

This Issue: Opening the Gates of Technology and Communication

Finding Common Ground: The Massachusetts Community & Banking Council Experience

Perspectives on Credit Scoring and Fair Mortgage Lending

Bringing IT Training to Underserved Markets

Communities & Banking

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this issue:

Opening the Gates of Technology and Communication

productive partnerships

Finding Common Ground: The Massachusetts Community & Banking Council Experience

Kathleen Tullberg explains how strife between bankers and community groups led to respect as she documents the Council's accomplishments and lessons learned over its past ten years.

banking trends

Perspectives on Credit Scoring and Fair Mortgage Lending

10

Article two in a five-part series. This article features three commentators' views on credit-scoring technology and its fair use.

enterprising

Bringing IT Training to Underserved Markets

18

Numerous programs are finding ways to bring information technology to underserved populations with the hope of creating middle-income earners.



Finding Common Ground

the Massachusetts Community & Banking Council Experience

by Kathleen Tullberg

On October 24, 2000, over 100 bankers and community leaders convened at the Federal Reserve Bank of Boston to mark the tenth anniversary of the Community Investment Program and the formation of the Massachusetts Community & Banking Council. The Massachusetts Community & Banking Council brings bankers and community groups together in a partnership to consider issues of importance to both groups. The partnership has led to the accomplishments and lessons learned during the past ten years that are discussed in this article.

Background: Community **Investment Program**

In 1990, when community leaders and the Massachusetts Bankers Association announced agreement on a new \$400 million Community Investment Program, the attitude of many bankers and community leaders was one of cautious optimism. The previous year had been one of discord, denials, demands, tension, and controversy. It started with the release of a Federal Reserve Bank of Boston study on the effectiveness of the Community Reinvestment Act and Home Mortgage Disclosure Act and included the release of two other mortgage studies showing lower levels of mortgage lending in Boston's minority neighborhoods. Community groups held demonstrations and sit-ins at bank branches and charged banks with lending discrimination and neighborhood disinvestment. They made application challenges, demanded more bank loans, and called for changes in federal, state, and city laws.

But it was also a year in which more than 200 bankers and community representatives devoted substantial amounts of time, effort, and commitment to developing long-range responses to community needs. A series of three public forums, co-hosted by the Federal Reserve Bank of Boston and the Massachusetts Banking Association, led to agreement among all parties that a comprehensive solution was needed. Following the forums, bankers established task forces to address four areas of concern identified by community leaders: mortgage lending, affordable housing development, access to bank services, and economic development. The Community Investment Program

Demonstrators picket two banks; more loans urged for city residents

6 arrested at Bank of Boston protest

Group decries business practices at minority area branches

Loan-pattern study gets bankers' mixed reviews

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Group of Boston bankers offers remedies for lending bias

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Fed study expected to tell banks to increase minority lending

Fed forum assesses bank loan practices

Preliminary Fed finding is 'racial bias MASSACHUSETTS Holding the banks feet to the fire Activists seize hope for community reinvestment (CIP), developed by the bank/community task forces, included the establishment of the Massachusetts Community & Banking Council; loan and equity funding for two new organizations, the Massachusetts Housing Investment Corporation and the Massachusetts Minority Enterprise Investment Corporation; and bank commitments for mortgage lending, new branches, and automated teller machines.

The cooperative spirit of the CIP was remarkable because community representatives saw the banks, at best, as inattentive to neighborhood needs and, at worst, as guilty of lending discrimination. Bankers, stung by the charges of discrimination and mindful of a softening economy, were wary of the community's demands. Banks were used to competing with one another, not cooperating. They also differed considerably in their experience with community representatives and programs. For some, the inner city represented a new market. For others, it was a way of expanding ongoing efforts. Major differences existed among the community representatives as well. For example, advocates for mortgage programs and bank services were not sure that community development corporations, already bank customers for housing projects, shared their priorities.

What all the parties shared, however, was a commitment to negotiThe cooperative spirit of the CIP was remarkable because community representatives saw the banks, at best, as inattentive to neighborhood needs and, at worst, as guilty of lending discrimination. Bankers, stung by the charges of discrimination and mindful of a softening economy, were wary of the community's demands.

ation and reaching agreement. By program was time the announced, both sides had learned a lot about the other. Community leaders learned the basics of banking and came to appreciate that bankers wanted to address the issues. Bankers learned about community needs and were comforted that community leaders shared their objective of long-term program viability. Since 1990, changed relationships have improved the way banks and community organizations work together and have significantly influenced the development of new programs and activities. Today, rather than adversaries, bankers and community leaders generally describe their relationship as one of partnership and collaboration.

MCBC: The First Five Years

Of all the organizations established by the CIP, the Massachusetts Community & Banking Council (MCBC) was perhaps the most ambiguous but the most ambitious. Its original mission statement called for it to serve as a research and policy center whose purpose would be to promote community investment in minority and low- and moderate-income communities. MCBC would also be responsible for "coordinating, monitoring, and evaluating" the Community Investment Program. MCBC would serve as a permanent point of contact between bankers and the community. With a board of directors composed of nine bank and nine community representatives, MCBC was a forum at which bankers and community members could meet on a regular basis to discuss problems, anticipate needs, and formulate initiatives. MCBC would help avoid crisis management and, it was hoped, promote cooperative relationships.

Like its sister corporations, MCBC was originally intended to serve the entire state, and at its onset, more than 150 banks across Massachusetts joined. MCBC's statewide ambitions were boosted by a success recorded even before its incorporation. Community advocates had identified check cashing as a major problem, especially for innercity residents. Without bank accounts or access to banking facilities, residents were often forced to rely on check-cashing establishments to meet their needs-often at considerable cost. In the spring of 1990, MCBC orchestrated an agreement with more than 200 banks across the state to cash checks for welfare recipients who did not have bank accounts. A year later, again in cooperation with the state's welfare agency, the program was expanded to include a directdeposit component.

Alerting the unaware, MCBC uses a friendly touch to talk about serious subjects.



Despite its initial success in developing a statewide program, MCBC's focus quickly began to narrow to Boston-based issues. During 1991, MCBC convened a task force to oversee the 1990 commitments to establish bank branches in underserved Boston neighborhoods. The 1990 agreement called for nine new branches and 32 new ATMs. In a series of meetings that brought together bankers, government officials, community advocates, and residents of inner-city neighborhoods, attempts were made to identify areas of the city most in need of bank branches. The meetings opened up the process of branch siting to neighborhood advocates and ordinary citizens. By 1995, nine new branch offices, three loan production offices, and 47 ATMs opened in the Boston neighborhoods of Dorchester, Jamaica Plain, Mattapan, Roxbury, and Lower Roxbury/South End.

While the bank and ATM placements were reaching a successful conclusion, MCBC found itself embroiled in another banking problem, the second mortgage/home improvement scam. The press and community leaders had uncovered evidence that banks were financing private-mortgage companies and home-improvement contractors who, in turn, were charging innercity customers high interest rates and/or performing substandard work. A subsequent study by the Federal Reserve Bank of Boston in 1991 confirmed the complaintsand revealed that some rates were as high as 18 percent. Further, more of these high-rate loans were being made in minority communities than in non-minority areas. The Fed reported that high-rate mortgages were supplied by a relatively small number of specialized lenders. The Fed stated that banks were not providers of high-rate second mortgages but that major Boston banks at times provided financing to some of the high-rate lenders or purchased loans from them. Many of the banks immediately dropped affiliations with questionable mortgage firms and offered aid to victims of the unscrupulous lending and home-improvement schemes by developing individual restitution plans. Several community-based organizations began documenting alleged abuses and, in many cases, negotiated resolutions with the borrowers, secondary lenders and, in some cases, banks.

In October 1992, MCBC launched the Victim Resolution Program (VRP) as the joint communitybank response to the disclosures. The VRP formed mediation panels composed of bankers, community While MCBC provided a forum for addressing the problems of branch locations and mortgage-lending abuses, these initiatives also strained MCBC's resources and limited its ability to follow through on plans for statewide research and educational programs. Many banks saw MCBC as increasingly focused on Boston issues. And after the first year, MCBC saw its membership from non-Boston banks drop. Even as they withdrew, however, the banking community outside the Boston area recognized the value of joint bank and community organizations in keeping lines of communication



One of MCBC's "Don't Borrow Trouble" campaign posters warning homeowners about predatory lenders.

advocates, and trained mediators who screened complaints, identified abuses, and resolved disputes. The mediation panels screened nearly 400 complaint calls, resulting in the filing of more than 180 complaints. Nearly half of the claims were deemed eligible, with 20 percent of those resolved through the program.

open. In cities such as Pittsfield, Lawrence, New Bedford, Cambridge, and Fitchburg, multi-bank loan pools and consortia were created to address community needs. In some of these areas, bank and community forums, most modeled after MCBC, were established to provide a regular meeting place for bankers and com-

munity leaders to discuss local issues and needs.

A Change in Focus

In 1993, MCBC formally changed its operating structure, in recognition of its focus on Boston and its dwindling budget. Full-time personnel were replaced by inkind staff support provided by member banks and MCBC committees, and outside consultants were relied on for identifying new issues. Despite the changed geographic focus, some of MCBC's work continued to have statewide relevance. In June 1994, MCBC launched Basic Banking for Massachusetts, the third component of its basic banking services initiative (see below).

By the second half of the decade, MCBC found its new focus. Its four standing committees—affordable housing, banking services, economic development, and mortgage lending-were each co-chaired by a bank and a community representative. Each was responsible for developing individual programs and activities that responded to needs identified by participating banks and organizations. A parttime manager was hired to coordinate and facilitate committee programs. MCBC simplified its mission and expanded its geographic focus to include all of Greater Boston. Tom Callahan, Executive Director of the Massachusetts Affordable Housing Alliance (MAHA) and vice chair of MCBC and its Mortgage Lending Committee, says of the changes in MCBC's organization and focus, "Community groups wanted MCBC to monitor all of the Community Investment Program agreements, but banks wanted it to be a discussion table. It's now a little of both. If MAHA or any other com-

munity organization has a broad issue regarding banks, they can bring it to the MCBC table. Banks can do the same. In those cases, MCBC can act as a neutral forum, either just to provide a table for discussion, information-sharing, or problem-solving or, in some cases, to take on projects that everyone agrees would be helpful but that no individual bank or organization is willing or able to take on alone."

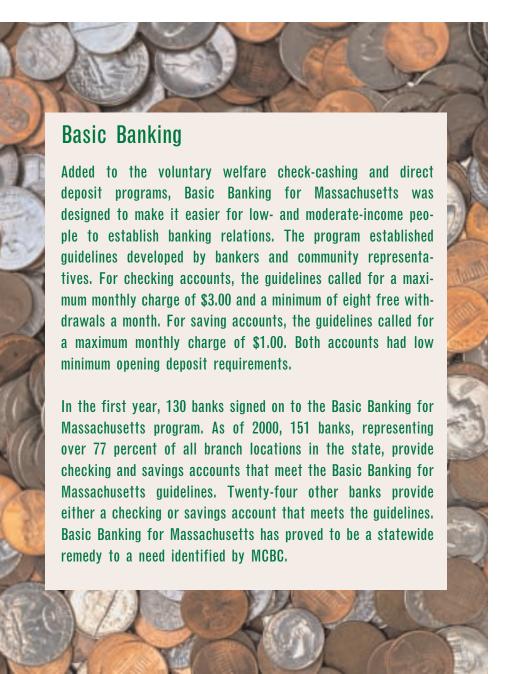
Today, MCBC's committees (which are open to all) take on a wide variety of community credit and banking issues. The column at far right provides examples.

How to Build a Working Partnership

MCBC has learned from its growing pains, and these lessons can apply to a variety of partnership organizations. Here are some tips:

Have the right people at the table

While MCBC's board of directors includes bank presidents and community executive directors, participants in MCBC committees are likely to be loan originators, program directors, and CRA officerspeople who are actually involved in local program implementation, have direct customer contact, and can share information on real problems and real needs. These are the people who can make changes happen. The front-line emphasis not only provides more practical information, it also helps banks and community representatives do their jobs better. Margaret Harrison, vice president at Mellon New England and co-chair of MCBC's Mortgage Lending Committee, says, "There is an interesting dynamic that takes place at MCBC's Mortgage Lending Committee. We have people from banks, community organizations, state, city, and federal agencies, even nonbank lenders. It is a good place to share information. Some



information that comes from the meetings is used by banks and other agencies to develop their own programs."

Listen to member needs

MCBC committees and activities reflect needs identified by committee participants. Different committees, participants, and issues have resulted in varied agendas. In 1995, MCBC published Changing Patterns, its first study of mortgage-lending patterns in Boston, as part of its report on the progress of the mortgage initiatives that had been developed in 1990. Tom Callahan says that the report proved to be particularly valuable for smaller banks and community organizations. Says Callahan, "The report is a good monitoring tool for the community by helping us track the progress we have made in expanding homeownership and in identifying new issues. The bigger banks that participate in MCBC have the resources to do these mortgage studies on their own, but the smaller banks do not. The reports help them develop mortgage lending products and policies." On the Committee's recommendation, MCBC has published annual update reports and has expanded the geographic focus of the report to include all of Greater Boston.

MCBC's Affordable Housing Committee agenda also reflects a gap identified by committee members. Esther Schlorholtz, senior vice president at Boston Private Bank & Trust Company and a member of MCBC's board of directors, recalls, "A couple of years we asked members of [MCBC's] Affordable Housing Committee what kind of role the committee should play in helping to support affordable housing. After all, we don't do lending and we don't develop housing. They told us that it would be helpful for the committee to serve as an information exchange, a place to keep up with new initiatives and changes in old programs." With that direction, the committee now invites speakers from a wide variety of organizations and agencies to each meeting. Over the past year, speakers have included representatives from the U.S. Department of Housing and Urban Development, Citizens Housing and Planning Association (CHAPA), City of Boston's Department of Neighborhood Development, Lynn Community Development Housing Corporation, Greater Boston Interfaith Organization, Massachusetts Life Insurance Community Investment Initiatives, Massachusetts Housing Partnership Fund, Boston Community Capital, Massachusetts Housing and Shelter Alliance, and other groups. Featuring speakers, says Schlorholtz, "helps keep people well informed and, in several cases, has identified opportunities for collaboration."

Be attentive to emerging issues and marketplace changes

New information and changing times can provide new opportunities for action. In 1990, the mortgage-lending issue was largely defined as one of lending to African-Americans. MCBC's first mortgage-lending study in 1995 showed significant gains in lending to African-Americans but little progress in expanding homeownership to Latinos. MCBC responded by establishing a task force on Latino mortgage lending, to identify barriers for Latino homebuyers and to develop strategies to increase the number of mortgage applications from Latinos. While the task force recommendations laid out specific steps that banks, community organizations, and MCBC could take to help address the problem, the process provided even greater insight to committee participants. Margaret Harrison recalls, "We at MCBC came away with a greater understanding of what the issues were. It opened up the discussion. Going forward, reaching other populations will be a goal." More recently, MCBC responded to lenders' aggressive campaigns marketing urging homeowners to consolidate their

MCBC Committee Work

Affordable Housing

MCBC's Affordable Housing Committee continues to serve as a forum for information-sharing on affordable-housing issues. As part of this effort, the Committee regularly hosts speakers from public, private, and nonprofit housing organizations.

Banking Services

MCBC's Banking Services Committee, with the active participation and support of the Massachusetts Division of Banks and the Massachusetts Bankers Association, continues to pro-Basic Banking for Massachusetts. The Committee also works to expand access to consumer-education programs, especially for residents currently utilizing check-cashing establishments or receiving government benefits.

Economic Development

MCBC's Economic Development Committee, including city, state, community, nonprofit, and business representatives, continues to identify ways to leverage public and private resources to support business development. As part of this effort, the Committee published its second Small Business Financial Resource Guide in 1998. The Guide was distributed to banks, business assistance organizations, and small-business owners throughout Greater Boston to help them find the right kind of assistance to meet business needs. In May 1999, the Committee distributed a self-assessment tool on Y2K issues developed specifically for small-business owners. In June 2000, MCBC published its first study of small-business lending patterns in Boston and neighboring communities.

continued on next page

credit card loans by the development of "Don't Borrow Trouble," a public awareness campaign to alert homebuyers to the risks of certain refinance loans.

Expand programs through collaboration

While MCBC's board of directors consists solely of nine bankers and nine community representatives, participation in committee activities has expanded to include dozens of other public sector, nonprofit, community, advocacy, and bank representatives. This results in more resources and opportunity for building on, spinning-off, and expanding programs. MCBC's "Don't Borrow Trouble" campaign is a prime example. MCBC was able to solicit pro bono advertising assistance to develop the campaign. All campaign materials were developed with the participation of community, bank, and public members of MCBC's Mortgage Lending Committee. The City of Boston partnered with MCBC in the production of the and campaign materials launching the program in Boston. The Massachusetts Division of Banks provided a toll-free number, enabling MCBC to launch the program statewide. The Massachusetts Bankers Association "Don't incorporated Borrow Trouble" as part of its own campaign on predatory lending and provided financial support for both the Boston and the statewide programs. Fannie Mae, Freddie Mac, the Massachusetts Mortgage Association, and the Massa-Mortgage chusetts Bankers Association provided financial support. A wide variety of banks and community organizations lent their support in getting the materials out to homeowners. Margaret Harrison says, "[We at] MCBC couldn't have developed and implemented the program on our own, but we are in a good position to bring other people to the table who share our concerns."

Collaborations have also enabled other organizations to update or extend programs. For instance, the City of Boston updated MCBC's Small Business Financial Resource Guide and made it available to small-business owners at the Boston Empowerment Center. CHAPA expanded on the work of MCBC's Home Counseling Directory by putting information about home-counseling agencies online, and the Homeownership Collaborative developed a homebuyer counseling curriculum and a certification program to help ensure the quality of homebuyer counseling. Discussion on neighborhood commercial real-estate

MCBC Committee Work continued

Mortgage Lending

- MCBC's Mortgage Lending Committee works with the Massachusetts Housing Partnership (MHP) Fund to track performance of the Soft Second Mortgage Program, in an effort to identify ways that banks and community organizations can work together to avoid foreclosures. As of June 2000, Soft Second mortgages had a delinquency rate of only 2.3 percent, as compared to a 2.6 percent delinquency rate for all mortgage loans in Massachusetts.
- In 1997, the Committee established a task force on Latino mortgage lending to learn more about the barriers to homeownership for Latino residents and to identify ways that banks and community organizations could help to expand those opportunities. In 1998, MCBC sponsored focus groups with Latino residents and surveyed
- Latino community organizations on the issue of mortgage lending. In March 1999, MCBC published and distributed the task force's recommendations for bank and community action to more than 350 banks, community organizations, and public officials. A final report from the task force was issued in April 2000.
- In 1998, the Committee established a Refinance Subcommittee to consider ways to assist homeowners facing financial difficulties. In March 1999, MCBC hosted a meeting of local banks to share information on the need for flexible refinance loans. A few months later, MCBC published a directory of foreclosure-prevention counseling services in Greater Boston to assist community organization and banks in making appropriate customer referrals.
- MCBC announced the Boston kickoff of "Don't Borrow Trouble," a public information campaign to help educate homeowners on refinance and foreclosure-prevention issues in December 1999. MCBC will begin implementation of the program statewide in early 2001.
- In January 2001, MCBC published an update of its earlier publication, Changing Patterns, which looks at mortgage lending patterns in Greater Boston and the impact of targeted mortgage programs in offering homeownership opportunities to low- and moderateincome residents. Over 400 copies of Changing Patterns VII were distributed to bankers, community organizations, housing advocates, and public officials. A new companion report on subprime refinance lending will be published in early 2001.

development, initiated by MCBC's Economic Development Committee, has been continued and expanded by the Local Initiatives Support Coalition and the Massachusetts Housing Investment Corporation.

Conclusion

MCBC strives to build on its strengths by serving as a neutral forum for identifying and addressing community credit needs and by taking on projects that no single bank or community organization will tackle. Once dominated by the largest Boston banks, MCBC's membership and committee participation has expanded to include many more small- and medium-sized banks. For such banks, which often have limited staff, MCBC provides a manageable way to maintain contact with community leaders. They also gain comfort from the oversight MCBC provides on particular programs. Banks new to the Soft Second Mortgage Program know that MCBC is monitoring its activity and, therefore, feel more comfortable joining the program. Banks wanting to respond to community demands for affordable bank products can participate in Basic Banking for Massachusetts and know that they will meet community expectations.

MCBC's first ten years have produced useful products and programs. What is equally important, however, is the role it has played since 1990 in helping to change the relationship between bankers and community leaders in Greater Boston. Those changes are significant. They have altered the way banks and community organizations work together and they have influenced the development of new programs and activities.

Going forward, the challenge for MCBC and its bank and community members will be to recognize and respond to new issues. In 1990, the issues focused on the need for more bank lending and investment in low- and moderateincome and minority neighborhoods. While that overall goal has not changed, the marketplace certainly has. The initial focus of increased mortgage lending to African-Americans has been expanded to include growing Latino, Asian, and other immigrant communities. Community efforts to expand the availability of affordable housing have been joined by the need to preserve existing units. The cost of housing is a growing concern. The financial marketplace has changed as well. Banks have merged and private mortgage companies now make more than 50 percent of all home mortgages in Boston. Credit card companies and out-of-state banks now make nearly 50 percent of all small-business loans in Suffolk County. And, there is the issue of the digital divide. In this complex environment, active participation by bankers and community leaders, working together as part of organizations like MCBC, will be the key to continuing the progress that has been made in meeting the community development needs of low- and moderateincome neighborhoods.

About the Author

Kathleen Tullberg is a consultant to financial institutions and local organizations on community investment issues. Ms. Tullberg currently serves as manager of the Massachusetts Community & Banking Council.

Until 1996, Ms. Tullberg was senior vice president and director of Shawmut National Corporation's community reinvestment department and served as the corporation's Community Reinvestment Act officer. In that position, she was responsible for coordinating and managing Shawmut National Corporation's CRA programs and activities in Massachusetts, Connecticut, Rhode Island, and New Hampshire.

Before joining Shawmut, Ms. Tullberg managed the Business Development Program for the Boston Private Industry Council and worked for the Commonwealth of Massachusetts in the Office of Federal-State Relations and the Office of State Planning.

Ms. Tullberg is a member of the board of advisors of the Fair Housing Center of Greater Boston and the boards of directors of Management Consulting Services and Technical Development Corporation, both nonprofit consulting organizations.

For more information or for a copy of MCBC's 10year report, contact: Massachusetts Community & Banking Council c/o Citizens Bank 53 State Street, 8th floor Boston, MA 02109 (617) 725-5748 perspectives on

Credit Scoring and Fair Mortgage Lending

Stepping up to Technology



redit scoring is an underwriting tool used to evaluate the creditworthiness of prospective borrowers. Utilized for several decades in granting certain forms of consumer credit, scoring has come into common use in the mortgage lending industry only within the last 10 years. Scoring brings a high level of efficiency to the underwriting process, but it has also raised concerns about fair lending with regard to historically underserved populations.

To explore the potential impact of credit scoring on mortgage applicants, the Federal Reserve System's Mortgage Credit Partnership Credit Scoring Committee is producing a five-part series of articles. This is the second. An important goal of the series is to provide the industry and concerned groups and individuals with the opportunity to comment on issues surrounding credit scoring. The first article, which provides a context for the issues to be discussed in the series and gives further background information on the Mortgage Credit Projects, can be found in the Spring 2000 issue of Communities & Banking on the website of the Federal Reserve Bank of Boston at www.bos.frb.org/comaff/html/ c&b.htm#spring2000.

This article incorporates statements requested from representatives of three organizations, selected because of their interest in and differing perspectives on credit scoring and fair lending.

Each representative for this article received a request to comment on the following text:

Lending institutions face various pressures in the course of their credit operations. They must consistently achieve and increase profitability, comply with a complex regulatory framework, and contend with new sources of competition. An institution's loan underwriting policy, and, in particular, its credit-scoring model, reflect the institution's appetite for risk, targets for profitability, and role in serving the credit needs of its market.

Credit-scoring models have predictive power; they give lenders the ability to expeditiously assess the likelihood of borrower default. There is general agreement that to retain their predictive power, models must be maintained and adjusted to reflect changes in loan performance and in market demands and demographics. In addition, observers argue that absent proper maintenance, a lender risks using a model with diminished predictive capability, which may produce an unjustifiable disparate impact on prohibited basis groups. 1

From your perspective and experience, what can lenders do to ensure that the credit-scoring models they develop or purchase will accurately predict the performance of their applicant base? What steps might lenders take to effectively update and maintain their models? Finally, what methods should lenders employ to monitor the performance of their credit-scored loans, particularly with respect to the fairness and accuracy of their models?

The Three Commenters:

James Wheaton Neighborhood Housing Services of Chicago

Mr. Wheaton has worked for and with nonprofit community development organizations since the mid 1970s. He now serves as the associate director of Neighborhood Housing Services of Chicago, Inc. (NHS), a position he has held since 1993. Mr. Wheaton's responsibilities include administration of NHS's home-improvement and purchase/rehab lending programs, as well as new program and product development. NHS of Chicago was established in 1975 as a nonprofit corporation that partners with financial institutions, community residents, city government, and Chicago businesses. NHS of Chicago has citywide lending programs as well as targeted neighborhood programs operating in 11 of Chicago's neighborhoods. NHS also recently created a program for victims of predatory lending. NHS of Chicago originates 500 loans annually, totaling \$15 million.

Thomas P. Fitzgibbon, Jr. Manufacturers Bank

Mr. Fitzgibbon is a senior vice president and chief retail banking officer for Manufacturers Bank, and is the president of Manufacturers Community Development Corporation. Mr. Fitzgibbon is a 30-year veteran of the banking industry, having served as a principal banking officer in lending and retail banking operations for institutions in Washington, DC and Minnesota prior to moving to Chicago in 1990. He has served on the Steering Committee of the Mortgage Credit Access Partnership and the Small Enterprise Capital Access Partnership for the Federal Reserve Bank of Chicago since 1995, and currently he is on the boards of directors for Bethany Hospital, DevCorp North, NHS of Chicago, the Northwest Housing Partnership and Regional Redevelopment Corp., and the Woodstock Institute. Manufacturers Bank, a \$1.4 billion community bank with 13 offices, is ranked as the one-hundredth leading small-business lender in the nation (American Banker) and the third leading small-business lender in low- and moderate-income markets in Cook County, IL. Manufacturers Community Development Corporation is a six-year-old subsidiary of the bank, managing more than \$40 million in direct-equity investments and loans in real-estate and small-business ventures.

Alex Stricker Fannie Mae

Dr. Stricker is an economist for credit policy at Fannie Mae. He has worked on development of Fannie Mae's automated underwriting models for the past two years, with emphasis on fairlending implications. Prior to joining Fannie Mae, he pursued doctoral studies at Syracuse University specializing in urban economics and housing discrimination. Fannie Mae is a stockhold-er-owned corporation chartered by the Congress to create a continuous flow of funds to mortgage lenders in support of homeownership and rental housing. It serves as a secondary market for mortgage loans by purchasing mortgages from lenders across the country, aggregating groups of loans into mortgage-backed securities, and selling the securities to investors.

James Wheaton, Neighborhood Housing Services of Chicago:

Along with the pressures to increase profitability, comply with complex regulatory requirements, and contend with new and ever more aggressive sources of competition, mortgage lenders, like other businesspeople, must also manage rapid change in technology. In the lending arena, this change is evident in the approval of loans through automated underwriting, made possible in part by the use of credit scoring. The past few years have seen a dramatic increase in the use of credit scoring in mortgage lending, yet there is substantial anecdotal evidence that credit scoring may not be a particularly responsive tool for the low- to moderate-income borrower.

Credit-scoring proponents point to the speed, accuracy, and fair treatment it brings to the lending process, but credit-scoring models require regular maintenance, testing, and updating to reflect changing market conditions, without which both lender and borrower will suffer. Nonetheless, it appears that some lending institutions rely on scoring models with limited predictive power, and they miss significant business opportunities as a result.

NHS of Chicago's direct lending is targeted to low- to moderateincome (LMI) neighborhoods and borrowers. Many of these communities did not, until fairly recently, have a neighborhood banking or lending branch. The primary providers of credit to many residents were financial entities that were aggressive in pursuing LMI borrowers; today, many of them would be characterized as subprime lenders. Because credit-scoring models factor in the types of credit used by a borrower in the past (and subprime credit has a negative impact on the score), many borrowers from these neighborhoods may be adversely affected when dealing with a conventional lender who relies on credit scores. Further, my own observation of credit scores of first-time buyers and LMI homeowners is that negative factors have an immediate effect on scores, while positive factors influence the score much more gradually.

Supporters of credit scoring also maintain that its use frees the lender to more closely examine the marginal borrower and spend the time and effort necessary to close the loan. At NHS, though, we have seen too many situations where credit scoring has actually been used to limit access to first-tier credit. In the Spring 2000 issue of the Federal Reserve Bank of Boston's Communities & Banking, Calvin Bradford argues that the use of credit scoring does not always result in more underwriting time being spent on applicants with marginal credit but may actually serve as a tool to identify candidates for higher-cost loans. Absent proper maintenance of a scoring model and its underlying assumptions, and without diligence to ensure its fair application across all applicants, credit scoring could further widen the gap between lowand high-income borrowers.

I believe that scoring models' predictive power is worse for lowincome borrowers than it is for the average mortgage applicant. NHS understands and appreciates that the acquisition of a home and the opportunity to thereby build both financial and social wealth is a powerful incentive. I do not believe that any credit-scoring model factors in the emotional impact of potential homebuyers when they are the first members of their families for generations to own a home or buy a home in the newly revitalized neighborhood in which they grew up. Human judgment is still essential in weighing these factors. And as Peter of Fair, Isaac McCorkell Company, Inc. states in the article mentioned above, the scoring models most often used in mortgage lending were not specifically designed to assess mortgage risk.

Lending institutions that use credit scoring to identify customers who would benefit from a second

look, prepurchase, or credit counseling are to be applauded. With government-sponsored enterprises such as Fannie Mae and Freddie Mac currently offering products with more flexible terms for the credit-challenged borrower (such as Fannie Mae's Timely Payments Rewards product), lenders can offer conventional pricing more readily than before.

Credit scoring proponents further maintain that a primary benefit of scoring is that it increases people's access to credit. I take this to mean that its primary goal is to provide credit that is reasonably priced and without excessive fees or burdensome loan terms. To reach this goal, all parties with a vested interest in the activities of lenders using credit-scoring technology need to ensure that the creditscoring tool is working as effectively and fairly as possible. While a scoring system may be developed on the basis of statistics, the developers' role cannot

and a property on the West Side of Chicago; there needs to be some adjustment to the automated system that might wrongfully deny that buyer access to credit.

If credit scoring is going to be a factor in credit decisions for the foreseeable future, models that more adequately assess mortgage risk need to be developed and put into general use. Scoring system developers need to develop methodologies that are more responsive to a borrower's positive credit behavior and that incorporate some of the more subjective, but very relevant, data that often factor into a human being's decision about someone's creditworthi-

Underwriting and Training Policies with Respect to Credit Scoring
Lending institutions clearly need to do a better job of training their personnel about the purpose and limitations of credit scores. I do not suggest that underwriters be

While a scoring system may be developed on the basis of statistics, the developers' role cannot be ignored.

ignored. Just as lending institutions and secondary-market investors are held to a standard of fairness, scoring-system developers should share in the obligation to ensure that their models do not unfairly exclude borrowers.

It has been our recent experience that lending institutions most sensitive to the needs of LMI borrowers are increasingly those institutions that rely less on credit scoring and more on individual assessment of the borrower. Community lenders (such as NHS) that are focused on LMI neighborhoods have an understanding of the local environment and neighborhood dynamics, and they provide competitively priced mortgages to LMI borrowers in considerable volume. For national lenders, this kind of hands-on approach is not feasible. An underwriter in St. Louis cannot be expected to know and understand the characteristics of a buyer divested of the capacity to override a credit-scored decision. However, excessive overrides raise serious concerns about disparate treatment of borrowers. Access to credit for a borrower who is qualified by a credit score (even marginally) should not be denied because of the underwriter's or loan officer's personal assessment of the borrower's gender, ethnicity, lifestyle, personality, temperament, family connections, and the like. Human nature being what it is, a lending policy allowing for "high-side" overrides-in which an applicant's score suggests they deserve a loan yet they are denied it-opens the door to potential misuse, and I do not believe a responsible lending institution would either tolerate such decisions or accept such liability.

Second review of all adverse actions should be standard operating procedure for lending institutions, both to ensure fair and equal access to credit and to ensure that acceptable business opportunities are not missed. For lenders that offer subprime products, I would suggest that their second review be conducted in the context of trying to qualify their customers for a conventional product. Lending staff involved in second reviews should have special training in the use of credit scores, including some education about how scores are developed, what a score is designed to predict, and what factors in a borrower's credit history will affect the score (either positively or negatively). The scoring-system developers are key in this process, and an acceptable middle ground must be struck between protecting their proprietary systems and educating lenders on the use and limitations of credit scoring.

In summary, access to credit continues to be a critical need in many LMI communities. The recent increase in the homeownership rate in this country indicates that there is a large population striving to be homeowners and making some progress to achieve that goal. To the extent that credit-scoring technology has made this possible, that is very positive. However, lenders, especially those who have developed their own credit-scoring model on the basis of their own experience and portfolios, must maintain and upgrade the creditscoring model in the same way that they maintain other systems. Maintenance and regular upgrades of credit-scoring models to reflect market conditions should be part of the business plan and evaluated on a regular basis. Such evaluation should include an analysis of the performance of credit-scored loans versus those that were overridden, and especially an analysis of the performance of those credit-scored loans that were identified as marginal. Just as no institution would attempt to run its business with outdated hardware, it should not be using an outdated scoring model to direct credit decisions.

Thomas P. Fitzgibbon, Jr., Manufacturers' Bank:

What can lenders do to ensure that the credit-scoring models they develop or purchase will accurately predict the performance of their applicant base?

For the successful use of predictive scoring models in the credit decision-making process, the models must be based on similar products, environments, and populations. In addition, the attributes and application of the criteria parameters in the models must be refreshed routinely to ensure that the applications produce results consistent with the expectations when the models were developed or purchased.

Model use is a two-step process. First, the lender must select the right model for the loan product. Second, the lender must consistently refine the model, which requires dedicating resources long after original This development. refinement requirement can be easy to ignore, especially in the early stages of a product rollout when there is little product performance to point to as indicators of performance shortfalls. However, this initial stage is the time when even more due diligence needs to be devoted to fine tune the model and avoid unintended results. Higher than anticipated pullthrough rates² or adverse action rates are early indicators that the model has serious flaws requiring immediate attention.

Most purchased credit-scoring models have solid data to support their predictability. In addition, the best model vendors require lenders to supply the results of their experience so the vendor can improve and enhance its own data for future models. This feedback improves the quality of the predictive factors and model fairness. Consistent feedback is part of the model-refreshing process; however, modification of the model criteria by the lender can degrade the model's results.

Lenders who develop their own models often need to compensate for their small population performance base by comparing experience for an extended time, and even more care should be given to reviewing results during initial product rollout. Comparing customer performance results, as well as application approval and pull-through rates, will yield richer data. These data will help the user identify fairness issues (adverse impact), adverse selection (capturing undesired applications), and low pullthrough (closing) rates that could indicate a competitive disadvantage of the product.

Senior management and boards of directors should be wary of "proxy-like" models, either inhouse or purchased from a vendor, that were developed for a loan product or population somewhat similar to another lender's product or population. Because such similarities can be hard to define, this practice can have disastrous results in both fairness to applicants and the bottom line. Management should perform adequate due diligence on the criteria and, if not convinced, employ outside resources to provide evaluation and recommendations related to the model.

What steps might lenders take to effectively update and maintain their models?

As I stated previously, most model vendors insist that lenders provide specific information related to model performance, including applications received, approval rates, pull-through rates, and servicing results. These data will also provide the lender³ with information that can be employed to change the criteria of the lender's model, product price, collateral value (if included in the model), population attributes, brokers or mortgage bankers who bring

applications to the lender, and other levers, in order to achieve the desired results.

Most lenders employ models to develop results based on return on assets (ROA) objectives, understanding there will be losses in any model that is employed. Loan pricing should reflect performance expectations and results. Therefore, consistent review of pricing (rate, fees, and so on) will be necessary to achieve the ROA and to ensure that the pricing reflects the risks associated with the population and security characteristics, thus ensuring fairness to all populations.

Lenders who develop their own models need to take steps to con-

rates (especially where protectedclass populations are concerned), or lower-than-expected pullthrough rates, are indications that the model may have flaws that need to be addressed.

What methods should lenders employ to monitor the performance of their credit-scored loans, particularly with respect to the fairness and accuracy of their models?

The methods lenders should employ include the following:

- Due diligence review of all adverse actions to ensure that the model is applied correctly,
- Comparative analysis of adverse actions to evaluate model results on protected-class applicants,
- Comparison of computer records

Senior management and boards of directors should be wary of "proxy-like" models, either in-house or purchased from a vendor, that were developed for a loan product or population somewhat similar to another lender's product or population. Because such similarities can be hard to define, this practice can have disastrous results in both fairness to applicants and the bottom line.

sistently review adverse actions: comparing protected-class applicants to the applicant pool, reviewing approval and pull-through rates related to the expectations, and comparing the servicing results to the ROA projections. Deviations from model projections should guide the lender to change the model, including credit score (FICO, Delphi, and the like), loan-to-value categories, applicant attributes, and vendors (if used).

In the initial stages of the product rollout, the lender needs to review early performance indicators that do not meet the expectations of the design phase. Even small indicators of performance shortfalls, such as low application rates from prohibited basis groups, higher-than-expected adverse action

(data input) with application sampling to ensure quality control,

Review of any subjective decision-making performed on scored applications that changes the model decision or modifies the pricing or product parameters, and
Review of closed-loan packages (quality control) to ensure that the loan parameters approved are the same as the parameters in the closed loan.

Consistency and diligence are imperative in developing and using credit-scoring models. Early indications of performance that are different than predicted allow action to be taken early in the process to change the model parameters and modify elements that caused the deviations. Vendors and lenders need to stay alert to changes and intervene quickly.

Alex Stricker, Fannie Mae:

Automated technologies in creditgranting institutions have expanded dramatically in the past 10 years and credit-scoring applications are now common. These applications aid significantly in the effort to streamline origination processes and cut costs while delivering consistent and objective decisions about an applicant's creditworthiness. Scoring models relate an applicant's past credit performance and current financial characteristics to future debt repayment. They are often characterized as generic or custom. Generic scores are created to be predictive of delinquency for generic consumer debt, using large amounts of credit data. Custom scores are designed to be predictive of repayment performance for specific types of credit or perhaps for a specific lender's customer base. With custom scores, additional non-creditreport information may be used in the modeling effort. Regardless of who builds a scoring model, there are common considerations in the development process and maintenance of the model.

Follow a Clear and Explainable Development Process

Scoring-model development occurs with the coordination of market analysts, credit-risk managers, statisticians, database administrators, and computer programmers. Each part of the process must be carefully planned to ensure development and implementation of a successful model.

• Objective

The first step in the technical development of a scoring model is to determine what measure of performance to model. Models may predict the probability of default (nonperforming loans that terminate and do not prepay in full), the probability of becoming delinquent, the financial losses an institution expects for each loan, or some combination of delin-

quency, default, and losses. A lender that uses another company's underwriting system to make loans to hold in its portfolio should be aware of the implications of the scoring model objectives for lending patterns. For example, models designed to predict serious mortgage delinquency tend to place more importance on past-credit-history variables than models designed to predict default. By contrast, mortgage default models give more weight to loanto-value ratios.

• Data Collection and Sample Design The data available for use in statistical modeling are the single most important technical element of model development. Lender data retention is crucial for model construction and testing. Typically, the more information available, the more precise the results can be. Lenders developing their own system are best served by data that come not only from their existing customer base but also from other segments of the market that represent potential applicants. The selection of risk factors included in a scoring model is determined in part by their availability to the modeler. Therefore, it is vital to capture and retain as much origination and subsequent performance information as possible.

After a sample has been constructed, the scoring limitations created by the available data sample need to be identified. For example, at this time, Fannie Mae's Desktop Underwriter does not process 95 percent loan-to-value ratio refinance loans with a cash-out component on non-owner-occupied, three- to four-unit housing. Our experience with this product is currently too limited to model, but as we learn more and acquire more data, the risk of this product may become better understood and be modeled appropriately.

• Statistical Tools

Most scoring applications predict the likelihood of an event. Many statistical tools are available. For example, default probabilities can be estimated by means of logistic regression. The logistic procedure, well known and understood by economists, is fast and straightforward to implement. The specific tool chosen depends on the goal of the scoring model and any deficiencies in the development sample. In the case of sample deficiency, data-augmentation methods are available to improve estimation on thin samples, as are procedures to account for potential biases stemming from missing information. The result of a scoring

for borrowers of all income levels produce an appropriate ordering of risk when it is applied only to lowincome borrowers? The answer depends in part on how diverse the development data are with respect to income. Testing a model's differential validity is necessary before implementing it in production.

• Cutoffs and Overrides During model development, attention should be given to determin-

A lender that uses another company's underwriting system to make loans to hold in its portfolio should be aware of the implications of the scoring model objectives for lending patterns. For example, models designed to predict serious mortgage delinquency tend to place more importance on past-credit-history variables than models designed to predict default. By contrast, mortgage default models give more weight to loan-to-value ratios.

model is the generation of a scorecard. Thus, the scorecard's combination of points may be influenced by the statistical tools and methods employed in the model.

• Validation and Testing

A variety of statistical tests are available to aid in the validation of a model. No single test provides a complete answer. Fannie Mae has estimated hundreds of models, with all potential variables, divided and clustered, to yield the statistically strongest model. The typical measures of qualitativedependent-variable modeling are used, such as gini coefficients, K-S statistics, and concordance. The overall idea is that the model must do the very best job of separating high-risk and low-risk loans. Since many model variations may be tested using several criteria, it is important to have rules for what constitutes a more predictive model. Equally important is how well the model predicts for subgroups of the intended population. For example, does a model designed to predict delinquency

ing how much risk to tolerate. The model itself may predict how likely default is for a particular loan. However, consideration must be given to how much collective credit risk the company is willing to take. This is determined by market analysis of likely application volumes, the length of time loans are expected to stay in the book of business, capital requirements, and pricing and revenue targets. A periodic review of these targets is necessary to ensure that the approved mix of business continues to meet revenue objectives.

Limits within the scoring engine can be reached if the scoring model tries to evaluate values for certain risk factors that are improbable in the scorecard application. At Fannie Mae, our system filters out for manual review all applicants with total debt-to-income ratios greater than 65 percent. The Desktop Underwriter program refers the application to the underwriter to determine whether the data were entered incorrectly or if the relatively high

debt-to-income ratio is manageable for the applicant.

• Monitor Application Decisions Is the production-decision process working in a way similar to the process tested? Generic creditworthiness scores might be used only in part to make a decision, so it is important to keep track of how these scores relate to the final decision. Custom systems may be used to support a comprehensive evaluation of applications and to monitor who is being approved or denied at the recommendation of the automated-scoring system. At Fannie Mae, we have monthly reports on applications through our Desktop Underwriter system. We examine the system's recommendations across various financial and demographic characteristics. When changes or irregularities are observed, more detailed examination follows. Such monitoring is vital to remedy problems or irregularities.

• Monitor Performance

Regardless of what the system is designed to predict, performance can be tracked from one month after origination. The most important report will show how loan performance varies by the scoring system's recommendation. Are the approved loans performing differently than the loans made with an automated recommendation for further review? If generic scores were used in the decision to make the loan, are higher-scored loans performing better than lowerscored loans? Other analysis should focus more narrowly on loans scoring near the cutoff to be sure that those marginal loans are performing as expected. A complete examination will involve tracking performance for numerous loan subsets across product, financial, demographic, and geographic segments of the market. The particular array of reports depends on the financial institution's lending goals and regulatory requirements. Simple reporting, done regularly and completely, will alert management, marketing personnel, and model developers to potential problems and areas to investigate further.

Model Evolution

Expect to update your model. Experience will improve the effectiveness of a scoring system. As such, the development process must be flexible to allow for changes suggested through the learning. At Fannie Mae we are continuously investigating and developing new models. Every new model we generate is an evolution the model it replaces. Approximately annually, Desktop Underwriter scorecard is reestimated to utilize additional performance data that come with the passage of time and variation in the economy. There is no secret formula for success. Able statistical analysis is necessary to generate a system. Its success requires the coordination of market analysis, data retention and reporting, and skilled risk managers.

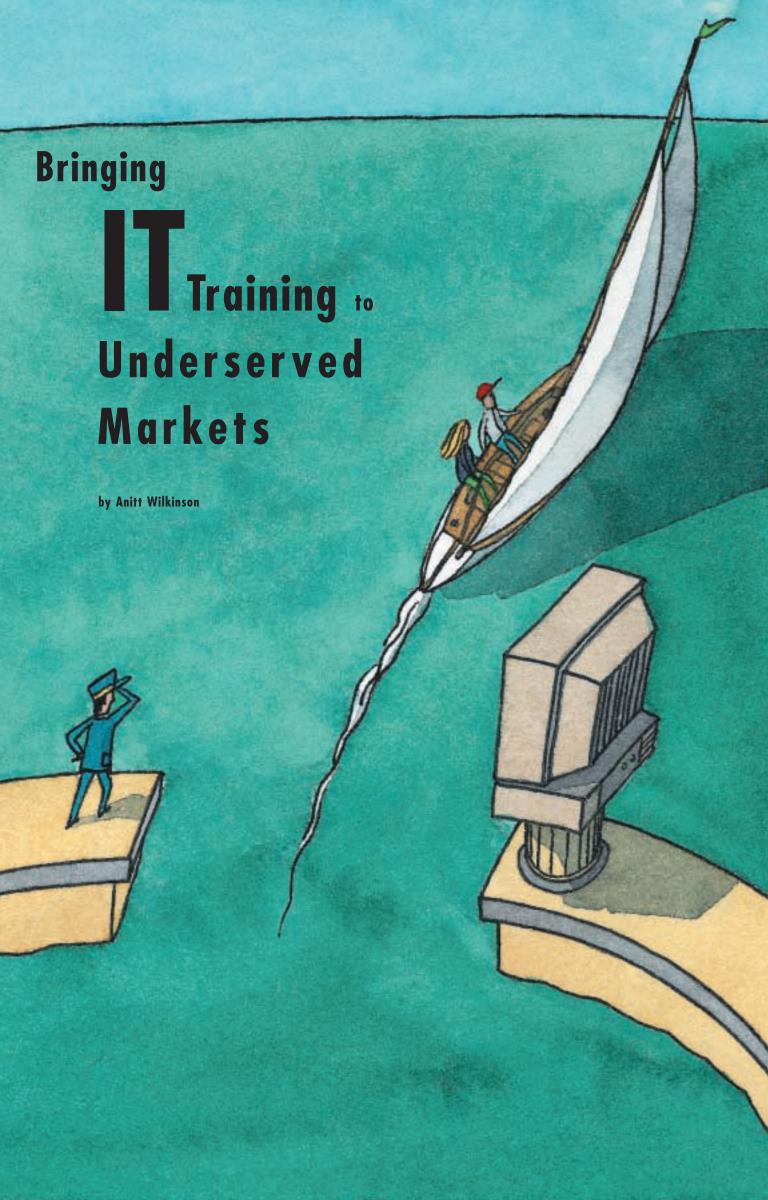
Endnotes

1. The Fair Housing Act prohibits discrimination based on race or color; national origin; religion;

sex; familial status (defined as children under the age of 18 living with a parent or legal custodian, pregnant women, and people securing custody of children under 18); and handicap. The Equal Credit Opportunity Act prohibits discrimination based on race, color, religion, national origin, sex, marital status, or age (provided that the applicant has the capacity to enter into a binding contract). Credit cannot be denied because any of the applicant's income derives from a public assistance program or because the applicant has, in good faith, exercised any right under the Consumer Credit Protection Act or any state law upon which an exemption has been granted by the Board.

- 2. The ratio of applications to the number of actual closed loans. For example, if the lender anticipates a 45 percent pull-through rate and gets a 75 percent pull-through rate, it means either that the model is too loose in credit-quality framework or that the prospective customer was not well-understood by the creator of the model. High pull-through rates usually mean "adverse selection" and could bode trouble for the lender in the servicing end of the business. Similarly, higher than anticipated adverseaction rates could mean that the credit quality is too tight and freezes out qualified customers.
- 3. The lender controls the modifications to the scoring model and, with the vendor's help (information feedback), the lender can make modifications that produce the desired outcome.

This concludes the second article of *Perspectives on Credit Scoring and Fair Mortgage Lending*. The Federal Reserve System's Mortgage Credit Partnership Credit Scoring Committee thanks the respondents for their participation. The next article will explore how lenders monitor the practices of their third-party brokers, especially for compliance with fair-lending laws, pricing policies, and the use of credit-scoring models.



n December 4, 2000, Microsoft donated \$100 million in cash and software to the Boys & Girls Clubs of America to bring technology access and programs to more than 3.3 million underserved young people. This is one indication that the informationtechnology (IT) industry recognizes the need for more workers in the field and that it is optimistic that those workers can come from low- to moderateincome populations. Many other organizations that are smaller than Microsoft are working to broaden information technology know-how of people of low to moderate income. This article profiles some of the programs these profit, nonprofit, and government organizations are using to bring technology and opportunity for digital careers to untapped, and often underserved, markets.

One goal of these programs is to help produce middle-income earners. In addition, they better equip people to keep up with... our culture's increasing reliance on IT, from applying for mortgage loans online to participating in distance-learning programs. They work to diminish the digital divide-the gap between individuals and communities who have access to and can effectively use new information and communications tools, such as the Internet, and those who cannot. The following examples illustrate what some local and national organizations are doing to bring digital technology and IT job skills to untapped markets.

CitySoft, Inc.

CitySoft is a for-profit web development and web services company with a social mission. Founder Nicholas Gleason works to empower people from urban communities by giving them job opportunities in the IT industry. Individuals hired by CitySoft are hired "70 percent based on their attitude and 30 percent based on their ability," says Allison Devore, Vice President of Business Development. She adds that the company recruits talent by maintaining relationships with chosen urban training programs whose administrators identify candidates who might succeed at CitySoft. In their New York City office, 90 percent of their web developers have come from "Playing to Win" in Harlem and Universal Business Media School in New York City. CitySoft has used the South End Technology Center in Massachusetts to fill positions in their Cambridge office. (They also have an office in Baltimore.)

New hires initially become nonpaid "apprentices" and are given specific tasks to test their abilities and grow their skills learned in training programs. Within two to three weeks of completing their assignment, apprentices meet with their supervisors for evaluation. If the apprentice enjoys the work and potential career, and if the supervisor is pleased with the apprentice's work, then the apprentice is graduated to a paid-intern position where he or she begins working on projects for which the company has paying clients. CitySoft's first contract, the creation of The Boston Globe's website Boston.com, was created by a developer who had gone through an urban training program.

To promote continuous improvement, employees are offered a variety of programming language classes such as Cold Fusion, Photoshop, and JavaScript. The program seems to be working—CitySoft hires and retains 90 percent of its employees from urban training programs and has led to a nonprofit, spin-off organization, CitySkills, discussed next.

CitySkills, Inc.

CitySkills is a national nonprofit organization working primarily with IT training programs and Internet employers. It provides services and advocacy focused on improving training programs that prepare low-income urban adults for web development careers. CitySkills' audience includes workforce development organizations, community-based nonprofits, and other job-training institutions.

CitySkills also shows nonprofit organizations that have traditionally provided job training for industries such as office administration and financial services how to retool their existing infrastructure to focus training on technology-driven career paths. Director Michael Margolis (who co-founded the organization with Nick Gleason) says that successful nonprofit training programs are "entrepreneurial, employer-driven, have strong leadership, and have very strong crosssector partnerships." One of CitySkills' initiatives is with YMCA Training Inc., which has been in Boston for 17 years and has placed 2,600 people in office administration jobs. CitySkills has partnered with them to create a web design job training pilot and help YMCA Training Inc. better understand the IT industry's talent needs.

OpNet

OpNet, a nonprofit, multimedia training institute based in San Francisco, provides an intensive five-week training program that targets low-income young adults and those who are unemployed or on welfare. The program provides free classes ranging from desktop publishing to web development. Applicants to the program must have a General Equivalency Diploma (GED) and basic computer skills such as knowing how to save a file. Chief Executive Officer Joe Hawkins says, "If we can identify shoe shiners and homeless moms and train them to work at excellent paying jobs in less than six weeks, then that should send a message to the country that it can be done." According to Mr. Hawkins, "We need to be able to look to talent within our own communities to meet the need [of this labor shortage]." The program has three components: EntryNet delivers five weeks of web design, job-readiness and project-management training, and an orientation to the new media industry; InterNet provides on-the-job experience with paid internships in new media companies; and SupportNet promotes success and long-term career development with training stipends, counseling, financial lifesupport subsidies, job placement assistance, continuous training, tutoring, mentorships, scholarships, and peer-group support.

To date, OpNet has trained over 200 people and approximately 50 to 55 percent of its graduates either have full-time jobs in the industry or are working on contract assignments; 10 percent have pursued advanced education. Average annual post-internship income has increased 165 percent, from \$11,500 to \$30,500. Prior to program entry, 59 percent of interns had household income classified by the U.S. Department of Housing Urban Development as very low, and 41 percent as extremely low. Thirty-four percent of the students are African-American, 24 percent Latinos, 24 percent Asians, and approximately 18 percent Caucasians or from biracial backgrounds.

OpNet uses an advisory board, made up of approximately 25 industry professionals, to help shape curriculum and keep the program in line with industry needs. Initial program funding relied on credit provided by the Local Economic Assistance Program, a venture capitalist firm. Today, they use large government grants to help fund the program.

La Alianza Hispana, Inc.

La Alianza Hispana is a nonprofit, multiservice agency serving Latino communities in the Roxbury and Dorchester areas of Boston. It provides a wide variety of programs and services, such as English as a Second Language, GED classes, and public health programs. Ms. Shirley Roderick, Program Manager of the Employment and Training Department at La Alianza Hispana, says that the institution's ultimate goal is to help community members improve their quality of life. Ms. Roderick believes that the Latino community has been falling

behind in the information age because many are unable to afford a computer and do not have access to the Internet. In an effort to bridge this gap, the employment and training department incorporates the use of technology in its various course offerings. Some examples of those courses are PC technician training and Microsoft applications. One of the classes teaches office skills and focuses on job searching via the Internet. Ms. Roderick plans to move the technology training to more advanced levels in the near future. The agency maintains an up-to-date listing of all the job openings within the area and often refers students to jobs that they hear about. The agency also has a strong internship program. Students who succeed in classes get promoted to a paid position at the agency. Ms. Roderick says that one former student now does the agency's PC support and another student networked the agency's computers before leaving for a more lucrative position. The agency is also involved in a Technology Goes Home collaboration discussed on the next page.

Although La Alianza Hispana has been fortunate to receive donations of computer hardware and software from the Timothy Smith Foundation and Lotus/IBM Corporation, funding remains a problem. They continue to have difficulty attracting and keeping qualified, bilingual instructors to teach IT classes because the instructors are able to make more money in the private sector. To mitigate this problem, they have established a collaboration with Northeastern University's Cooperative Education Department.

The Visually Impaired: Working Toward Inclusion in the Internet Age

Mr. Curtis Chong, Director of Technology at the National Federation of the Blind in Washington, DC, thinks that economics is the issue causing a digital divide in the visually impaired community. He says that for visually impaired individuals to use the Internet, they must attach a third-party piece of software (adaptable to Windows only), called a screen access program, to the computer. At present, five or six programs are on the market, ranging in price from \$500 to \$1,000 or more. These program take screen information and convert it into speech. Those who are able to afford it can purchase a display that converts the data on the screen into Braille. According to Mr. Chong, most computer stores are unaware of this software or do not stock it. There is also the issue of training and education. Says Mr. Chong, "When visually impaired people access the Internet, they do so using a keyboard, not a

mouse, and so a program that forces you to use the mouse for every single function is inaccessible to the blind." Employers who rely on software that requires use of a mouse damage job prospects for blind people. Because training resources are not available in the general community, most visually impaired individuals who learn keyboard access to the Internet are selftaught, like Mr. Chong.

Mr. Chong is delighted that the government has drawn a lot of attention to the plight of the visually impaired in the digital divide; however, the National Federation of the Blind is not waiting for the government to solve all of their problems. They currently plan to construct and operate a National Research and Training Institute that will develop new directions and trends in research, some of which will be in high technology.

The High Tech Demonstration Program

The High Technology Demonstration Program, run by the City of Boston's Office of Jobs and Community Service, is a free program that caters to dislocated workers, primarily women and minorities, between the ages of 40 and 45. For the past two years the High Technology Demonstration Program, with grant partner Metro Southwest, a workforce development agency in the Norwood area, has been offering PC support training through two of its group-training vendors. Executive Director Dave Bassett says that 100 individuals were trained in the program, and 85 percent were able to obtain jobs in the high tech industry. The majority of these people had no previous high tech experience. The PC-support training-skills program was set at a ninth-grade reading and math level with basic computer literacy recommended. Mr. Bassett plans to raise the bar to a tenth-grade reading and math level with stronger computer skills required of individuals seeking to gain admittance to the network administration and the web design High programs. The Demonstration Program has a job referral component, with grouptraining vendors Clark University State School Bay Technology responsible for placing people upon program completion.

Mr. Bassett says that while there is a skill shortage across the board, it remains a challenge to train individuals so that they can gain the skills that are necessary to secure a job. The program keeps abreast of market trends and labor needs by using an advisory board (representing several local employers) as a resource. It was the advisory board who recommended that the program target women, minorities, and mid-career workers, since they felt that they were the groups most underrepresented in the workforce.

Technology Goes Home

A survey conducted by the Mayor's office in 1996 revealed that only one in 10 children in Boston's public schools had a computer in their home. Following this survey, the Mayor's office convened a series of meetings at City Hall with business leaders to figure out how to improve the situation. As a result of the meetings, and an initial donation of 1,000 computers, the Technology Goes Home Program was born. In the program, families receive new computers upon completion of a computer-training program. The goals of the Technology Goes Home Program are to encourage enhanced employment opportunities for adults, improved academic performance for children, community collaboration and cooperation, and creation of Internet communities within and between neighborhoods. Mr. Steve Gag, Executive Director for the program, says that it seeks to ensure that every family of a publicschool student, and primarily those of low to moderate income, has access to a computer.

Might a Dot-Com Downturn Reverse These Efforts?

Although efforts are under way to bridge the divide and to include more low-income individuals in the field of information technology, the recent downturn in the dotcom economy has left fewer positions available for entry-level workers, particularly those coming out of short-term training programs such as the ones featured in this article. As of February 12, 2001, over 55,000 individuals have been laid off in the dot-com industry.² A December article in *The* New York Times titled "A Black Woman Crosses the 'Digital Divide' And Gets Stranded" tracks the career of a former student of OpNet's six-week training program, and the difficulties she has experienced trying to find a job since being let go by her former employer, a San Francisco start-up Internet company called ShopTok. According to the article, "The majority of the tens of thousands of workers laid off in the dot-com downturn are the lower-wage, entry-level workers who can least afford to lose their jobs."

The market for IT professionals such as computer scientists, computer engineers, systems analysts, and computer programmers who possess special skills still remains strong, however, and it is projected to grow considerably over the next five years, from 1.5 million in 1996 to 2.6 million in 2006.³ Knowledge of information technology tools and services will be an essential feature of the twenty-first century, from accessing online-banking services to searching the web for job opportunities. Fortunately, programs like the ones described in this article provide many low- and moderate-income people with motivation and the first step toward opportunity in the IT industry, possibly leading toward their attainment of further skills.

Endnotes

1. The demand for IT workers has grown with the increase in the Internet, networked computers, ecommerce, and digitized products and services. According to a January 2001 report Measuring the Internet Economy, available at <www.internetindicators.com/jan_2001.pdf>, "The Internet Economy now directly supports more than 3.088 million workers . . . more than the number employed by the insurance industry (2.36 million workers) and double the real estate industry (1.5 million)."

2. www.theStandard.com

3. Carol Ann Meares and John F. Sargent, Jr., "The Digital Workforce: Building Infotech Skills at the Speed of Innovation," U.S. Department of Commerce, Office of Technology Policy, June 1999.

About the Author

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