			
Inventory Purchase	$762,000	$2,540,000	$5,080,000
Salaries, Commission and Wages	$460,000	$930,000	$930,000
Support	$30,000	$100,000	$200,000
R&D Fixed Assets	$50,000	$50,000	$50,000
Office Supplies	$5,000	$5,000	$5,000
Travel	$20,000	$100,000	$100,000
Rent	$24,000	$24,000	$24,000
Utilities	$3,000	$3,000	$3,000
Telephone	$2,000	$7,000	$7,000
Legal and Accounting	$15,000	$50,000	$100,000
Advertisement	$0	$50,000	$50,000
Taxes (20%)	$25,800	$228,200	$690,200
Total Cash Disbursed	$1,396,800	$4,087,200	$7,239,200
Total Operating Cash Surplus	($196,800)	$712,800	$2,260,800
Payment To Investors	$100,000	$900,000	$2,385,600
Ending Cash Balance	$1,103,200	$916,000	$791,200

Because of delays in collecting accounts receivable, we will run a moderate negative cash flow in the first year. However, according to the projections, throughout the three years, our cash on-hand does not dwindle below comfortable levels. The investors are paid off in full after the third year, at a rate of return of 40% compounded annually.

7.3 Assumptions

Payments of account receivable will commence within three months of system purchase. Payment for each project will be charged in installments throughout the project cycle. Accounts receivable will be a higher proportion of total sales in the first year as compared to subsequent years because of the large granularity of total yearly billing that each job comprises.

Tax amount will be 20% of the profit. This number was chosen because it is close enough to the real figure, and simplifies the assumptions.

8. Investments

We wish to raise an investment of $1,400,000 in debentures. This amount has been chosen because it is sufficient to cover all of our expenses during the first year. Since we intend to be profitable at the end of the first year, no extra funding will be required for the years following the first.

At the end of the first year, a profit of $111,200 is expected to be generated. This profit will represent 7.94% return on investment. $100,000 of the profit will be used to pay dividend to the investors. At the end of the second year, a profit of $948,800 will be generated. $900,000 of the profit will be used to pay the investors. At the end of the third year, $2,385,600 will be used to finish repaying the investors. At the end of the third year, PeopleFinder will be a company wholly owned by its employees and original founders. The rest of the profit is going to be reinvested in the company.

At the end of the third year, the investors would have received $3,385,600 for their initial investment of $1,400,000, representing a profit of $1,985,600. The investors' expected rate of return would be 34%.

9. Summary

After researching the idea of writing software and distributing hardware devices which allow for tracking of people in amusement parks, we have come to the conclusion that this is a viable business opportunity. We have found that the market is quite large and an identifiable opportunity exists in it. Resources and technical ability are readily available, all that is needed is venture capital to maintain us during the first year of operation.

We believe that there is money to be made from the sales of the PeopleFinder System. The costs of material are approximately $250,000, and with a typical system sale price of $500,000, the profit margin is very high.

Hardware for the system is easily obtainable from local manufacturers, and the resources to produce the software are internal to the company.

Our team is motivated, the opportunity exists, and the resources are available. The money invested in PeopleFinder Technologies will be put to good use, and will provide a quick return. We estimate that after the first three years of operation, PeopleFinder Technologies will be profitable enough to return with interest any investment made in the company.