

Fulfillment/Printing for INPUT

Date 2/28/97 By CR
 Program Code _____ Project Code EPRB2
 INPUT P. O. # 9268 BAC Ref. # _____

Title: Banks Report Problems
in Electronic Banking Products

- ☐ Report
☒ Research Bulletin
☐ Profiles
☐ Newsletter
☐ Reprints
☐ Other _____

Fulfillment - Please print list to order covers>>

TO: GBC
Covers Order

Date _____
 Quantity _____
 Color _____
 Size _____
 P. O. Number _____
 GBC Control Number _____

Reports

Fulfillment _____
 Stock _____

Total _____

Executive OV

Fulfill. _____
 Stock _____
 TU Pkg. _____
 Total _____

Research Bulletin

Fulfillment 155
US stock 105
UK stock 200

Newsletter

Fulfill. _____

Total 460

Date/FedX GBC _____
 Date Due INPUT _____
 Date Rec. INPUT _____

Date _____

PLEASE PRINT ☐ labels ☐ packing slips
 To: BAC _____

TO BRADFORD ADAMS

- ☐ Folder ☐ Disk ☐ Hard Copy ☐ Blue Form
☐ Dates ☐ GBC Cover

For Set Up/Proof _____
 Proof rtn to INPUT _____
 Final proof rtn to BA _____
 Scheduled to Ship _____

Instructions:

- ☐ Window Cover
☐ Hot Strip
☒ 3-Hole Drill
☐ Staple
☐ Shrink Wrap
☐ Other _____

Return to INPUT Ship Date _____

- ☐ Originals/Disk in folder
☐ For Stock: _____ RP _____ OV _____ RB _____ PR
☐ Internals for Distribution
☐ International for mailing/DHL
☐ Other _____
☐ INPUT add stock quantity to inventory report

Other Information/Notes

- Please print in new orange Electronic Process Practice Masthead.

* Please read banner on masthead!! (we had one printed in correct color but wrong masthead!)
ESIRB

Please put "about INPUT" on back of RB ask Linda if questions



Banks Report Problems With Electronic Banking Products

Despite promising forecasts of additional revenue and new business from home (or PC) banking, smart cards and other electronic products, a number of banks report that they have encountered more problems than anticipated with these products, as illustrated in Exhibit 1.

Exhibit 1

Problems Encountered with Selected Retail Electronic Products

Electronic Banking Products	Problems Reported by Banks
Home or PC Banking	Pricing was not analyzed. Cost of support is high. Should have selected other products.
Smart Cards (with stored value capability)	Use is below forecast. Profitability is in question.
Internet based services	Forecast business volume and number of new accounts has not been achieved.

Source: INPUT

Banks and vendors aiding them do not always conduct sufficient customer research or tests of new services before introducing electronic or digital money products. Vendors must help banks by making sure that all aspects of a new product are considered.

- The pricing strategy for home banking, for example, may have to be checked through a pilot effort involving the sale of the service, rather than just asking customers about possible prices, to make sure pricing will not discourage customers for signing up for the service.
- Vendors should ensure that banks understand the support and costs involved with a new service. Banks underestimate the cost of running support desks.
- Vendors must advise banks on alternatives available to meet retail electronic banking objectives so that customer requirements are satisfied.

It is in the vendor's interest make sure that banks investigate the suitability of products, since they (the vendors) will incur costs and changes if difficulties are encountered.

Vendors as well as banks must keep in mind that the successful use of these products is

important since it will have a significant effect upon future lending, savings, investment and other banking business and revenues.

Examples of problems that were reported to INPUT during recent research on electronic banking include:

- Bank customers who were encouraged and helped to use "trial" home banking systems became annoyed with deficiencies in current features and transferred accounts to banks that had more attractive systems.
- Some banks introduced pricing strategies for home banking systems that had supposedly been researched but which drove customers (together with their checking and savings accounts) to other banks.
- Banks found that the costs of support and administration for electronic banking ventures were higher than planned, and this made their electronic banking products unprofitable.
- The slow growth of customers for some smart card or Internet services made some banks question whether they had selected the right services or anticipated what was involved in start up.
- Banks also report that they had not anticipated the impact of new products on existing or other new products. For instance, a new approach to call center banking had an impact on the use of home banking at one bank.

Many banks report, in hindsight, that more research should have been undertaken before they launched new retail electronic banking services.

An additional onerous aspect of these situations, according to banks, is the additional time and expenditures which must be spent on reviewing and adjusting or changing plans after a new product encounters difficulties.

- As one IS executive in a bank stated, the assumption of his bank was that new technology would overcome the difficulties encountered in signing up customers for electronic services at other banks.
- Several vendors reported that the difficulties encountered in past ventures with home banking were similar to experiences being encountered with bank customers today.

As a result of current experience, banks recommend that research prior to product launch be more intensive. INPUT recommends that vendors involved in supporting banks make sure that steps are taken to both analyze and test the interests and needs of present customers and to investigate experience elsewhere as shown in Exhibit 2.

Exhibit 2

What Should be Done Before Launching Electronic Banking Services

Step Recommended for Planning Retail Electronic Services	Rating of Importance (low=1; high=5)
Research and test needs and interests of customers more deeply	4.4
Obtain information on tests and use of electronic products at other banks	4.2
Conduct meaningful tests or pilots with customers	4.2
Model impact of new products on present business and other products being planned	3.5

Source: INPUT



Needs of customers must not only be researched and analyzed—they must be tested.

- Customers may indicate a strong interest in new products, but not accurately specify what they feel is most necessary for such a service or how they will respond to differences in price.
- Citibank has found that their pricing strategy (no charge) has won a number of clients in the NY City area.
- Some bank customers have surprised their banks by switching service to another bank in order to use home banking available with Internet or network services based offerings or a personal financial software product.

Banks may find the services of vendors helpful in analyzing the attraction of services available in the market. But banks must also be cognizant of the fact that changes are happening rapidly in electronic banking, and the vendor working with them may have a product that is lagging more recent introductions of other vendors.

Banks may also find out that electronic banking products cause conflicts with other existing banking products in several ways.

- They may cause a decrease in use of other products by being substituted for them.
- They may also cause a decrease in use of existing products by creating a confusing image of the bank for customers.

One vendor aided a German bank to attack the above mentioned problem of product conflict by helping to set up a subsidiary that uses a set of new electronic products and allows the main banking institution to retain an image of older products. The bank expects

to see business shift to the new subsidiary over time.

It is important for banks and the vendors aiding them to stay abreast of developments in customer interests and in new ideas in electronic or digital money products. The use of these products will drive banking business in the future, as shown in Exhibit 3.

Exhibit 3

Impact of Electronic Banking Services on Banking Business by 2002

Area of Banking Business Impacted by Electronic Banking Services	Estimate of Impact by 2002
Incremental volume of lending business driven by electronic banking services for customers	\$1 Trillion
Increase in use of electronic transactions in banking	Increase from 45% of transactions in 1996 to 95% in 2002
Use of electronic money products such as "home" banking and smart cards	More than double in use

Source: INPUT

The increasing importance of electronic banking, and the need to plan and launch electronic banking services, is causing many banks to develop plans rapidly. A number of banks feel that they will not be sufficiently converted to electronic banking products to be prepared for competition by 2002.

Andersen Consulting feels that most banks are not prepared for the conversion of banking business to electronic products, and it is providing a facility, the Financial Ideas Exchange, where banks can try out new electronic banking technology.

Vendors must recognize that banks have to be prepared to meet competition in offering electronic banking products by 2002, if not sooner. However, vendors must also recognize that sufficient research into the requirements of bank customers as well as testing of products must take place before products are launched.

- This means that IT vendors serving banks have to obtain sufficient research on experience in introducing and using electronic banking products so that they

can analyze bank situations and provide aid to banks.

- If vendors do not gain sufficient familiarity with the market, they may see sales cycles lengthen as they gain knowledge on the job while helping banks develop a plan and implement product solutions.

While this additional step in the product launch process may lengthen the time to market, it will quickly pay for itself in increased sales and customer satisfaction.

This Research Bulletin is issued as part of INPUT's Electronic Process Practice. If you have questions or comments on this bulletin, please call your local INPUT organization or John McGann at INPUT, 400 Frank W. Burr Blvd., Teaneck, NJ 07666, (201)801-0050.



Fulfillment/Printing for INPUT

Date 3/25/97 By LR
 Program Code _____ Project Code EPRB2
 INPUT P. O. # 9268 BAC Ref. # _____

Title: Banks Report Problems
ul. Electronic Banking Products

- ☐ Report
☒ Research Bulletin
☐ Profiles
☐ Newsletter
☐ Reprints
☐ Other _____

Fulfillment - Please print list to order covers>>

TO: GBC

Covers Order

Date _____
 Quantity _____
 Color _____
 Size _____
 P. O. Number _____
 GBC Control Number _____

Reports

Fulfillment _____
 Stock _____
 Total _____

Executive OV

Fulfill. _____
 Stock _____
 TU Pkg. _____
 Total _____

Research Bulletin

Fulfillment 155
US stock 205
UK stock 200

Newsletter

Fulfill. _____

Total 460

Date/FedX GBC _____
 Date Due INPUT _____
 Date Rec. INPUT _____

Date _____

PLEASE PRINT ☐ labels ☐ packing slips
 To: BAC _____

TO BRADFORD ADAMS

☐ Folder ☐ Disk ☐ Hard Copy ☐ Blue Form
☐ Dates ☐ GBC Cover

For Set Up/Proof _____
 Proof rtn to INPUT _____
 Final proof rtn to BA _____
 Scheduled to Ship _____

Instructions:

- ☐ Window Cover
☐ Hot Strip
☒ 3-Hole Drill
☐ Staple
☐ Shrink Wrap
☐ Other _____

Return to INPUT

Ship Date _____

- ☐ Originals/Disk in folder
☐ For Stock: _____ RP _____ OV _____ RE _____ PR
☐ Internals for Distribution
☐ International for mailing/DHL
☐ Other _____
☐ INPUT add stock quantity to inventory report

Other Information/Notes

• Please print on MU
orange Electronic
Process Practice Masthead.

* Please read banner
on masthead!! (we had
one printed in correct color
but wrong masthead!
ESIRB-7

* Please put "about INPUT" on
 back of all 1st editions

Banks Report Problems With Electronic Banking Products

Despite promising forecasts of additional revenue and new business from home (or PC) banking, smart cards and other electronic products, a number of banks report that they have encountered more problems than anticipated with these products, as illustrated in Exhibit 1.

Exhibit 1

Problems Encountered with Selected Retail Electronic Products

Electronic Banking Products	Problems Reported by Banks
Home or PC Banking	Pricing was not analyzed. Cost of support is high. Should have selected other products.
Smart Cards (with stored value capability)	Use is below forecast. Profitability is in question.
Internet based services	Forecast business volume and number of new accounts has not been achieved.

Source: INPUT

Banks and vendors aiding them do not always conduct sufficient customer research or tests of new services before introducing electronic or digital money products. Vendors must help banks by making sure that all aspects of a new product are considered.

- The pricing strategy for home banking, for example, may have to be checked through a pilot effort involving the sale of the service, rather than just asking customers about possible prices, to make sure pricing will not discourage customers for signing up for the service.
- Vendors should ensure that banks understand the support and costs involved with a new service. Banks underestimate the cost of running support desks.
- Vendors must advise banks on alternatives available to meet retail electronic banking objectives so that customer requirements are satisfied.

It is in the vendor's interest make sure that banks investigate the suitability of products, since they (the vendors) will incur costs and changes if difficulties are encountered.

Vendors as well as banks must keep in mind that the successful use of these products is

important since it will have a significant effect upon future lending, savings, investment and other banking business and revenues.

Examples of problems that were reported to INPUT during recent research on electronic banking include:

- Bank customers who were encouraged and helped to use "trial" home banking systems became annoyed with deficiencies in current features and transferred accounts to banks that had more attractive systems.
- Some banks introduced pricing strategies for home banking systems that had supposedly been researched but which drove customers (together with their checking and savings accounts) to other banks.
- Banks found that the costs of support and administration for electronic banking ventures were higher than planned, and this made their electronic banking products unprofitable.
- The slow growth of customers for some smart card or Internet services made some banks question whether they had selected the right services or anticipated what was involved in start up.
- Banks also report that they had not anticipated the impact of new products on existing or other new products. For instance, a new approach to call center banking had an impact on the use of home banking at one bank.

Many banks report, in hindsight, that more research should have been undertaken before they launched new retail electronic banking services.

An additional onerous aspect of these situations, according to banks, is the additional time and expenditures which must be spent on reviewing and adjusting or changing plans after a new product encounters difficulties.

- As one IS executive in a bank stated, the assumption of his bank was that new technology would overcome the difficulties encountered in signing up customers for electronic services at other banks.
- Several vendors reported that the difficulties encountered in past ventures with home banking were similar to experiences being encountered with bank customers today.

As a result of current experience, banks recommend that research prior to product launch be more intensive. INPUT recommends that vendors involved in supporting banks make sure that steps are taken to both analyze and test the interests and needs of present customers and to investigate experience elsewhere as shown in Exhibit 2.

Exhibit 2

What Should be Done Before Launching Electronic Banking Services

Step Recommended for Planning Retail Electronic Services	Rating of Importance (low=1; high=5)
Research and test needs and interests of customers more deeply	4.4
Obtain information on tests and use of electronic products at other banks	4.2
Conduct meaningful tests or pilots with customers	4.2
Model impact of new products on present business and other products being planned	3.5

Source: INPUT

Needs of customers must not only be researched and analyzed—they must be tested.

- Customers may indicate a strong interest in new products, but not accurately specify what they feel is most necessary for such a service or how they will respond to differences in price.
- Citibank has found that their pricing strategy (no charge) has won a number of clients in the NY City area.
- Some bank customers have surprised their banks by switching service to another bank in order to use home banking available with Internet or network services based offerings or a personal financial software product.

Banks may find the services of vendors helpful in analyzing the attraction of services available in the market. But banks must also be cognizant of the fact that changes are happening rapidly in electronic banking, and the vendor working with them may have a product that is lagging more recent introductions of other vendors.

Banks may also find out that electronic banking products cause conflicts with other existing banking products in several ways.

- They may cause a decrease in use of other products by being substituted for them.
- They may also cause a decrease in use of existing products by creating a confusing image of the bank for customers.

One vendor aided a German bank to attack the above mentioned problem of product conflict by helping to set up a subsidiary that uses a set of new electronic products and allows the main banking institution to retain an image of older products. The bank expects

to see business shift to the new subsidiary over time.

It is important for banks and the vendors aiding them to stay abreast of developments in customer interests and in new ideas in electronic or digital money products. The use of these products will drive banking business in the future, as shown in Exhibit 3.

Exhibit 3

Impact of Electronic Banking Services on Banking Business by 2002

Area of Banking Business Impacted by Electronic Banking Services	Estimate of Impact by 2002
Incremental volume of lending business driven by electronic banking services for customers	\$1 Trillion
Increase in use of electronic transactions in banking	Increase from 45% of transactions in 1996 to 95% in 2002
Use of electronic money products such as "home" banking and smart cards	More than double in use

Source: INPUT

The increasing importance of electronic banking, and the need to plan and launch electronic banking services, is causing many banks to develop plans rapidly. A number of banks feel that they will not be sufficiently converted to electronic banking products to be prepared for competition by 2002.

Andersen Consulting feels that most banks are not prepared for the conversion of banking business to electronic products, and it is providing a facility, the Financial Ideas Exchange, where banks can try out new electronic banking technology.

Vendors must recognize that banks have to be prepared to meet competition in offering electronic banking products by 2002, if not sooner. However, vendors must also recognize that sufficient research into the requirements of bank customers as well as testing of products must take place before products are launched.

- This means that IT vendors serving banks have to obtain sufficient research on experience in introducing and using electronic banking products so that they

can analyze bank situations and provide aid to banks.

- If vendors do not gain sufficient familiarity with the market, they may see sales cycles lengthen as they gain knowledge on the job while helping banks develop a plan and implement product solutions.

While this additional step in the product launch process may lengthen the time to market, it will quickly pay for itself in increased sales and customer satisfaction.

Banks Report Problems With Electronic Banking Products

Despite promising forecasts of additional revenue and new business from home (or PC) banking, smart cards and other electronic products, a number of banks report that they have encountered more problems than anticipated with these products as illustrated in Exhibit 1.

Exhibit 1

Problems Encountered with Selected Retail Electronic Products

Electronic Banking Products	Problems Reported by Banks
Home or PC Banking	Pricing was not analyzed. Cost of support is high. Should have selected other products.
Smart Cards (with stored value capability)	Use is below forecast. Profitability is in question.
Internet based services	Forecast business volume and number of new accounts has not been achieved.

Source: INPUT

Banks and vendors aiding them do not always conduct sufficient customer research or tests of new services before introducing electronic or digital money products. Vendors must help banks by making sure that all aspects of a new product are considered.

- The pricing strategy for home banking, for example, may have to be checked through a pilot effort involving the sale of the service, rather than just asking customers about possible prices, to make sure pricing will not discourage customers for signing up for the service.

- Vendors should ensure ^{that} banks understand the support and costs involved with a new service. Banks ~~underestimated~~ ^{underestimate} the cost of running support desks.
- Vendors must advise banks on alternatives available to meet retail electronic banking objectives. ~~Banks may consider utilizing personal financial software with their home banking product which they do not realize is not suited to the characteristics of their customers.~~ ^{so that customer requirements are satisfied}

It is in the vendor's interest make sure that banks investigate the suitability of products,

since they (the vendors) will incur costs and changes if difficulties are encountered.

Vendors as well as banks must keep in mind that the successful use of these products is important since it will have a significant effect upon future lending, savings, investment and other banking business and revenues.

Examples of problems that were reported to INPUT during recent research on electronic banking include:

- Bank customers who were encouraged and helped to use "trial" home banking systems became annoyed with deficiencies in current features and transferred accounts to banks that had more attractive systems.
- Some banks introduced pricing strategies for home banking systems that had supposedly been researched but which chased customers (together with their checking and savings accounts) to other banks.
- Banks found that the costs of support and administration for electronic banking ventures were higher than planned, and this made their electronic banking products unprofitable.
- The slow growth of customers for some smart card or Internet services made some banks question whether they had selected the right services or anticipated what was involved in start up.
- Banks also report that they had not anticipated the impact of new products on existing or other new products. For instance, a new approach to call center banking had an impact on the use of home banking at one bank.

Many banks report, in hindsight, that more research should have been undertaken before they launched new retail electronic banking services.

An additional onerous aspect of these situations, according to banks, is the additional time and expenditures which must be spent on reviewing and adjusting or changing plans after a new product encounters difficulties.

- As one IS executive in a bank stated, the assumption of his bank was that new technology would overcome the difficulties encountered in signing up customers for electronic services at other banks.
- Several vendors reported that the difficulties encountered in past ventures with home banking were similar to experiences being encountered with bank customers, today.

As a result of current experience, banks recommend that research prior to product launch be more intensive. INPUT recommends that vendors involved in supporting banks make sure that steps are taken to both analyze and test the interests and needs of present customers and to investigate experience elsewhere as shown in Exhibit 2.

Exhibit 2

What Should be Done Before Launching Electronic Banking Services

Step Recommended for Planning Retail Electronic Services	Rating of Importance (low=1; high=5)
Research and Test Needs and Interests of Customers More Deeply	4.4
Obtain Information on Tests and Use of Electronic Products at Other Banks	4.2
Conduct Meaningful Tests or Pilots with Customers	4.2
Model Impact of New Products on Present Business and Other Products Being Planned	3.5

Source: INPUT

Needs of customers must not only be researched and analyzed they must be tested.

- Customers may indicate a strong interest in new products, but not accurately specify what they feel is most necessary for such a service or how they will respond to differences in price.
- Citibank has found that their pricing strategy (no charge) has won a number of clients in the NY City area..
- Some bank customers have surprised their banks by switching service to another bank in order to use home banking available with Internet or network services based offerings or a personal financial software product.

Banks may find the services of vendors helpful in analyzing the attraction of services available in the market. But banks must also be cognizant of the fact that changes are happening rapidly in electronic banking, and the vendor working with them may have a product that is lagging more recent introductions of other vendors.

Banks may also find out that electronic banking products cause conflicts with other existing banking products in several ways.

- They may cause a decrease in use of other products by being substituted for them.
- They may also cause a decrease in use of existing products by creating a confusing image of the bank for customers.

A vendor aided one German Bank attack the problem of product conflict just mentioned by helping to set up a subsidiary that uses a set of new electronic products and lets the main banking institution retain an image of older products. The bank expects to see business shift to the new subsidiary over time.

It is important for banks and vendors aiding them to stay abreast of developments in customer interests and in new ideas in electronic or digital money products. The use of these products will drive banking business in the future as shown in Exhibit 3.

Exhibit 3

Impact of Electronic Banking Services on Banking Business by 2002

Area of Banking Business Impacted by Electronic Banking Services	Estimate of Impact by 2002
Incremental Volume of Lending Business Driven by Electronic Banking Services for Customers	\$1 Trillion
Increase in Use of Electronic Transactions in Banking	Increase from 45% of transactions in 1996 to 95% in 2002
Use of Electronic Money Products such as "Home" Banking and Smart Cards	More Than Double in Use

Source: INPUT

The increasing importance of electronic banking, and the need to plan and launch electronic banking services is causing many banks to develop plans rapidly. A number of banks feel that they will not be sufficiently converted to electronic banking products to be prepared for competition by 2002.

Andersen Consulting feels that most banks are not prepared for the conversion of banking business to electronic products, and they are providing a facility, the Financial Ideas Exchange, where banks can try out new electronic banking technology.

Vendors must recognize that banks have to be prepared to meet competition in offering electronic banking products by 2002 if not sooner. However, vendors must also recognize that sufficient research into the requirements

of bank customers as well as testing of products must take place before products are launched.

- This means that IT vendors serving banks have to obtain sufficient research on experience in introducing and using electronic banking products so that they can analyze bank situations and provide aid to banks.
- If vendors do not gain sufficient familiarity with the market, they may see sales cycles lengthen as they gain knowledge on the job while aiding banks develop a plan and implement product solutions.

While this additional step in the product launch process may lengthen the time to market, it will quickly pay for itself in increased sales and customer satisfaction.

- Among other actions, American Express has obtained a licence for the Proton card in order to offer a smart card capability.
- Lombard, a discount brokerage that provides checking services for clients, developed an internet capability for investment including money market accounts that grew to 50% of its business in 1996.

Many steps in electronic banking and finance may not be successful however.

Cybercash launched an interesting concept in digital payment involving the use of credit and debit cards that has not gained the volume of users that were forecast. Its Cybercoin and virtual check products may be more successful.

The E-cash product of DigiCash, which was introduced by Mark Twain Bank, has not gained a meaningful number of customers according to the bank. It may be more successful at European bank clients.

- Now that SET is available to protect credit card transactions, more work may be necessary to convert US bank customers to the use of Cybercash or E-cash solutions.
- The use of smart cards like Mondex, which can be used for remote payments, could also impact the use of Cybercash and DigiCash solutions.

Several personal financial service products like Quicken also failed to obtain sufficient users since their developers had not conducted the detailed study of bank retail depositor needs that Intuit performed before launching a product and has continued to perform for Quicken.

- Technical aspects of products may be well thought out such as the development of phones that can enter instructions for paying bills.
- Investigation may not be made of the attraction of a new phone terminal for bank customers in the market where it is introduced.
- Mistakes have also been made in the use of technology such as in not developing versions of products for use on the Internet.

IT Vendors serving the banking industry must pay analyze bank functions and customer characteristics as well as the technology which is promoting the boom in electronic banking.

There is no doubt among banks that electronic banking capabilities are necessary for retail banking services. Bank customers are demanding home banking, use of the Internet, advanced ATM services and smart cards.

- Banks report that they expect the percentage of worldwide banks that offer homebanking to climb to over 80% in the next four years.

- The use of the Internet to sell and perform retail banking is expected to be used by 85% of banks by 2000.

Banks also expect a substantial increase in the use of electronic capabilities in work with corporate customers. As shown in Exhibit 4, the major method that banks expect to use for contact with corporate customers will be electronic within the next five years.

Exhibit 4

Use of Electronic Contact with Corporate Banking Customers

Use of Electronic Contact with Corporate Customers	Bank Estimate of Use	
	1996	2001
Percentage of Transactions and Messages exchanged electronically	45	95
Percentage of Lending Business Driven by Electronic Banking Services	20	90

Source: INPUT

The need for the use of electronic capabilities is driving many banks to seek partnering arrangements with IT vendors.

- These arrangements can provide banks with the means of obtaining knowledge and experience with new technology as well as opportunities to reduce costs and develop electronic capabilities rapidly.
- Vendors can also find these relationships useful since they provide knowledge about banking functions and the opportunity to develop general capabilities if not systems that can be sold elsewhere.
- Partnering arrangements have also provided banks with opportunities for participating in revenues, but the most important benefit of these relationships, according to banks, is obtaining assistance in using new technology, particularly communication and security technology, to meet banking needs.
- Assistance is essential to some banks in order to meet business goals since they do not have technical personnel with up to date experience.
- Several banks pointed out that they have technical capabilities such as experience with ATM, ISDN and cryptographic techniques, but reported they had to use IT vendor assistance to meet ambitious schedules.

The opportunities for IT vendors to supply aid to banks to support electronic banking will increase sharply over the next five years. Expenditures for vendor services will almost double to a global figure of \$77 billion between 1997 and 2002.

This Research Bulletin is issued as part of INPUT's Electronic Process Practice.. If you have questions or comments on this bulletin, please call your local INPUT organization or John McGann at INPUT, 400 Frank W. Burr Blvd., Teaneck, NJ 07666, (201)801-0050.

Banks Report Problems with Electronic Banking Products.

Draft

Vol. XXX, No. XXX

March

January 1997

by whom?

We are doing it - say so!!

More Planning Needed To Launch Electronic Banking Products

Despite promising forecasts of additional revenue and new business for home (or PC) banking, smart cards and other electronic products, a number of banks report that they have encountered more problems than anticipated with these products as illustrated in Exhibit 1.

Exhibit 1

Problems Encountered with Selected Retail Electronic Products

Electronic Banking Products	Problems Reported by Banks
Home or PC Banking	Pricing was not analyzed. Cost of support is high. Should have selected other products.
Smart Cards (with stored value capability)	Use is below forecast. Profitability is in question.
Internet based services	Forecast business volume and number of new accounts has not been achieved.

Source INPUT

There has been a lack of research or plans to experiment with services in lieu of research in a number of instances where electronic or digital money products have been introduced. In these cases, banks have initiated retail electronic banking services without considering alternatives or means of fully evaluating services before action is taken.

Banks must investigate the alternatives that are available to meet retail electronic banking objectives and carefully analyze the needs and inclinations of their customers. They must also keep in mind that the successful use of these products is important since it will have a significant effect upon future lending, savings, investment and other banking business and revenues.

Examples of errors include Banks report that a number of steps with that were taken with insufficient research led to problems or undesirable results.

- Bank customers who were encouraged and helped to use "trial" home banking systems became annoyed with deficiencies in current features and transferred accounts to banks that had more attractive systems.
- Some banks introduced pricing strategies for home banking systems that had supposedly been researched but which chased customers (together with their checking and savings accounts) to other banks.

INPUT Research Bulletin

- 2
- Banks found that the costs of support and administration for electronic banking ventures were higher than planned, and this made their electronic banking products unprofitable.
 - The slow growth of customers for some smart card or Internet services made some banks question whether they had selected the right services or anticipated what was involved in start up.
 - Banks also report that they had not anticipated the impact of new products on existing or other new products. For instance, a new approach to call center banking had an impact on the use of home banking at one bank.

7

An additional onerous aspect of these situations, according to banks, is the additional time and expenditures which must be spent on reviewing and adjusting or changing plans after a new product encounters difficulties.

In hindsight, many banks report that more research should have been undertaken before they launched new retail electronic banking services.

Banks and vendors admit that they did not fully investigate the experience of other parties who developed and introduced electronic banking products.

- As one IS executive in a bank stated, the assumption of his bank was that new technology would overcome the difficulties encountered in signing up customers for electronic services at other banks.
- Several vendors reported that the difficulties encountered in past ventures with home banking were similar to experiences being encountered with bank customers, today.

As a result of current experience, a number of banks recommend that research be more extensive and intensive. The steps that they suggest focus heavily on both analyzing the interests and needs of present customers and investigating experience elsewhere as shown in Exhibit 2.

What are we doing?

Exhibit 2

What Should be Done Before Launching Electronic Banking Services

Step Recommended for Planning Retail Electronic Services	Rating of Importance (High = 5 and Low = 1)
Research and Analyze Needs and Interests of Customers More Deeply	4.4
Obtain Information on Tests and Use of Products at Other Banks	4.2
Conduct Meaningful Tests or Pilots with Customers	4.2
Work With Vendor/ Partner that has Knowledge and Experience	3.9
Model Impact of New Products on Present Business and Other Products Being Planned	3.5

Source: INPUT

Needs of customers must not only be researched; they must be analyzed in depth and tested.

Customers may indicate a strong interest in new products, but not accurately specify what they feel is most necessary for such a service or how they will respond to differences in price.

Citibank has found that their pricing strategy (no charge) has won a number of clients in the NY City area.

Some bank customers have surprised their banks by switching service to another bank in order to use home banking available with Internet or network services based offerings or a personal financial software product. Bank America has attracted bank customers from other banks by following this strategy.

Repeat of Sec 1st bullet on P1

Some banks have also found after the loss of customers, that the customers were interested in smart card services offered by Mondex or new pay by phone or call center services offered by other banks.

More analysis of research data is needed to uncover these tendencies. Banks may find the services of vendors helpful in analyzing the attraction of services available in the market, but banks must also be cognizant of the fact that changes are happening rapidly in electronic banking, and the vendor working with them may have a product that is lagging more recent introductions of other vendors.

Banks may also find out that electronic banking products cause conflicts with other existing banking products in several ways.

- They may cause a decrease in use of other products by being substituted for them.
- They may also cause a decrease in use of existing products by creating a confusing image of the bank for customers.

The customers may be unsure of how to conduct business in the new electronic world. One German Bank has attacked this problem by setting up a subsidiary that uses a set of new electronic products and letting their main banking institution retain an image of older products. The bank expects to see business shift to the new subsidiary over time.

It is important for banks and vendors to stay abreast of developments in customer interests and in new ideas in electronic or digital money products. The use of these products will drive banking business in the future as shown in Exhibit 3.

Exhibit 3

Impact of Electronic Banking Services on Banking Business by 2002

Area of Banking Business Impacted by Electronic Banking Services	Business Impact by 2002
Incremental Volume of Lending Business Driven by Electronic Banking Services for Customers	\$1 Trillion
Increase in Use of Electronic Transactions in Banking	Increase from 45% in 1996 to 95% in 2002
Use of Electronic Money Products such as "Home" Banking and Smart Cards	More Than Double in Use

Source: INPUT

The increasing importance of electronic banking, and the need to plan and launch electronic banking services is causing many banks to rapidly develop plans. A number of banks feel that they will not be sufficiently converted to electronic banking products to be prepared for competition by 2002.

Andersen Consulting feels that most banks are not prepared for the conversion of banking business to electronic products, and they are providing a facility, the Financial Ideas Exchange, where banks can try out new electronic banking technology.

The desire to meet competition in offering electronic banking products, however, must be tempered by the need to investigate products and the banking customers that are involved.

- Products can be chosen which have to be upgraded immediately since they don't meet customer needs/desires or are not as advanced as products that will be introduced shortly after their implementation.
- The needs/desires of customers may not be analyzed correctly, and they may not use electronic products to the extent forecast, or

INPUT Research Bulletin

worse, they may go other banks to obtain the services they want.

- ① Banks must improve their ability to match customer needs and introduction of electronic banking products and services.
Vendors must relate product features and functions to the requirements of the Bank's customers.
- ② John - for each bullet we should state the vendor impact/action required
- ③ This implies the sales cycle will lengthen unless the vendors improve ~~for~~ education re. product impact.
- ④ What should vendors do?

Banks Report Problems With Electronic Banking Products

Despite promising forecasts of additional revenue and new business from home (or PC) banking, smart cards and other electronic products, a number of banks report that they have encountered more problems than anticipated with these products as illustrated in Exhibit 1.

Exhibit 1

Problems Encountered with Selected Retail Electronic Products

Electronic Banking Products	Problems Reported by Banks
Home or PC Banking	Pricing was not analyzed. Cost of support is high. Should have selected other products.
Smart Cards (with stored value capability)	Use is below forecast. Profitability is in question.
Internet based services	Forecast business volume and number of new accounts has not been achieved.

Source: INPUT

Banks and vendors aiding them do not always conduct sufficient customer research or tests of new services before introducing electronic or digital money products. Vendors must help banks by making sure that all aspects of a new product are considered

- The pricing strategy for home banking, for example, may have to be checked through a pilot effort involving the sale of the service, rather than just asking customers about possible prices, to make sure pricing will not discourage customers for signing up for the service.
- Vendors should ensure banks understand the support and costs involved with a new service. Banks have tended to underestimate the cost of running support desks.
- Vendors must advise banks on alternatives available to meet retail electronic banking objectives. Banks may consider utilizing personal financial software with their home banking product which they do not realize is not suited to the characteristics of their customers.

It is in the vendor's interest make sure that banks investigate the suitability of products,

since they (the vendors) will incur costs and changes if difficulties are encountered.

Vendors as well as banks must keep in mind that the successful use of these products is important since it will have a significant effect upon future lending, savings, investment and other banking business and revenues.

Examples of problems that were reported to INPUT during recent research on electronic banking include:

- Bank customers who were encouraged and helped to use "trial" home banking systems became annoyed with deficiencies in current features and transferred accounts to banks that had more attractive systems.
- Some banks introduced pricing strategies for home banking systems that had supposedly been researched but which chased customers (together with their checking and savings accounts) to other banks.
- Banks found that the costs of support and administration for electronic banking ventures were higher than planned, and this made their electronic banking products unprofitable.
- The slow growth of customers for some smart card or Internet services made some banks question whether they had selected the right services or anticipated what was involved in start up.
- Banks also report that they had not anticipated the impact of new products on existing or other new products. For instance, a new approach to call center banking had an impact on the use of home banking at one bank.

Many banks report, in hindsight, that more research should have been undertaken before they launched new retail electronic banking services.

An additional onerous aspect of these situations, according to banks, is the additional time and expenditures which must be spent on reviewing and adjusting or changing plans after a new product encounters difficulties.

- As one IS executive in a bank stated, the assumption of his bank was that new technology would overcome the difficulties encountered in signing up customers for electronic services at other banks.
- Several vendors reported that the difficulties encountered in past ventures with home banking were similar to experiences being encountered with bank customers, today.

As a result of current experience, banks recommend that research prior to product launch be more intensive. INPUT recommends that vendors involved in supporting banks make sure that steps are taken to both analyze and test the interests and needs of present customers and to investigate experience elsewhere as shown in Exhibit 2.

Exhibit 2

What Should be Done Before Launching Electronic Banking Services

Step Recommended for Planning Retail Electronic Services	Rating of Importance (low=1; high=5)
Research and Test Needs and Interests of Customers More Deeply	4.4
Obtain Information on Tests and Use of Electronic Products at Other Banks	4.2
Conduct Meaningful Tests or Pilots with Customers	4.2
Model Impact of New Products on Present Business and Other Products Being Planned	3.5

Source: INPUT

Needs of customers must not only be researched and analyzed they must be tested.

- Customers may indicate a strong interest in new products, but not accurately specify what they feel is most necessary for such a service or how they will respond to differences in price.
- Citibank has found that their pricing strategy (no charge) has won a number of clients in the NY City area..
- Some bank customers have surprised their banks by switching service to another bank in order to use home banking available with Internet or network services based offerings or a personal financial software product.

Banks may find the services of vendors helpful in analyzing the attraction of services available in the market. But banks must also be cognizant of the fact that changes are happening rapidly in electronic banking, and the vendor working with them may have a product that is lagging more recent introductions of other vendors.

Banks may also find out that electronic banking products cause conflicts with other existing banking products in several ways.

- They may cause a decrease in use of other products by being substituted for them.
- They may also cause a decrease in use of existing products by creating a confusing image of the bank for customers.

A vendor aided one German Bank attack the problem of product conflict just mentioned by helping to set up a subsidiary that uses a set of new electronic products and lets the main banking institution retain an image of older products. The bank expects to see business shift to the new subsidiary over time.

It is important for banks and vendors aiding them to stay abreast of developments in customer interests and in new ideas in electronic or digital money products. The use of these products will drive banking business in the future as shown in Exhibit 3.

Exhibit 3

Impact of Electronic Banking Services on Banking Business by 2002

Area of Banking Business Impacted by Electronic Banking Services	Estimate of Impact by 2002
Incremental Volume of Lending Business Driven by Electronic Banking Services for Customers	\$1 Trillion
Increase in Use of Electronic Transactions in Banking	Increase from 45% of transactions in 1996 to 95% in 2002
Use of Electronic Money Products such as "Home" Banking and Smart Cards	More Than Double in Use

Source: INPUT

The increasing importance of electronic banking, and the need to plan and launch electronic banking services is causing many banks to develop plans rapidly. A number of banks feel that they will not be sufficiently converted to electronic banking products to be prepared for competition by 2002.

Andersen Consulting feels that most banks are not prepared for the conversion of banking business to electronic products, and they are providing a facility, the Financial Ideas Exchange, where banks can try out new electronic banking technology.

Vendors must recognize that banks have to be prepared to meet competition in offering electronic banking products by 2002 if not sooner. However, vendors must also recognize that sufficient research into the requirements

of bank customers as well as testing of products must take place before products are launched.

- This means that IT vendors serving banks have to obtain sufficient research on experience in introducing and using electronic banking products so that they can analyze bank situations and provide aid to banks.
- If vendors do not gain sufficient familiarity with the market, they may see sales cycles lengthen as they gain knowledge on the job while aiding banks develop a plan and implement product solutions.

While this additional step in the product launch process may lengthen the time to market, it will quickly pay for itself in increased sales and customer satisfaction.

- Among other actions, American Express has obtained a licence for the Proton card in order to offer a smart card capability.
- Lombard, a discount brokerage that provides checking services for clients, developed an internet capability for investment including money market accounts that grew to 50% of its business in 1996.

Many steps in electronic banking and finance may not be successful however.

Cybercash launched an interesting concept in digital payment involving the use of credit and debit cards that has not gained the volume of users that were forecast. Its Cybercoin and virtual check products may be more successful.

The E-cash product of DigiCash, which was introduced by Mark Twain Bank, has not gained a meaningful number of customers according to the bank. It may be more successful at European bank clients.

- Now that SET is available to protect credit card transactions, more work may be necessary to convert US bank customers to the use of Cybercash or E-cash solutions.
- The use of smart cards like Mondex, which can be used for remote payments, could also impact the use of Cybercash and DigiCash solutions.

Several personal financial service products like Quicken also failed to obtain sufficient users since their developers had not conducted the detailed study of bank retail depositor needs that Intuit performed before launching a product and has continued to perform for Quicken.

- Technical aspects of products may be well thought out such as the development of phones that can enter instructions for paying bills.
- Investigation may not be made of the attraction of a new phone terminal for bank customers in the market where it is introduced.
- Mistakes have also been made in the use of technology such as in not developing versions of products for use on the Internet.

IT Vendors serving the banking industry must pay analyze bank functions and customer characteristics as well as the technology which is promoting the boom in electronic banking.

There is no doubt among banks that electronic banking capabilities are necessary for retail banking services. Bank customers are demanding home banking, use of the Internet, advanced ATM services and smart cards.

- Banks report that they expect the percentage of worldwide banks that offer homebanking to climb to over 80% in the next four years.

- The use of the Internet to sell and perform retail banking is expected to be used by 85% of banks by 2000.

Banks also expect a substantial increase in the use of electronic capabilities in work with corporate customers. As shown in Exhibit 4, the major method that banks expect to use for contact with corporate customers will be electronic within the next five years.

Exhibit 4

Use of Electronic Contact with Corporate Banking Customers

Use of Electronic Contact with Corporate Customers	Bank Estimate of Use	
	1996	2001
Percentage of Transactions and Messages exchanged electronically	45	95
Percentage of Lending Business Driven by Electronic Banking Services	20	90

Source: INPUT

The need for the use of electronic capabilities is driving many banks to seek partnering arrangements with IT vendors.

- These arrangements can provide banks with the means of obtaining knowledge and experience with new technology as well as opportunities to reduce costs and develop electronic capabilities rapidly.

- Vendors can also find these relationships useful since they provide knowledge about banking functions and the opportunity to develop general capabilities if not systems that can be sold elsewhere.

Partnering arrangements have also provided banks with opportunities for participating in revenues, but the most important benefit of these relationships, according to banks, is obtaining assistance in using new technology, particularly communication and security technology, to meet banking needs.

- Assistance is essential to some banks in order to meet business goals since they do not have technical personnel with up to date experience.
- Several banks pointed out that they have technical capabilities such as experience with ATM, ISDN and cryptographic techniques, but reported they had to use IT vendor assistance to meet ambitious schedules.

The opportunities for IT vendors to supply aid to banks to support electronic banking will increase sharply over the next five years. Expenditures for vendor services will almost double to a global figure of \$77 billion between 1997 and 2002.

Practice Area
Program
Elect. Proc. Practice

This Research Bulletin is issued as part of INPUT's **U.S. Information Services Market Analysis Program**. If you have questions or comments on this bulletin, please call your local INPUT organization or John McGann at INPUT, 1881 Landings Drive, Mountain View, CA 94043-0848, (415) 961-3300.

