Presents

QuikNotez

The quicker way to take notes

By: Sandy Granados, Francisco Peña, and Alfredo Vieyra
May 27, 2004

Steve Mihalic
Region Manager, Commercial Loans
Santa Barbara Bank & Trust
20 East Carrillo Street
Santa Barbara, CA 93101

Dear Mr. Mihalic:

Our business plan for a newly invented cell phone accessory –QuikNotez– is enclosed. We are applying for a commercial bank loan to finance the expenses for this exiting new product.

QuikNotez has been designed to allow cell phone owners to write fast, quick notes while using their cell phones. Our conservative estimates show that this product will be reasonably in demand as it will become a unique trend. There is no other item on the market that is as inexpensive and feasible to produce. The current market offerings and detailed product design in the enclosed proposal define a particularly attractive investment opportunity.

We are prepared to meet for a formal presentation of our plan to answer any lingering questions you may have at your office if and when you accept our request.

We are sure that you will find this unique invention one that will interest you as a sound investment.

Sincerely,

Sandy Granados Francisco Peña Alfredo Vieyra
Chief Executive Officer Chief Design Officer Chief Financial Officer
Computer Engineer Mechanical Engineer Electrical Engineer

UCSB

Enclosure: FAS.Co Design Proposal
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Executive Summary

Cell phones are a must have in today’s world. They provide us with a way to conduct business, make plans, browse the internet, or simply make a call. Cell phones are extremely useful, yet one flaw plagues every cell phone. This flaw is the ability to write information manually onto the phone while the phone is in use. Instead of reformatting the software to every cell phone, FAS Co. has developed a unique solution to fix this problem.

After observing cell phone use, FAS Co. designed QuikNotez, to solve the problem of having a writing utensil and a writing surface available at all times when needed. QuikNotez is a detachable dry-erase board which attaches to the back of the cell phone and allows the user to safely write small, quick notes or reminders at no risk of loosing them. Thus the problem of having a writing utensil and writing surface available at all times when needed is solved. There is no product like QuikNotez in the market; therefore, FAS Co. took it upon itself to fix this problem with a great solution. Many of us have been faced with the dilemma of wanting to write down important information. However, we were not able to record that valuable information because of lack of supplies.

QuikNotez has a unique product design that is not currently available anywhere. FAS Co. will have monopoly of this portion of the market and as a result, earn a substantial amount of profit. QuikNotez targets anyone who needs a simple to use, inexpensive, note taking device. The only competition we at FAS Co. expect will be that of the PDA. However, PDAs are too expensive compared to the target price for QuikNotez. So, QuikNotez will take control of the market that is composed of customers who do not need a high priced PDA.

All great inventions have something in common; they were all simple to use. QuikNotez is not only simple to use but inexpensive to make. The materials that are more than right for the job are also inexpensive. Most of the materials will be composed of plastic. The only materials that will be composed of metal are the spring-powered release mechanism and the metal rod to hold the two whiteboards together. The materials and its simplicity makes QuikNotez have a great design that is user friendly. Yet it also provides the customer with the reliability needed to achieve satisfaction.

QuikNotez will be compatible with most phones that are on the market. This almost universal product will become a success because of its compatibility. In addition, its low cost will attract customers. QuikNotez was designed with the customer in mind this rationale inspired FAS Co. executives to make QuikNotez available to anyone who has a couple of dollars to spend on something useful.
Introduction

Cell phones are a useful technological device that many people own in today’s society. Many of us are dependant on cell phones to conduct business, make long distance short, browse the internet, read email or make simple plans. Some of us rely on the cell phone’s date book to remind us of important events or meetings. Others use the phonebook feature as the only contact list for relatives, business or friends. These cell phone features have made it possible for some of us to ignore paper reminders that can easily be misplaced. Thus, we now carry what would be a thick date book containing our schedules, notes and contacts, in the palm of our hand, all within the cell phone.

As a result of these cell phone features, we no longer rely on paper messages as much as we used to. However, what happens when you are talking on your cell phone and need to write down a number or a quick message? First reaction, “find paper and pencil.” During this situation, it is almost impossible to find these items. If you do find a paper and pencil and write down the message, the separate paper is often lost.

To solve this problem, we at FAS Co. have designed QuikNotez, a cell phone accessory that consists of a dry-erase board and marker that allows the owner to write a quick, fast note whenever needed, thus ends the search for a pencil and paper. QuikNotez, a detachable dry-erase board, attaches to the back of the cell phone and allows the user to safely write small, quick notes or reminders at no risk of loosing them. This small product is simple, unique and useful for those who are dependant on reminders. It is a compact accessory that solves a simple problem.

Our invention will provide cell phone users with easy access to a substitute for paper and pencil. We strongly believe that our product is beneficial for the users as well as the investors. The user will benefit from the design and simplicity, as well as the advantage of not losing phone numbers, room numbers, or meeting times. The investors will benefit because QuikNotez is cheap to manufacture, simple to use, and users who demand such an accessory will be appreciative.
Background/Need

Today’s cell phones are very innovative and multifunctional. They come with many standard functions. For example, the ability to write important reminders onto the cell phone’s calendar is an extremely useful function. However, one innovation that is missing is the ability to manually write down small amounts of important information. During a cell phone conversation, the cell phone does not allow you to access its calendar or notepad to write down a quick address, meeting time, or phone number, which is being given to you over the phone. We at FAS Co. have developed a solution to this problem. Our solution’s name is QuikNotez.

While observing cell phone use, we noticed many occasions where a writing utensil and paper were needed while talking on the cell phone. For this reason, we developed an attachable, simple to use, note taking device. QuikNotez provides that important writing utensil and surface that is needed during those occasions.

To support our observations, we conducted a survey of 30 random adults (Refer to Appendix A). We found that 86% owned a cell phone and 16% owned a PDA. From the responses that we received, we were also able to conclude that 88% would be interested in our product (See Figure 1).

![Figure 1: Survey Results.](image)

An important question our survey asked was “Why don’t you own a PDA?” Some people replied that PDAs are too expensive while others responded that they seem complicated. QuikNotez is an economic and reliable replacement to the expensive PDA.

According to a study conducted by the MRT Cellular Team of Europe, it is projected that in 2003 alone there will be around 205 million cell phone subscribers in North America. This very large number of subscribers creates a high probability of potential buyers for QuikNotez.
Current Market Offerings

QuikNotez’s main competition for storing quick messages is the hand-held computer called the palm pilot (See Figure 2).

Figure 2: Palm Pilots.

Palm pilots are the new trend that some even say may replace the cell phones. According to the numbers in 2003, there are more than 74 million cell phones being used in the United States. It is predicted that by 2004, there will be 139 million people using a cell phone in the United States. In comparison, the palm pilots are not much of a competition to cell phones; according to www.news.cnet.com, there are is only 10 million people in the United States that own a palm pilot. A major reason why palm pilots are not out numbering cell phones currently is the fact that palm pilots sell for two to three times the cost of owning a cell phone.
Product Design

**QuikNotez**, a detachable dry-erase board, attaches to the back of the cell phone and allows the user to safely write small, quick notes or reminders at no risk of losing them (See Figure 3).

![Figure 3: Left and right view of closed attached QuikNotez.](image)

**QuikNotez** holds on to your cell phone with a transparent plastic film that wraps around the cell phone keys. The transparent plastic film is loose-fitting enough to allow you to stroke your cell phone keys liberally. It also holds the dry-erase board fixed in place, which means that **QuikNotez** does not actually attach to your cell phone. The dry-erase board detaches using a simple release device that contains a release push button. The dry-erase board has a hinge so that it can flip open and have twice the surface writing area. A marker is equipped with QuikNotez and it is placed in the inner core of the dry-erase board where the FAS Pen holder is located.

**QuikNotez** operates using a basic hinge concept with one central pivot point. The release button utilizes a spring, which keeps the dry-erase board connected to the transparent plastic film which in turn attaches to your cell phone. At any time, the user is able to attach or detach the dry-erase board with ease.

Four main parts make the **QuikNotez** function properly: Transparent Plastic Wrap, Dry-Erase Board, hinges, and the Spring-Powered Release.
Transparent Plastic Wrap

As shown in Figure 4, the transparent plastic wrap creates a pouch for the cell phone to sit in securely.

![Figure 4: Cell phone's front view.](image)

You will have the option of having this leather strap or pure plastic. It is tough enough to not tear easily and loose-fitting enough to allow the user to hit the cell phone keys freely.

![Figure 5: Cell phone's bottom view.](image)

Considering that most cell phones charge through a bottom connection, the transparent plastic wrap has a hole at the bottom to accommodate any type of connection needed (See Figure 5). It is designed to have a tight fit for the cell phone thus; first time fit will be difficult to put on. This is necessary to hold QuikNotez firmly. After the transparent wrap has been molded according to the cell phone, putting on, taking off and key stroke will become simple.
Dry-Erase Board

QuikNotez comes equipped with a dry-erase board and a marker with our company logo imprinted on it. FAS Pen fits nicely in the pen holder that consists simply of a hollow cylinder made of plastic (See Figure 6).

FAS Pen is an extremely small writing utensil that will run out of ink quickly. Several FAS Pen’s will be provided when QuikNotez is purchased. FAS Pen has an eraser type end made out of stiff fabric (See Figure 7). The stiff fabric will easily erase FAS Pen’s ink from the board if any mistakes are written. FAS Pen also has a cap to prevent the pen from drying. The cap’s color will indicate the pen’s color.
Hinges

The dry-erase board has 2 surfaces. These surfaces are connected together by a hinge as shown in Figure 8. The two surfaces have interlocking parts and a thin metal bar that holds them together. The dry-erase board can be folded in half so that the QuikNotez does not cause much thickness.

Figure 8: Hinge Concept.
**Spring-Powered Release**

The spring-powered release system is located where the transparent or leather strip connects to QuikNotez. Extruding off the end of the strip is a round plastic holder which we will refer to as the female end. It is a cylinder with a hole in the center of it. The hole only goes in half the distance of the whole cylinder. The Male end of the release system is constructed using a wedge, spring, and pivot bar. As the male end slides upwards towards the center of the hole, the wedge force the spring to compress and the wedge enters its casing. As the wedge approaches the hole, the spring is released and the wedge fits inside of the whole. The wedge will stay inside until the spring is again compressed (See Figure 9).

![Figure 9](image)

**Figure 9:** Female and male parts of the hinge concept.

The user of the QuikNotez has access to a release button that is located at the bottom of the male end of the release system. By moving the shaft that is connected to the wedge, the user can force the spring to compress. The two pivot bars keep the shaft in its place so that the mechanism works thoroughly every time. As the shaft is moved the, the pivot bars serve as a lever system, pulling the wedge out of its hole (See Figure 10).

![Figure 10](image)

**Figure 10:** Closer look of the male part of the hinge concept.
Specifications

Approximate measurements for QuikNotez are shown in Figure 11.

![Figure 11: Specifications.](image)

**Table 1: Specifications.**

<table>
<thead>
<tr>
<th>Object</th>
<th>Width</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top Board</td>
<td>2 inches</td>
<td>3 inches</td>
</tr>
<tr>
<td>Bottom Board</td>
<td>1 ¼ inches</td>
<td>3 inches</td>
</tr>
<tr>
<td>FAS Pen</td>
<td>&lt; 0.5cm</td>
<td>2 ¾ inches</td>
</tr>
<tr>
<td>FAS Pen Holder</td>
<td>&lt; 1 cm</td>
<td>¾ inches</td>
</tr>
<tr>
<td>Transparent Wrap</td>
<td>Varies with cell phone</td>
<td>Varies. Approx: 3 inches</td>
</tr>
</tbody>
</table>

Theory of Operation

The dry-erase board opens easily with the use of a basic hinge system. Interlocking pieces that pivot around the same axis stabilize both sides. The release button uses a spring powered locking system that keeps the dry-erase board securely attached to the transparent wrap. The transparent wrap will hold to the owner’s cell phone.
Design Options

**Leather or Plastic**

QuikNotez can be attached to two different types of surfaces. As shown in Figure 4 and 5 of the product design, the transparent plastic wrap may extend out of a leather strip or a plastic strip. Both options guarantee to hold QuikNotez firmly and safely. It will be up to the purchaser to decide which type they prefer to buy.

**QuikNotez Colors**

QuikNotez will come in a variety of colors. This will benefit cell phone owners who have unique covers and will like to match QuikNotez with their cell phone. QuikNotez will be available in the following given colors shown in Figure 12:

![Color Options](image)

**Figure 12: QuikNotez color options.**

**FAS Pen Color**

FAS Pen, which comes with QuikNotez, will also come in several different colors. This option can differ from QuikNotez actual color. This will be another option the buyer will have the ability to decide as they are purchasing our product. Available color choices are shown in Figure 13.

![Color Options](image)

**Figure 13: FAS Pen color options.**
Environmental Impact

**QuikNotez** will have very little impact on the environment because it will mainly be produced of plastic, leather, some fabric and ink. Although leather will be a *QuikNotez* option, only a small portion of the product will contain a strip of it. If the buyer dislikes animal cruelty of any kind, he has the option of obtaining pure plastic. Ideally, *QuikNotez* should save trees due to the fact that small paper messages will decrease once this product is purchased. Since plastic does not decompose easily, *QuikNotez* needs to be thrown away properly after it no longer serves a purpose so it does not harm the environment. **FAS Co.** will not take any responsibilities if the purchaser chooses to purposely harm the environment with this product.
Implementation Plan

To get QuikNotez into the market, we need several resources and sources of funding. As we discussed in the introduction, the main source of funding will be a loan. If we are granted the loan, we plan to manufacture several prototypes. We expect QuikNotez to be a success because of the high number of potential customers and a popular inexpensive price.

Timeline

Once the loan is obtained, work will begin and several prototypes will be manufactured. After we have prototypes, FAS Co. will present them to cell phone accessory companies to get them to invest in QuikNotez. Once we obtain more funding, QuikNotez will be mass produced and shipped to sell around the world. We expect the whole process to take roughly ten months to a year.

Materials/Cost

Our product will be composed of several materials that will mainly be plastic. These materials include a transparent plastic film, dry-erase board, and the FAS Pen. The only materials that will be composed of metal will be the spring for the spring-powered release, and the metal rod to hold the two white boards together. We estimate that these materials will be inexpensive (See Table 2). Once we take labor and shipping into account, we expect the final price of the product to be in the 7 dollar range.

<table>
<thead>
<tr>
<th>Materials</th>
<th>Costs (Dollars)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dry-erase board</td>
<td>0.52</td>
</tr>
<tr>
<td>Metal</td>
<td>0.40</td>
</tr>
<tr>
<td>Plastic for FAS Pen</td>
<td>1.00</td>
</tr>
<tr>
<td>Final estimate of materials</td>
<td>1.95</td>
</tr>
</tbody>
</table>

Table 3 explains how the cost of the dry-erase board was determined. The cost of dry-erase board per QuikNotez was determined by buying a large size of dry-erase board and then cutting it into small sections of 2 inches by 3 inches. The price of it depends on the size of dry-erase board that is taken into account. Do keep in mind that the shipping and handling and labor were not taken into consideration in the calculations. However, we hope to establish a contract with one dry-erase board company to obtain a better price on the materials. In addition, to save money on costs and to keep prices down, labor will be done outside of the United States.
Table 3: Dry-erase board costs.

<table>
<thead>
<tr>
<th>Material</th>
<th>Size</th>
<th>Original Price (Dollars)</th>
<th>Costs Per QuikNotez (Dollars)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dry-erase board</td>
<td>48 inches x 48 inches</td>
<td>119.95</td>
<td>0.52</td>
</tr>
<tr>
<td></td>
<td>48 inches x 144 inches</td>
<td>299.95</td>
<td>0.26</td>
</tr>
<tr>
<td></td>
<td>48 inches x 192 inches</td>
<td>389.95</td>
<td>0.25</td>
</tr>
</tbody>
</table>

Qualifications

Our engineers at FAS Co. who designed QuikNotez are professionals. Our Chief Executive Officer, Sandy Granados, has a degree in Computer Engineering. She will overlook the implementation plan and make sure that everything is in order. Our Chief Financial Officer, Alfredo Vieyra, has a degree in Electrical Engineering. He will overlook the financial aspects of allocating the different resources that are needed to manufacture QuikNotez. Finally our Chief Design Officer, Francisco Peña, designed QuikNotez and certifies that all the components would incorporate to produce an inexpensive reliable product (See Appendix B).
Conclusion

QuikNotez is a cell phone accessory that allows you to write quick, small messages whenever needed. It solves a problem that most people encounter and disregard. QuikNotez will be successful because cell phone accessories are fashionable and this one will become an exclusive trend. FAS Co. expects to receive a substantial amount of profit once this product is out on the market because it is inexpensive to make. We hope our design proposal has convinced you enough to grant us the loan needed to create QuikNotez. We guarantee our product will be a success.
References


Appendix A: Survey

Survey for QuikNotez

We are in the process of developing a new cell phone accessory and would appreciate your help. Please answer the following questions by circling the appropriate answer: Feel free to write in a comment if needed.

Do you own a cell phone? □ Yes □ No

It is a flip-phone? □ Yes □ No

Do you own a PDA? □ Yes □ No

If NOT please provide us with reason: ____________________________________________________________

How long have you owned the cell phone: □ One month? □ Half a year? □ More than a year?

How often do you use your cell phone: □ Less than an hour? □ An hour a day? □ More than an hour a day?

Do you often ask people to call you back because you don’t have paper to take down the message? □ Yes □ No

Do you often write in your hands because of lack of paper? □ Yes □ No

Do you consider your cell phone too bulky? □ Yes □ No

Does your phone have the speaker phone feature? □ Yes □ No

Do you use an ear-piece to talk with your cell phone? □ Yes □ No

Comments: ____________________________________________________________

Thank You, for taking your time to fill out this survey.
### Survey Results

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Do you own a cell phone?</td>
<td>26</td>
<td>4</td>
</tr>
<tr>
<td>2. It is a flip-phone?</td>
<td>23</td>
<td>7</td>
</tr>
<tr>
<td>3. Do you own a PDA?</td>
<td>5</td>
<td>25</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question</th>
<th>One Month</th>
<th>Half Year</th>
<th>More than year</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. How long have you owned your cell phone?</td>
<td>15</td>
<td>7</td>
<td>8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question</th>
<th>Less than an hour</th>
<th>An hour a day</th>
<th>More than an hour a day</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. How often do you use your cell phone</td>
<td>23</td>
<td>6</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>6. Do you often ask people to call you back because you don’t have paper to take down the message?</td>
<td>20</td>
<td>10</td>
</tr>
<tr>
<td>7. Do you often write in your hands because of lack of paper?</td>
<td>17</td>
<td>13</td>
</tr>
<tr>
<td>8. Do you consider your cell phone too bulky?</td>
<td>16</td>
<td>4</td>
</tr>
<tr>
<td>9. Does your phone have the speaker phone feature?</td>
<td>12</td>
<td>18</td>
</tr>
<tr>
<td>10. Do you use an ear-piece to talk with your cell phone?</td>
<td>7</td>
<td>23</td>
</tr>
</tbody>
</table>

**Comments Received:** I’m interested. Where can I buy one? When will it become available? Not interested.
Appendix B: Resumes

Enclosed are three resumes from the engineering members that created QuikNotez.

Sandy Granados: Chief Executive Officer & Computer Engineer.

Alfredo Vieyra: Chief Financial Officer & Electrical Engineer.

Francisco Peña: Chief Design Officer & Mechanical Engineer.