

OnLine Banking Proposal

This memorandum tells how a bank can maintain its commitment to customer service while still moving to the highest technological level. There are certainly flaws with the proposal, not least of which is the rather sketchy plan.

To: Mr. David Applebaum, Beneficial Bank President

From: Huy Van Nguyen, Bank Technology Manager/Developer

Date: April 26, 2001

Subject: Online Banking Proposal

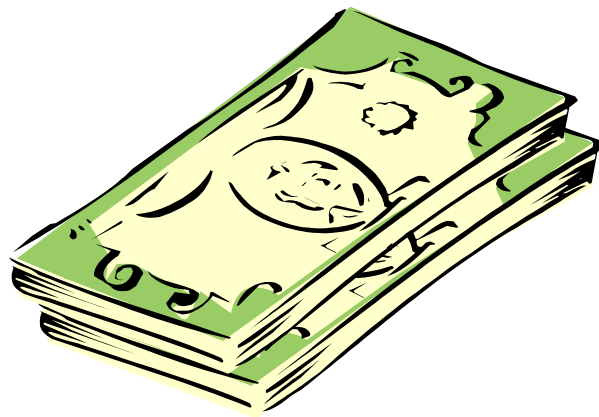
I would like to thank you again for taking time out of your busy schedule to attend my recent project presentation. I hope you found it informative. Enclosed you will find a copy of my proposal, "Beyond Traditional Banking for Beneficial." The report discusses Beneficial's need to construct, implement, and provide Internet banking for its customers in order to remain a competitive leader in the banking market.

Nearly 65% of all banks in the United States offer some form of online banking for its customers. Among some of the major national banks with successful and comprehensive online banking systems are Wells Fargo (www.wellsfargo.com), First Union (www.firstunion.com), and Citibank (www.citibank.com). However, financial institutions similar in size to Beneficial have also initiated successful Internet bank programs, the most notable being Digital Insight, Edify, and Stillwater National Bank of Oklahoma. Thus, it is critical that we too consider and eventually develop our own system.

My proposal includes a step-by-step guide about what needs to be considered in developing an Internet system and what procedures are required to make the system successful. The plan I have designed is both time and cost efficient. More importantly, it also incorporates features that are customer-based to ensure "friendly, professional service" and improve customer relationship. The resultant online system will allow Beneficial to continue to declare that we "have the resources and expertise to help its customers achieve their goals and realize their dreams."

Contact me if you have any questions or comments upon review of the proposal. The best way to get in touch with me is by stopping by my office or by email huyvann@hotmail.com. Thank you for your valuable time, and I hope to discuss the project with you in further detail.

Beyond Traditional Banking for Beneficial



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April 5, 2001

Abstract

This proposal introduces an aspect of banking that is missing in Beneficial Bank—an online banking system. It highlights the fact that a majority of U.S. banks offer Web banking and that Beneficial's lack of one introduces serious disadvantages, not only to the financial institution itself, but to its customers as well. It then reports the gains that an online banking system would render, including increased profits, enlarged customer base, and improved customer relations. It also reviews some of the most successful online banking systems, pointing out basic features of any Web banking system, such as customer login/password verification, viewing account activity, transferring funds, and paying bills. It then outlines the procedures to implement an Internet system customized to Beneficial's specific needs, utilizing the services of Electronic Data Systems (EDS) for the computer network and Digital Planet for the website development. Finally, a detailed budget is presented, highlighting the first year startup cost, successive annual cost, and a comparison of the proposed budget to Beneficial's funds to show the project's affordability.

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Executive Summary

The rate at which the Internet has grown within the last decade is incredible. With millions of websites, it has become one of the most fundamental arenas for communication and the exchange of information, goods, and services.

With the widespread popularity of the Internet, Beneficial's lack of an online banking system introduces serious disadvantages to not only our financial institution, but more importantly, to our customers. Not having an Internet banking system means no expansion in an otherwise profitable market. Also, Beneficial could face the potential loss of existing customers who wish for such speed and convenience. Considering the fact that nearly 65% of all banks in the United States currently offer some form of online banking for its customers, it is essential that Beneficial develop its own Internet banking system in order to continue its reputation as a leader in banking excellence.

Research has shown that substantial growth in Internet commerce is inevitable and that consumers' demand for this electronic mode of business is too significant to ignore. This drastic demand signifies that firms of all sizes must become proactive in not only seeking out Internet opportunities, but in determining ways to exploit this revenue-producing medium as well. Within the scope of banking industry, many small and large financial institutions that have implemented an online banking program have consistently turned a profit. Thus, the prevalent success of other online banking endeavors is a strong indication that our own establishment will be lucrative as well.

The plan that I have customized for Beneficial encompasses a time and cost efficient objective, and it will ensure that Beneficial will maintain the same "friendly, professional service" that has become synonymous with our name. With any Internet-based system, a computer network must be constructed to link our databases to a central server. For our purposes, we will set up a special network called a storage area network (SAN). However, as an established bank, Beneficial already has the basic infrastructure in place, so the primary work is the implementation of different kinds of software required for SAN's and fiscal transactions. To do so, we will employ the network solutions company EDS, which specializes in providing SAN services, to startup and manage both the network and system. Next, we will employ the service of Digital Planet to design a website that features a simple, user-friendly layout for customer access, which will be accessible via a link on our existing homepage. Upon completion of the system, we will contact both our present and potential customers about the new feature through an information distribution campaign involving our physical branches and other modes such as email.

The budget for my project is estimated to be \$955,058.88 for the first year, which includes the physical network connections, software applications, web development, employee training, and information campaigns. Successive years require only maintenance and incur a lower cost of \$630,000. Relative to our annual total assets of \$3 billion, the cost is a very small percentage- approximately 0.0318% of our total assets.

Moreover, the cost of an Internet transaction is about \$0.03, as compared to \$.27 for ATM, \$0.54 for phone, and \$1.07 for physical branch transactions. Thus, the savings and opportunities that online banking introduces undeniably outweigh all the costs. I hope you feel as I do that this new extension will be a valuable investment that secures the future success of Beneficial and its customers.

Introduction

Our company's mission statement asserts that we are "one of America's oldest consumer finance companies" and claims we "have the resources and expertise to help its customers achieve their goals and realize their dreams" (www.beneficial.com) Yet, we lack one of the most fundamental aspects of banking today. This missing link in our company that would make our financial institution complete is Web banking. In order to continue to be a leader in providing "money solutions" to "millions of hard-working people," development of an Internet banking system is mandatory (www.beneficial.com).

A topical analysis of the situation would suggest redundancy in implementing an Internet banking structure, since Beneficial has been quite successful without one for over 85 years. However, an Internet banking system would enhance our bank, in quality and profit, and would lead to a multitude of opportunities for both our institution and our customers. The FDIC Quarterly Banking Profile for the third quarter of 2000 reported that commercial banks recorded their "third best quarterly earnings ever" ("FDIC" 1). This improvement signifies that the demand for bank services is up and that banks are needed more than ever to support this positive upward trend.

More importantly, though, is the fact that commerce via the Internet is flourishing at an extraordinary pace- commerce that certainly encompasses banking transactions. The following illustration by the Forrester Research, Inc. study forecasted that I-commerce as a channel of revenue would increase from 15% to 42% in only 4 years and that all other forms of commerce, such as direct sales, will drop (Diniz 2):

Comparison of Types of Commerce

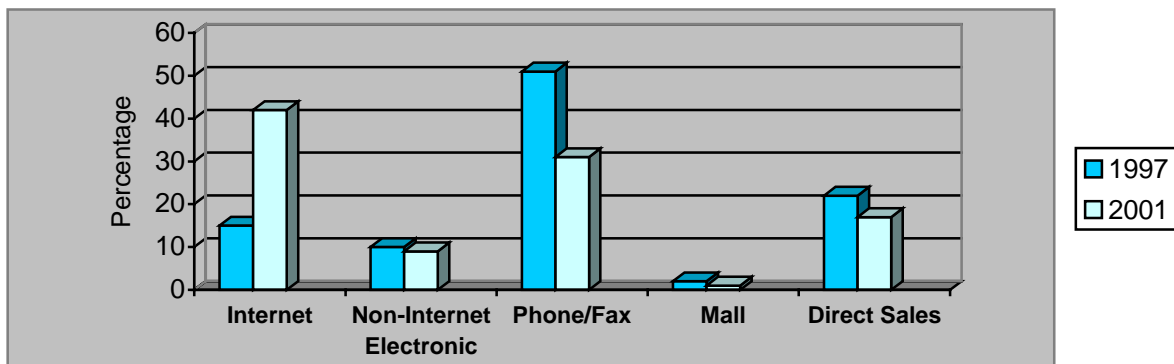


Figure 1

Because of the general increase in demand for bank services and the growing appeal of I-commerce, expansion to include an Internet banking format is the next logical step in our progress.

Recent trends reporting increases in demand for bank services and I-commerce coupled with the fact that more than half of all banks nationwide offer some form of online banking point to one end- that Beneficial should capitalize on this banking innovation as soon as possible. There are some issues that must be addressed when considering a Web banking system, like the financial costs and the possibility that the service will not be popular with users. However, the gains that an online bank would offer, such as an enlarged customer base and increased profits resulting from reduced transaction costs, will certainly make this new service a worthwhile investment, now and for the future.

The next Research Review section will discuss all of the above-mentioned topics, and more, in further depth and will provide insight into the aspects of this new genre of banking.

Research Review

Reasons

An Internet banking division would enhance our bank, in quality and profit, and would lead to a multitude of opportunities for both our institution and our customers. The FDIC Quarterly Banking Profile for the third quarter of 2000 reported that commercial banks recorded their “third best quarterly earnings ever” (“FDIC” 1). This improvement signifies that the demand for bank services is up and that banks are needed more than ever to support this positive upward trend. Even higher in appeal is the use of the Internet as a means to conduct business activity and perform fiscal transactions. The U.S. Department of Commerce reports that Internet traffic is doubling every 100 days, and the 1997 Forrester’s Business Trade and Technologies strategies research report predicted a forty-fold increase in Internet commerce from \$8 billion in 1997 to about \$327 billion by the year 2002 (Cuevas 2). A more recent prediction in September 1998 calculated this number to be closer to one trillion dollars by 2002 (Crusciel 1).

Growth of Internet Commerce

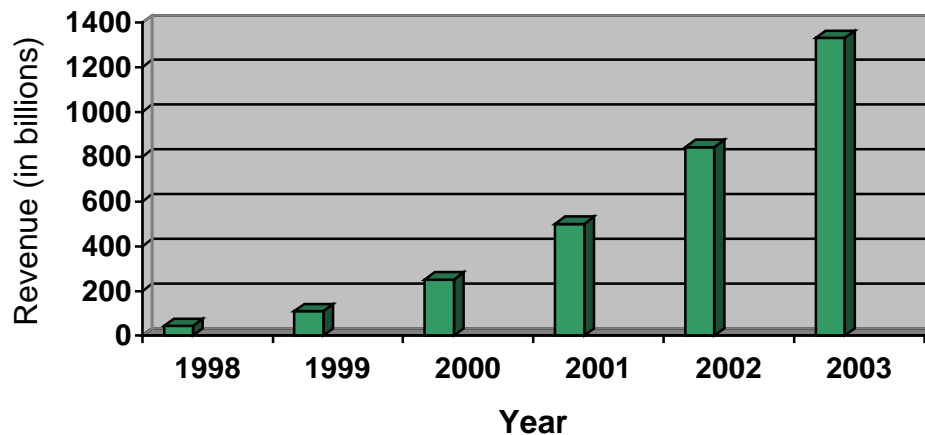


Figure 2

Regardless of which projection may be most accurate, the bottom-line is that substantial growth in I-commerce is inevitable and that consumers’ demand for this electronic mode of business is too significant to ignore. Thus, “given the projections that Internet commerce will grow astronomically over the next few years, firms of all sizes must become proactive in not only seeking out Internet opportunities but in determining ways to exploit this revenue generating medium” (1). Thus, trends indicate that firms should already be involved in Internet commerce.

Secondly, nearly 65% of all banks in the United States currently offer some form of online banking for its customers (“FDIC” 3). “According to American Banker, more than two-thirds of the 227 transactional websites counted in June 1998 by the FDIC are offered by banks and thrifts with assets of less than \$500 million” (Cuevas 1). The super-banks have been online for some time now, but smaller community banks similar to Beneficial have been emulating their lead. Wells Fargo, NationsBank, First Union, and Fleet are among some of the more notable larger banking institutions that have an exhaustive collection of online services (“CompuBank” 1). Moreover, this number does not include Internet-based banks- financial firms that conduct business solely via the Internet. The Travelers Group/Citicorp, NextCard, E*TRADE, and Net.B@nk are a few of the thousands of Internet-based banks that have “consistently turned a profit” (“Non-banks” 2). The prevalent success of these online banking endeavors is a strong indication that our own establishment of a Web banking system will be auspicious as well.

More importantly, the significance of the large number of banks offering online services is that it forces us to exploit one too, in order to remain the strong force we have become in the past decades. A study conducted by Deloitte and Touche estimates that half of all U.S. bank branches will be substituted by electronic banking within the next ten years (Ramaswami 2). “Most banks have come to stage saying they want to provide Internet banking and that it’s important” (“Internet Web” 1). American Express, for instance, has invested close to \$100 million during the last five years for this purpose (Ramaswami 2). Digital Insight and Edify are the leaders in Internet banking systems among smaller financial institutions, with 200,000 registered end-users, and medium-sized to large US banks, respectively (“Internet Web” 2). Other recent successful adopters of a Web banking service include Stillwater National Bank of Oklahoma and State National Bank of Big Springs Texas (Cuevas 2). Thus, these banking triumphs “pinpoint a significant incentive for smaller banks to go online” (2), and deeply implies that we also develop a site to remain competitive in the banking market.

Benefits

Once an online banking system is devised and implemented, it will introduce a number of valuable benefits and opportunities. First, we will be able to enlarge our customer base without building new offices or employing more workers. Amarillo Bank, for example, projected 200 initial users upon the site’s debut but actually went “beyond expectations” with 4,000 users instead, making it “an overnight success” (“Amarillo” 1). Also, Amarillo has a monthly sign-up rate of 200 users and receives 426 log-ins a day (1). Secondly, providing an Internet bank system will help to ensure retention of existing customers because we would become a comprehensive organization that provides the latest in banking technology in conjunction with the nationally renowned experience and quality people have come to associate with the name Beneficial. Finally, our profits will increase significantly. The cost of an Internet transaction ranges from \$.01 to \$.07, as compared to \$.27 at an ATM, \$.54 over the phone, and \$1.07 in a physical branch (Cuevas 2).

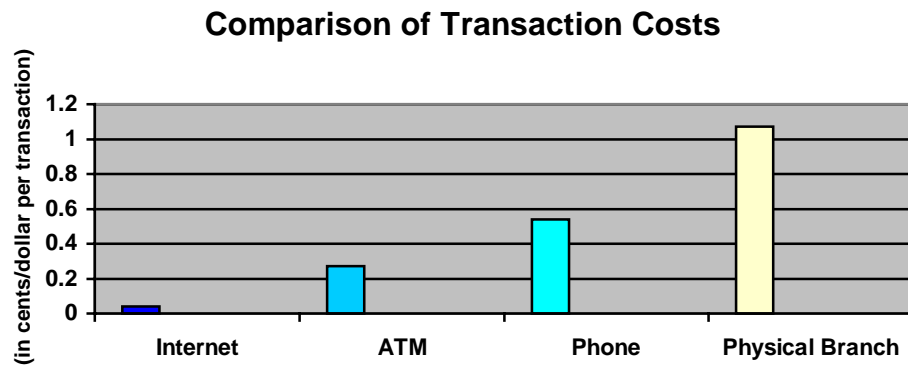


Figure 7

This is a considerable savings, especially if one takes into account the amount of transactions we perform. Also, according to a banking study performed by Sang-Rim Choi and Adrian E. Tschoegl, a reduction in labor coupled with an increase in efficiency translates to an increase in net profit and productivity (Choi and Tschoegl 359-360). By implementing an Internet system, we would simultaneously decrease the amount of workers needed to perform those same online services while making considerable gains in efficiency from the high speed of the Internet. These advantages in implementing online banking are compelling reasons enough to do so and undeniably outweigh all the costs.

Setbacks

There is the obvious financial hindrance. According to one writer, “The cost of developing an online banking business includes not only the basic expenses involved in putting together the website, but also legal and regulatory hurdles, investment in security systems, and significant expenditures to drive business to a site once it has been created. Development costs include infrastructure expenses, including acquiring the necessary computing power to make the online system effective, as well as costs to employ personnel or hire consultants to set up and manage the system” (Conger 5). However, the startup cost is much lower than what one might expect. Amarillo Bank, which has a total asset of \$1.3 billion, started its web banking system on a development budget of only \$18,000; that is, it took the bank less than 0.0014% to establish a flourishing system (“Amarillo” 1).

There is also the equally significant issue of the site not being popular with users. However, the success of other online banking systems and the potential market of 60 million-plus Internet users make this barrier to entry very minimal (Conger 6).

Taking all this into consideration, the upcoming Plan section will present a comprehensive outline of the steps to be taken to develop our own successful online banking system.

Plan

Project Objective

To develop and implement an online banking system that incorporates the basic features of an Internet banking program into a simple user-friendly layout. One of the factors that will distinguish our online banking system from others is our emphasis on a simple user-friendly layout.

Planning Meetings

General Pre-Project Meeting

The general meeting is intended to:

- summarize the importance of an online banking system
- discuss the requirements of an Internet banking system
- schedule and setup workshop meetings

Workshop Meetings

Workshop meetings are intended to address and map out the specific steps to be taken for various stages of the implementation of an online bank system. Each meeting will feature specialists and/or speakers related to the particular areas of:

- computer networking- Electronic Data Systems (EDS)
- webpage design- Digital Planet
- customer information campaign

Post-Project Meeting

The post-project meeting will be used to:

- examine the resulting online system
- make any alterations, if necessary, to the system

Design/Development

Computer Network

As with any Internet-based system requiring a client-server architecture, a computer network must be developed. The network will link all our customers' account information from all 950 physical branch databases directly to one central server database. However, as an established financial institution, the physical connections for such an information network have been previously established; all the information in any local branch is accessible via remote access through an application-shared database computer from our headquarters in Baltimore, MD.

Yet, to allow Beneficial customers from anywhere around the world to access their accounts any time of day or night, we must implement a special network called a special area network (SAN). An SAN will provide an "any-to-any" mechanism for our

server to access multiple disk resources for the purposes of both the traditional network client-server applications and/or transaction-processing application (Nolle 1).

To construct such a SAN, we will employ the services of Electronic Data Systems (EDS), one of the leading network solutions specialists firms today. There are two main reasons why EDS was chosen above other firms:

1. EDS is a full-service provider, which means that they offer their clients subscription-based storage service for a monthly fee that includes a Service Level Agreement (SLA) guaranteeing customers the data storage capacity they demand. They do offer optional services as well, including data protection, data transfer, backup and restoration, and disaster recovery.
2. EDS has developed global networks for other banking institutions, including Capital One, First Union Bank, Fleet Bank, Washington Mutual, and World Savings.

As a full-service provider, EDS does provide its clients with the following to startup and manage a successful online banking system:

- Fiber-channel networking infrastructure using EMC Symmetrix as the storage array platform (Clark 6)
- Software- EDS has assembled software programs customized to meet the needs of Beneficial, and the following software applications are offered as a package
 - network management- CiscoWorks 2000 LAN/SAN Management
 - network database- Microsoft SQL Server 2000 Enterprise Edition
 - internet server- Microsoft Commerce Edition 2000
 - communication suite- IBM Secureway Communications Server V6.1
 - encryption- CA Crypt IT V1.06 Workgroup Edition
 - network utility- Citrix Metaframe V1.8 Enterprise Edition
- Licensing- each software application requires a license, and EDS handles all of the necessary paperwork and processing for Beneficial
- Support and Training- in addition to providing us with the hardware and software to startup our SAN, the monthly subscription-based fee will pay for:
 - monthly EDS monitoring and system-failure testing
 - client support and troubleshooting
 - training of Beneficial employees to use, manage, and upgrade (when necessary) the system
 - a training program for Beneficial customer financial specialists on how to input new account information for processing

Website

The primary factor that will distinguish our online banking system from others is our emphasis on simplicity of our finance website. Since we do currently have a Beneficial homepage, all that is required is the addition of an “Online Personal Finance” link that connects to a webpage for customer access to our online system.

The “Online Personal Finance” page will allow Beneficial customers the three basic features of an online bank- (1) view account activity/transaction summaries, (2) transfer funds or balances, and (3) pay bills. It will also highlight the following:

- customer login text field- customers will be asked to input information such as their name, social security number, and account number
- password/pincode text field
- button for viewing account activity
- button for transferring funds
- button to pay bills
- “forgot your password?” feature
- link for online banking enrollment
- link for direct access to customer service
- link for more information about the other services of Beneficial

For this supplementary webpage, we will employ the services of the same web developers that designed our homepage- Digital Planet.

Customer Information Distribution Campaign

We will inform our present customers about the new service three months prior to its availability. This will allow time for interested customers to enroll, and provide us with an idea of the demand for such a service.

There are four channels by which to distribute information and to contact our customers:

1. physical branch- distribute information brochures at all of our 950 local branches
2. homepage
3. traditional mailings
4. email, if applicable

Customer Enrollment Campaign

Customers will be able to enroll:

- at their local branches- each local Beneficial branch financial specialist will be trained to input and submit customer information into the database for processing
- online- there will a link on the “Online Personal Finance” page that will allow customers to directly sign up
- by calling our customer service toll free number at 1-800-371-6441

Budget

This budget is an estimate of the maximum cost that will be incurred on the proposed online banking system. The budget below is calculated for the first year (total costs for startup) and for subsequent years (total costs for maintaining).

Monthly EDS subscription-based storage service fee	=\$50,000
<ul style="list-style-type: none"> • initial SAN fiber channel setup • monthly monitoring and testing • customer support and troubleshooting 	<ul style="list-style-type: none"> = \$75,000
 Software	
<ul style="list-style-type: none"> • internet server- Microsoft Commerce Enterprise Edition 2000 • network database- Microsoft SQL Server 2000 Enterprise Edition • network utility- Citrix Metaframe V1.8 Enterprise Edition • network management- CiscoWorks 2000 LAN/SAN Management • encryption- CA Crypt IT V1.06 Workgroup Edition • communication suite- IBM Secureway Communication Server V6.1 	<ul style="list-style-type: none"> =\$12,268.96 = \$9,997.86 = \$9,395.00 = \$1,599.72 = \$1,157.91 = \$839.43
 Licensing	
<ul style="list-style-type: none"> • \$1,300 per software application license 	<ul style="list-style-type: none"> = \$7,800.00
 EDS training program for Beneficial employees	
<ul style="list-style-type: none"> • trained to use, manage, and update the system • train customer financial specialists on data entry/enrollment 	<ul style="list-style-type: none"> = \$45,000.00
 Digital Planet web developer/IT specialist	
	=\$65,000.00
 Webmaster	
<ul style="list-style-type: none"> • annual maintenance of site 	<ul style="list-style-type: none"> = \$30,000.00
 Information distribution and enrollment campaigns	
<ul style="list-style-type: none"> • brochures • posters • labor 	<ul style="list-style-type: none"> = \$97,000.00
 Total Cost for First Year	
	= \$955,058.88
Total Annual Cost	
	= \$630,000.00

Discussion

Though the startup and maintenance costs do seem rather expensive, in comparison to Beneficial's average annual total assets of \$3 billion dollars, the project is very affordable. The total startup cost is less than 0.032% of our bank's annual assets, and the total maintenance cost is 0.021%. Taking into account the money that Beneficial would save from transaction costs and a likely potential of drastically increasing our market area without building new offices or field services, it is expected that our profits will increase. Over time, the new online banking system would pay for itself.

Our new online system will push us back to the forefront of banking excellence, and even further. Unlike some other Internet banking sites that are overly complicated or charge expensive fees for customer access, which may in turn discourage their use, Beneficial's site will be designed with our customers in mind and at no extra charge. Featuring an extra user-friendly layout, our system will invite our customers to join in on what other bank's customers have been utilizing for some time now. Here at Beneficial, we understand the importance of saving money and time, and that is exactly what our Web banking system would do for our customers and for us.

The new service will create many positive changes for our valued customers. The Internet banking system will give our customers the convenience they cannot receive from traditional banking- the option to view their accounts, transfer funds, pay bills, or do anything else related to money except withdrawals, all at the click of a button from the comfort of their homes at any time of day or night. Our customers will no longer have to worry about the hassles of organizing their accounts, writing checks, stamps, and mailing bills. The online system can provide all of these services and more. The system will also give them the power to monitor their bank accounts day to day, instead of waiting for a monthly statement. Most importantly, the online service will better interacting possibilities between Beneficial and our customers, which may result in more intimate customer relationships- something synonymous with our name.

With so many possible gains at such a modest cost, an online banking division is certainly something not to be overlooked. Our mission statement does iterate that our customers will "enjoy many other important benefits, now and in the future. Choosing Beneficial means getting the money you're looking for...and much more." This new addition is a wise investment into the future of Beneficial, for it provides our customers with one of today's most important banking innovations while giving us the resources to continue our outstanding service.

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