



Web Banking in USA

By Eduardo Diniz

Email: diniz@haas.berkeley.edu

Eduardo Diniz is Visiting Researcher at Haas School of Business in University of California at Berkeley and a Ph.D. candidate at Fundacao Getulio Vargas in Sao Paulo, Brazil. He's been working with IT impacts in Brazilian banks for the last seven years. He came to Berkeley in August 1996 to research on Web banking.

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Abstract: This report presents a survey* on Web sites of banks in USA. It was done in order to learn about Web banking models that are being adopted in United States. We see American banks using the Web to reach opportunities in three different categories: to market information, to deliver banking products and services and to improve customer relationship. We split each one of these categories in three levels of interaction, to classify different kinds of applications that are found in each of the searched Web sites.

*Data collected in October/November 1997

1. Framework

To better understand how banks are setting up their Web sites, a framework was conceived, providing a tool to classify and make comparisons between different kinds of banks, from different groups and sizes. The same framework can also be used to look at bank Web sites in different countries, operating under different market pressures and regulation, giving clues on how the environment shapes site designs and development.

Of course, a tool which helps to set parameters to understand Web banking can be used at different points over time in order to see how the use of this technology evolves and its impacts on banking business. The functionality of the Web sites was divided in such a way to give insights on three different opportunities that the technology could bring to banks:

- as an information vehicle, since very often banks work as information providers;
- as a channel for conducting transactions, in the same way as in branch offices or ATMs;
- as a tool to improve customer relationship.

Sometimes different activities in these three fields of opportunities became blurred, which makes it hard to distinguish which way we should classify one or another feature in a Web site. On the other hand, we should keep an eye on the way resources are used and how different levels of interactivity are being considered when a bank decides to create a Web site.

To classify the interactivity, we have adopted a model with three levels. At the first level, which we will call basic or incremental, a bank can only reproduce the way it works with other media than the Web. It opens a new front without exploring the whole possibilities of the new vehicle yet. At the next level, the intermediary, some specific features of the Web are used to improve services and activities done by banks. But the use of this resource does not impact very much the way banks run their business. In contrast, The third level, advanced, opens the possibilities for business transformation and the creation of new business opportunities.

We divided each one of the three categories of activities previously described - information delivery, transaction channel and customer relationship - into these three different levels of interactivity, as seen on figure 1.



Figure 1: framework for classification

Thus, we can see all these categories together in a table with nine boxes where:

- a. Banks use the Web as an information delivery tool. At the basic interactivity level, like an electronic brochure, it provides institutional and promotional information, ways for contact the bank and special offer announcements. Examples for the intermediary level of interactivity are search engines, report downloads, recruitment forms and hot links to other sites. At the advanced interactivity level, Web sites use customizing resources, besides some subscription option, advertisement or discussion groups.
- b. The Web is a vehicle for the most common transactions that one could expect to have with a bank. In the lowest level of interactivity, we see applications for opening accounts and requesting products and services. Included here are card requests and investment and credit applications. At the intermediary interactivity level, a client can have access for information on accounts through balance and statement. Other options are fund transfer and bill payments. Notice that in the intermediary level the client has to have some access to the bank database. As advanced level of interactivity we consider banks that are working primarily via Web, the non-branch banks. We also have in this very same level banks that are promoting the use of some e-cash as a way to develop transactions through the Web.
- c. Banks use the Web to improve relationship with customers. At the basic interactivity level, e-mail and forms are the ways a client has to make suggestions and complains. At the intermediary interactivity level, advising tools (as calculators, for example) are offered as a support to make financial decisions. The advanced level of interactivity is related with possibilities the Web brings in gathering information to product and service development. More advanced technologies, such as videoconference, are also considered in this level.

2. The sample from USA banks we worked on

We selected 121 banks from all over the USA that were already running a Web site. From these, about 20% are banks

with assets greater than \$10billion, more than 30% are somewhere in between \$500million and \$10billion and almost half of them (47%) with assets lower than \$500 million. We checked information of each bank we have the Web site visited with the FDIC database.

The study was developed based only on the information we can get from the Web sites. We didn't make any direct contact with the banks themselves, which we are planning to do next. So we can say that our observation is from the point of view of a user who is looking for a bank to do business with.

3. Results



Figure 2: Distribution of services found in bank sites

The preliminary results of our study are shown at the figure 2. Notice that one site can have services in more than one of the boxes since we are classifying the offered services and not the sites themselves.

All the Web sites we visited offer some plain information with no interactivity. We see bigger banks doing better than smaller ones on the information delivery field at higher levels of interactivity.

On the transaction field, we see banks creating opportunities to develop an alternative channel to deliver products. Again, at the basic and intermediary levels, we notice bigger banks doing better. We couldn't find many banks offering transaction services at the advanced level, but some observations on this case will be presented later.

At the customer relationship level we feel that, differently from other categories of services, smaller and mid size banks are doing as well as the big ones. See the 100%, 90% and 98% case in the basic level; and the 60%, 59% between big and mid-sized on the intermediary level.

We couldn't obtain any observation at the advanced level for customer relationship since this information can't be clearly seen from just looking at the Web site. We consider that we need to have information from inside the bank to see how they keep track of the clients' demands and how this impacts the product development process. We are going to get this information at the next phase of our work.

3.1. Information delivered

Taking a closer look at the kind of information delivered by banks on their Web sites, we see that about 90% are concerned with giving information to make contact with them in physical branches. Branch and office addresses (together with phone and fax numbers), ATMs addresses and office times are considered here.

Bigger banks are better structured to provide information for public relations purposes. 88% of the big ones, 62% of the mid size and 33% of the small ones offer this type of information, which includes press releases, newsletters, news about the site and the bank and welcome letters.

On the other hand, smaller banks are slightly more concerned with the release of information about their staff and board of directors than bigger ones - 56%, 64% and 67% respectively from the big to the small banks. This situation is clearly understandable since the big banks count on their brand names much more than the smaller ones, which have to better promote their managers.

Financial information about the company is found more often with larger banks - again from the big to the small: 84%, 51% and 33%. Stock information has similar relation: 56%, 33% and 18%, respectively. However, information on fees and rates are more often found in mid-size (62%) and smaller banks (47%) which are highly competitive in this area. Big banks (40%) are more confident in their brand names, and are less committed to showing their prices.

The fact that only roughly half of the web sites communicate to their actual and potential clients information such as the price of products and services, indicates competition in banking industry is less price motivated than in other sectors.

We see bigger banks better prepared to provide economic information about the financial market, and their Web sites show this. The production of articles and economic reports, analysis of economic performance of industries and countries are found on 60% of the big bank sites.

Job offers are very easy to find too. 80% of the big banks are using the advantages of making recruitment announcements on the Web: wide geographical area reached, the target people (high level, etc.), time of response and comparative announcement costs.

Other online banking strategies like phone banking and PC banking based on some kind of proprietary software are also promoted on the Web sites. It seems that this is another field where big banks have no clear predominance. Even the numbers of banks, which are offering these services, are lower than we would expect: less than 40% for the whole sample in both cases.

At the intermediary level of interactivity, we see once more the big banks' effectiveness. Download and forms to order more detailed reports are more often found within big banks (52%). Search tools are often in sites with many pages, being more common among big banks (52%).

Links to other sites, though it is a very basic technology, is used among a relative low percentage of banks (50% of all). This show that a significant number of them see their sites as a final stop to a Web traveler. This seems like a mistaken in terms of Web concepts.

For advanced interactive level we are considering ways of customizing the information within the site, subscription services advertising and discussion groups. Very few banks use these resources - 24%, 10% and 4%, respectively from the big to the small -, although they don't demand extremely sophisticated technological capabilities.

3.2. Transaction channel

At the basic transaction level we are considering mainly the availability through the site of application forms to request the most common banking products: checking (or other) account, card (credit or other), loans and investments.

Our survey shows that even if there is almost no technological restriction to offer these application forms (we considered even forms that are not online), they are not used very much. Our guess is that the barrier to implement these services through the Web site is outside of the technological field.

It's worthwhile to note that application for investments, which are closer to becoming real transactions, are less used than the others are - 12% for investments applications against 24% in loan and card applications, and 19% in account applications. On the other hand, applications for loans, which are less like real transactions, since they need more accurate evaluation, are slightly more used. This gives us a clue about how conservative banks still are to perform online transactions.

At the intermediary transaction level we see the services that every client want to see in his/her bank Web site. Although these services are common, we put them at an intermediary level because they imply some level of access to bank databases. This demands higher security standards, which places them in a superior level compared with services from the basic level.

Balance and statement are the most obvious services in this category. They are rigorously offered together - 17% of the total bank sites for both services. Transfer funds between accounts of the same client inside the bank is the next stage (16%). Bill payment, which is more expensive and complex inside the bank process, is a little less used (15%).

Almost 60% of the sites where these transaction services are offered are free of charge. A quarter of them charge only for bill payment. Others charge a flat fee or offer the services free of charge, depending on the balance of the client. Disregarding the differences among services in different banks, fee range from \$4.50 to \$7.95 per month.

We also considered in this category the demo use of the service for someone who wants to try it before enrolling. Only 11% of the sites have this kind of demo of the online services.

At the advanced transaction level, we consider first banks, which are promoting services only through their sites. From all the sites we visited, only two can be considered as totally Web bank organizations. We also consider in this level sites which are offering e-cash solutions (even if developed by third parties, as is the case of the only one bank we found promoting this service) to improve transactions on the Web. It is clear that big banks are not interested in being totally Web banks in the near future. However they are not even promoting the use of any payment system designed specifically for the electronic commerce.

3.3. Customer relationship

As the basic level of customer relationship we considered options that one can find to make complaints, write opinions and request services in a generic way.

From the survey we see that the bigger the bank, the more it prefers to get structured information from its customers. This is possible with the use of forms, which are filled field by field. Once the forms can be sorted by field, a bank can better organize the requests and complains it receives. This opens some opportunities to automate at least part of the response to customer demands.

The email option is loosely open and frequently more difficult to reply to messages, making virtually impossible the automation of response. On the other hand, the customer can feel free to say whatever he wants by email.

At the intermediary level of customer relationship we have identified ways a bank can use to help customers to make financial decisions. Among the banks concerned about offering this help to their customers, calculators are the most used tool (38%).

Other examples of advising tools are help planners, budget worksheet and questionnaires to identify the investment profile of the customer. All of them are very simple and can give some help to the customer, but it is difficult to imagine a customer making a loan or investment decision only by handling these tools on a Web site.

We also consider advising tools that can be downloaded to the customer's computer instead of being used online. Even these tools don't seem sophisticated enough to reach more complex customer needs.

4. Conclusions

We noticed that banks have much to improve in their Web sites, and that they are only in the very beginning in terms of functionality. Models of bank Web sites are still not clear. The sites we visited give the impression of not being well targeted and it is not clear if they are designed for client exclusive use or to a broader group of visitors. Customization has to be more widely adopted.

Some basic technologies that are very well known in the Internet world are not used or have little use. We found relatively low usage of links and subscription services, and virtually no discussion groups, for example.

By the charts we saw, we conclude that banks are very interested in keeping their position as information providers on the financial market. Many of the visited sites show this trend, by delivering lots of reports, analysis and articles.

The services in the transaction group have more barriers to be implemented. These barriers can be technological, but it is clear that they also rely on cultural and organizational fields. Customer relationship can be much improved. Banks have already developed technologies to advise customers at higher level than they show in their sites.

The framework we presented here shows that the interactivity implemented in one site can be gradually adopted. The planning of a site can evolve from one level of interactivity to another, keeping pace that permit overcoming organizational and cultural barriers.

And, of course, the new business opportunities are in the higher levels of interactivity since there are fewer competitors acting and there is more chance for implementing innovative services.