IMPROVING BANK MARKET PERFORMANCE

Cheryl J. Frohlich
University of North Florida
Jacksonville, FL

C. Bruce Kavan
University of North Florida
Jacksonville, FL

A. Coskun Samli
University of North Florida
Jacksonville, FL

Abstract

The primary assertion of this paper is that banks need to redirect and balance the focus of their business strategy from that of an internal (efficiency oriented) to an external (effectiveness oriented) marketing research program in order to achieve full profit potential. The return on assets (ROA) of banks has only fluctuated from 0.93% in 1992 to 1.24% in 1997. As one alternative to the flat ROA, the industry has engaged in a merger mania and invested in internal, transaction-oriented information systems in order to reduce costs and increase the current net income (efficiency driven). However, this business strategy results in short-run profits to the exclusion of opportunities that may result in long-run profits. It is obvious from this flat ROA that banks have not been effective. Therefore, in order to avoid the danger of banks becoming atrophied, the organizational effectiveness component must be brought into the overall architecture of the bank's information system rather than the simple current emphasis on processing efficiency. This change in business strategy requires a fundamental paradigm shift in the manner in which banking executives view their industry. The business strategy must change from the narrow "provider of financial service" orientation to the broader "fulfiller of financial needs" orientation. A marketing information research system facilitating such a major shift in orientation is presented.

Introduction

During the last decade, the banking industry has been characterized as one of increasing mergers and acquisitions accompanied by a large amount of technological change. The number of banking institutions decreased from approximately 14,451 in 1982 to 8,774 in 1998, representing a 39 percent decline nationally (FDIC Statistics on Banking, 1998). The higher level of merger and acquisition activity seen in recent times has been in response to a changing regulatory envi-

ronment including the liberalization of state branching laws (Christopher & Craig, 1996; Helfer, 1997).

Much of this merger and acquisition activity has been driven by the industry's focus on the bottom line (net income). With the decline of the average money center and regional banks net interest income from 1986 through 1997, an economy of scale (efficiency) merger mania has occurred in order to maintain or improve that bottom line. Industry profits are at historic highs; however, it is becoming painfully obvious that these historic profits are a result of the customer absorbing an increasing share of bank cost through increased bank fees. Thus, these historic industry profits are not being generated from net interest income of the larger banks that control the majority of deposits. Industry profit is being generated from smaller institutions net interest income coupled with the additional "fee for service" income generation and transaction efficiency in larger institutions. Industry profits could be even greater if the larger banks were able to increase their net interest spread. Could a more effective information technology strategy be an appropriate method for larger banks to increase their profitability through a more favorable net interest spread?

Literature

The excessive bottom-line orientation of the banking industry (Deutsch, 1990) has been maintained over the decade by the industry's continued cost-cutting behavior (Nelson & Owen, 1996). This cost-cutting behavior has been reflected in the industry's development and use of its information technology (IT) (McCormick, McMahon, & Kuenne, 1996). A study by the Bank Administration Institute, Furash & Co, and the Wharton Financial Institutions Center (Anonymous, 1999 p.18) found that ". . . in most banks . . . visited, IT acts as a spending control . . . . There was surprisingly little analysis of competitive response, performance measurements were simple and there typically has been no decision-review process." Thus, information systems have been used to gather and use internal information and increase the efficiency of the bank without a review process involving the external environment (the measure of effectiveness).

As pressures on margin and efficiencies from increasing competition has occurred, the response of the banking industry has been ". . . to look to technology to offer new revenue sources, streamline operations and enhance efficiencies (Hill, 1998, p. 30)." Much of the technological development has focused on the gathering of detailed customer information for sales purposes (Cline, 1999). In addition, information has been gathered concerning the best branch and ATM sites based on data such as population demographics, streets, zip codes, county lines and competitor locations (Amato-McCoy, 1999). Technology has also been used to reduce internal costs through the automation of transaction intensive applications such as the loan underwriting process (Caner, 1999).

Research findings reveal banks with a stable customer base show substantial profit increases. The development of long-term relationships with bank customers can be achieved by creating and delivering products desired by those customers. Finally, banks have gathered feedback on customer satisfaction to ensure customer satisfaction (Licata, Weber, & Reed, 1998). This later idea addresses the effectiveness of the marketing strategy. Few articles (Kavan, Frohlich, & Samli, 1994) have been written on the use of a complete information system that marries the historical efficiency-driven use of technology to reduce costs with the long-run effectiveness of customer satisfaction. According to Fornell *et al* (1996) banks do not rate high on customer satisfaction. Thus, there appears a need for the industry to develop an effective information technology strategy that will address this customer satisfaction issue.

The Need for an Effective Information Technology Strategy

It has been said that the only constant in the life of an executive is change itself. It should be obvious that yesterday's standards and results are not acceptable in today's operating environment. As markets become more global, opportunities are greater, expectations are higher, and the challenges facing banking executives are more significant than ever. The organizational foundations that are laid today become the basis upon which to build for the future.

The primary responsibility of a bank's executive management is to build for the future and insure the perpetuation of the organization through the creation of new value. For the senior Information Technology (IT) executive, value creation must begin with the specification of the information infrastructure that underlies the entire organization. This infrastructure is at the core of a bank's competency, and it manifests itself to the IT executive in the form of an architecture. Therefore, one of the primary roles of the bank's senior management team is the creation of infrastructure or architecture (Kavan, 1998).

The infrastructure or system architecture provides a shared vision of the information systems environment required to meet the needs of an organization. Thus, for a bank, the architecture represents the technological structure for conducting business. The degree to which such architecture is implemented represents the bank's coordinated response to the market place (i.e., the strategic direction). Thus, the technology linkage between a bank business strategy (and vision) and its architecture is a very critical one.

The senior management team must actively participate and orchestrate the development of such an actionable business strategy for the bank. This articulation of an organizational strategic response through the successful translation of the strategy into an appropriate and enduring architecture is critical for the perpetuation of the bank. The architecture is achieved by acquiring and directing the technology and organizational resources to support the bank's strategic direction. The degree to which the architecture reflects and is able to support the bank's strategic

objectives is reflected in the ability to generate the information necessary to make appropriate market decisions. These market decisions are of the same type (price, product, channels, etc.), and therefore the information needed to drive these decisions is consistent between all types and sizes of institutions. Although the information requirements are common, the bank's response to this information may vary based upon individual market characteristics and competitive business strategy. Just as smaller banks outsource transaction-processing capabilities to larger correspondent banks, these infrastructure considerations might also be outsourced.

All organizations are systems, and banks are no exception. Bank organizational systems may be depicted as the bank acquiring resources and transforming these resources (inputs) into products or services (outputs) that are sold in a marketplace. The servomechanism for control of the organizational system is the bank's management team. It is up to this team to ensure that the bank is operationally efficient and effective. Efficiency is defined as the ratio of output to input (a necessary condition) whereas effectiveness is associated with the rate of absorption of outputs (products and services) to the environment or marketplace.

An organization that utilizes only internal information for strategic decision purposes (efficiency driven) will lose its connection with the "outside world" or environment. This will result in a failure to adapt to undetected change in the environment because internal information is insufficient to detect external change. Any system that is not open to its environment will atrophy and die (Schoderbek, Schoderbek, & Kefalas, 1985). Thus, the organizational infrastructure or architecture developed for a bank must provide for input (feedback) from the environment or marketplace to insure its perpetuation. The authors contend that many bank information systems or architectures are inherently closed (Kavan, Frohlich, & Samli, 1994). In most bank information systems, information for new value creation (product and service) is inherently flawed since the information is acquired only from the bank's existing customer base. This type of data gathering assumes the current customer base is representative of the marketplace as a whole and ignores opportunities not represented within the bank's current customer base.

With the prevailing record high levels of bank profits and with no major bank threatened with failure, the incentive to change banking behavior may be lacking. This paper establishes a banking information structure that would avoid the negative effects of the current efficiency driven merger mania. In an effort to construct an architecture that is both efficient and effective, three basic propositions are put forth. First, banks already have certain critical information regarding their customers. This information, if used properly, provides a solid basis upon which to build an internal bank information management system that is efficiency oriented. Second, a comprehensive bank marketing research activity is presented as a critical component missing from most current bank systems. Finally, this article presents a strategic information framework that combines current bank internal information systems with externally oriented information required for truly effective marketing oriented decision making.

The Efficiency Focus

Financial institutions have failed to adequately respond to a changing environment as evidenced by the inadequate creation of new value demonstrated by their flat return on assets (ROA). ROA has only fluctuated from 0.93% in 1992 to 1.24% in 1997 (FDIC Third Quarterly Report 1997). Given current high market returns and the industry's flat ROA, the only way to increase return on equity is through leverage, but this increases risk. As one alternative to the flat ROA, the industry merger mania continues. In 1995, some 389 mergers worth $57 billion took place (Pare, 1995). Realizing the problem of the flat ROA, financial institutions have invested in internal transaction-oriented systems in order to reduce costs and increase the current net income. However, because of excessive bottom-line orientation (Deutsch, 1990), these systems have focused primarily on internal efficiency, which results in short-run profits to the exclusion of opportunities that may result in long-run profits. Efficiency, as previously defined, is the ratio of output to input. Improved efficiency, therefore, reduces the cost of operation and has an immediate effect on profitability.

However, emphasis on internal efficiency does not provide a bank with information concerning some critical issues relative to basic survival. It is extremely important to ask the pertinent questions: What are the benefits for the consumer? What is the consumer looking for? What are the customer's needs (Lovelock, 1991)? Even though a bank's business is to fulfill the customer's financial needs, most banks still see themselves as providers of financial services. That is, the bank provides a financial service or produces a financial product without first fully assessing the customer's financial need. As a result, as with most service industries, banks do not rate high on customer satisfaction (Fornell, *et al*, 1996). Pare (1995) indicates that the basic business of banking — taking deposits and making loans — is collapsing (thus the declining net interest spread of the larger banks) and expansion into fee-based business is not happening quickly enough to offset the losses. Therefore, banks have been putting emphasis only on efficiency rather than the effectiveness that a good service organization should emphasize. This behavior is contrary to the practice of profitable service organizations. Thus, the banking industry has a wrong focus in its business strategy.

The Paradox of Efficiency

Perhaps the most critical point here is that in the banking industry, more than most other industries, there is a new type of competition in the making. This new type of competition is based upon information. However, this information has been primarily internally oriented. Therefore, it cannot be used to establish a competitive advantage and improve market position (Lengnick-Hall, 1996).

> Organizations operating in today's competitive environment require the adoption of defined strategies as well as the ability to adopt these

> quickly and effectively. While an organization may well have superior products or services today it can quickly lose this leadership position if it does not develop a clear decision-making process and the ability to implement decisions (Takac & Singh, 1992, p. 32).

Indeed, the information technology (IT) is already developed to provide the bank with a new consumer/market dimension. One aspect of this recent development is "buyer-value" analysis. This methodology enables the bank to identify whom among their prospects will buy what and when. They may even determine why customers select one provider of financial services over another (Elliott, Swan, & Whitmyer, 1995). But none of these opportunities can take place if the banking industry insists on taking the narrow "provider of financial service" orientation rather than the broader "fulfiller of financial needs" orientation.

In fact, if the banking industry continues to take the narrow rather than the broader focus in their business strategy, they will continue to lose market share in total consumer assets.

In 1980, banks and thrifts had accounted for 54 percent of the financial institutions in the U.S. By December 1994, that share had dropped to 33 percent and by June 1995, it had slipped to 32 percent. Fifteen years ago, consumers left about 34 percent of their assets in checking and savings accounts and CDs; in 1995 consumers banked only 17 percent in savings (Pare, 1995). It is obvious from these statistics that banks have not been effective. In order to avoid the danger of banks becoming atrophied, the organizational effectiveness component must be brought into the overall architecture of the bank's information system rather than the simple current emphasis on processing efficiency.

Effectiveness

Organizational effectiveness may be defined as providing financial services for a consumer. Typically, such action is rewarded by profits. These profits may not be immediate but may occur over the long-run. This customer oriented focus requires a strategic shift towards more emphasis on the individual needs and less emphasis on the accounting function. From a marketing viewpoint, these two perspectives represent the difference between a production and marketing orientation (Deutsch, 1990). In order to prevent the bank from atrophy, it must become open to the environment in a marketing sense. Banks still see themselves as providing a product that should be produced efficiently; whereas, the modern marketing concept implies that the product must be first and foremost consumer oriented, in other words, market effective (Deutsch, 1990; Kavan, Frohlich, & Samli, 1994).

This dichotomy must be accepted and fully explored by bankers in their effort to develop an effective information infrastructure. The banks that consider themselves financial services providers (which the authors maintain most banks do) are likely to develop an efficient information system dealing with primarily the

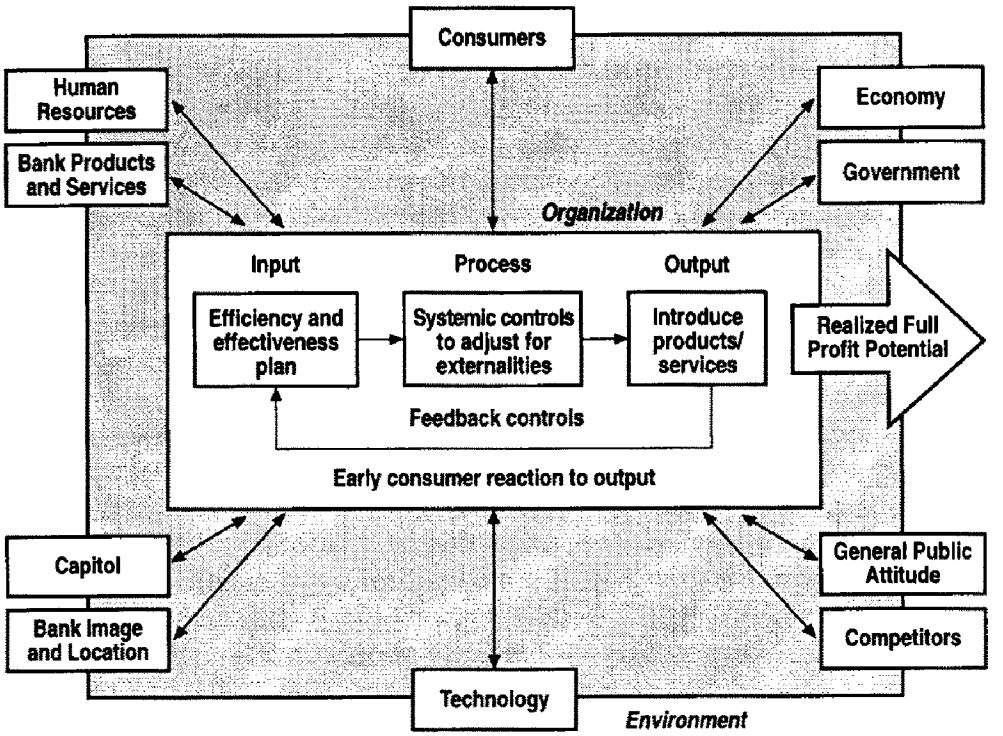
input/output relationship and utilizing the bottom-line (i.e., current year's net income) as the servomechanism for feedback. All of these, input, output, and feedback are internally data dependent. As a result, bankers are attempting to change their environment to fit their products, which again, in marketing terminology is a production orientation (Kavan, Frohlich, & Samli, 1994).

Market effectiveness requires that product service organizations provide a product and service mix appropriate for a particular group of consumers. Banks are no exception to this rule. In other words, banks should adjust themselves to the environment, which is not only a less risky strategy but is also more plausible than trying to adjust the environment to their products. If a bank narrowly defines its business strategy as a financial services provider to consumers rather than the broader business strategy of a consumer-financial service solutions provider, it is likely to look only at efficient ways to make resources available. However, if this broader interpretation of the business strategy is accepted, then it becomes crucial for the bank to understand what kind of satisfaction (market-effectiveness) it is providing, for whom, and how this consumer satisfaction could be enhanced by the bank's services. In other words, banks must think of themselves not as financial service providers, but as consumer financial problem solvers. This broader strategy interpretation will also result in greater long-term profits for the bank. Thus, this broader strategy interpretation implies the balancing of internal and external information along with the development of an optimal information infrastructure. The business strategy must change for banks.

The Information System

To facilitate an understanding of the concepts to be enumerated, consider Figure 1 (Information Framework). The organization is depicted with input, process, and output components within the context of an environment or market place. There are many exogenous variables to the organizational system. These exogenous variables include such areas as economy, government, public attitude, competitors, technology, etc. The organizational system exists within an environment that it contributes to, while at the same time the environment affects the system's organizational effectiveness. Current banking systems are primarily driven by internal information and are bottom-line oriented. A servomechanism to control feedback governs the organization. This feedback loop interacts with a bank's management decision process and, for the most part with today's banks, relies heavily upon internal information in the input and output relationship rather than these external exogenous variables. In the proper information or infrastructure development, direct feedback from the environment or marketplace must be included.

Figure 1
Information Framework
(adapted from Schoderbek, et al)



Result of Efficiency Strategy

If a bank only uses this internal information, there will be an inappropriate emphasis on attempting to control the environment due to banks driving emphasis on minimizing the cost of banking. Such bank systems are strictly efficiency oriented (as defined by the ratio of output to input) and do not consider the bank's ability to develop an effective competitive edge by adjusting its information gathering processes to more closely monitor consumer desires.

This type of organizational system does not provide for nor integrate the external information required for marketing research. Externally based marketing information provides an opportunity for the bank to adapt itself to its environment. Without such a component within the bank's information system, the internal system will not be able to adjust to changing externalities.

The basic orientation of a bank should be towards controllable systemic variables versus environmentally uncontrollable conditions. However, the current trend toward improved efficiency is, in essence, a veiled attempt by the bank to control variables that, by definition, are uncontrollable environmental conditions. Thus, it should be of little surprise that these attempts to

manipulate the environment have had little effect on improving the bank's position within the industry.

Proposed System Framework

Banks should follow the "accepted" information framework that includes both internal and external information. As Figure 1 demonstrates, the critical point is that the bank must adjust to the externalities of the environment. In so doing, the proposed system is an open system. It collects information from without as well as from within. Hence, it draws richer information because it is extracted directly from the market and consumer rather than the inadequate internal proxy for those entities. Such an open organizational model emphasizes a balance between efficiency and effectiveness.

In other words, the entire system is geared toward identifying critical external parameters and internal factors that may be utilized to develop marketing strategies which, in turn, enhance the bank's ability to survive through adjustment to the externally changing environment. Additionally, organizational adjustment based upon early consumer reaction is a more superior regulator than waiting for the lagging indicator of short-term profit. Such a feedback mechanism must be composed of two generic groups of information — psychometrics (economic, demographics, and behavioral) and marketing mix information inputs.

Bank Image Research

An important aspect of consumer analysis involving psychometrics is in the area of bank image and location. Although much work has been done in retailing regarding the store image, in bank marketing this is still a neglected area. It has been posited that if the consumer's perception of the retail store's image matches the consumer's self perception, a congruity is developed. Such congruity enhances the customer's loyalty towards the store (Samli, 1989). It is proposed that such a relationship already exists in banking. However, this implies that bank marketers can successfully measure their bank's image and make it congruent with the self-image of their core customers. This proposition requires quite sophisticated consumer and bank image analyses. Location relates to local geographic dimension within which the bank has communication capabilities with current and prospective customers. Again, this is a very critical external marketing research activity. This is a particularly germane question in the emerging era of "virtual banks." Just as retail establishments have a trading area, banks also have a trading area that needs to be identified, measured and evaluated (Samli, 1989) even in cyberspace.

Marketing Mix Research

Marketing mix information inputs deal with the target market customers' behavior regarding the bank and its services, associated price of the services and the customers' mass media exposure. This particular portion of the information sys-

tem provides data not only about the target customers' psyche and their perceptions of the bank, as mentioned above, but also how the bank can communicate with that segment and deliver its services (Kotler, 1997).

Cognitive Dissonance Research

The last component of the bank consumer research is related to cognitive dissonance. It is very critical for a bank to realize that cognitive dissonance is very real. In simple terms, cognitive dissonance is defined as having "second thoughts." It implies that after patronizing the bank, the customer may have second thoughts about the rationality of their choice. If cognitive dissonance exists, it might even be stronger in banking than in other types of businesses. Because banking is as personal to a consumer as medicine or a relationship with an attorney (Samli & Frohlich, 1992), consumer satisfaction is unique for each consumer.

Since most of the bank's activities are dependent upon repeat business, the customer's dissatisfaction with a bank is likely to be exacerbated even more than a typical product or service group's customer dissatisfaction. Thus, the bank not only must have proper information to identify its target markets but also must have the proper information about how to develop and deliver its products and establish an effective communication base with its targets to satisfy customer needs. In order to eliminate or reduce this potential cognitive dissonance, both internal and external information must be used jointly to create an information system which facilitates the developing of a marketing strategy that enables the bank to adjust to external conditions and be efficient in this adjustment process.

Managing the Proposed System

It must be recognized that such a proposed infrastructure is not a one-point-in-time activity, but rather an ongoing or continuous strategic planning process (Kavan, 1998). Managing such a system is extremely critical. Figure 1 provides a general management concept of the organizational system. As illustrated by this figure, the whole process is related to identifying and using internal controllable variables (a bank's resources or strengths) in order to adjust to the externalities which are not controllable. Typically, the controllable aspects of internal variables are much more dominant than external variables. It must be emphasized that adjusting to externalities can be achieved more effectively than trying to manipulate the externalities through efficiency. Only a mature functional development of a current information system will enable the bank to think in terms of its external information requirements as the missing linkage to the external environment (i.e., customer satisfaction). These external information requirements will identify the type of additional marketing research that should be undertaken and dictate details of the external information gathering process.

Continuous performance monitoring (internal) of the proposed information system is critical. Feedback (external) should provide insight into a number of vital questions:

Are the bank's product offerings adequate?
Does the bank know its target markets?
Can the bank distinguish the risk factor among its market segments?
Are there other untapped target markets?
Is the bank successfully communicating with the consumers who are likely to be in its target markets?
Are the pricing policies of the bank acceptable to its customers?
Do recent customers of the bank exhibit the target market's customer features?
Is there any cognitive dissonance?

Although performance monitoring and feedback are commonly construed to be one and the same, their functions are conceptually different. This distinction is the difference between short-run marketing research dealing with the bank's performance (monitoring) and the long-run marketing research dealing with the feedback. Feedback is used within the context of a bank establishing a certain image in such a manner that it would create a long-term loyalty on the part of its target market's customers. Customer loyalty, therefore, is the key feedback factor that should be emphasized in bank marketing (Samli, 1989). If the consumers are not quite loyal (feedback), the bank must explore the ways to make them happier and loyal (control).

If a bank can project an image that is not only acceptable but also desirable to its customers, it will be able to consider its marketing efforts successful. Desirability to the customer is the feedback or control mechanism. A program of ongoing market research generally provides this feedback. Therefore, it (feedback) modifies the entire process under conditions of the external environmental (customer) dissatisfaction as illustrated in Figure 1.

Conclusions

In the current world, the missed opportunities in market performance are due primarily to an ineffective or totally inapplicable information system. Effective decisions require appropriate information — one can profit through knowledge. In most cases, banks are currently dealing with internal information systems that emphasize efficiency rather than market effectiveness. As a result, banks are experiencing difficulty in adjusting to their changing market environment. Unless change is made, these behaviors will result in atrophy of the individual banking organization.

It has been posited in this paper that consumer banks must migrate in the direction of balancing external and internal information requirements to be simulta-

neously efficient and effective. Efficiency without effectiveness as experienced by many banks is deadly. Effectiveness alone is not likely to be very profitable. The framework proposed in this paper implies a need for a heavy commitment to marketing research. Consumer banking will have to perceive itself as not just a financial service provider but as a consumer financial problem solver. Such a paradigm shift in the bank's strategy will elevate marketing research to an ongoing research activity that provides information for determining appropriate marketing strategies or market focused management. This change in the bank's strategy, coupled with the appropriate use of the proposed information system, is likely to be the key for survival under turbulent and adverse market conditions.

References

Amato-McCoy, D. (1999). Summit employs mapping system to pinpoint best branch, atm sites. Bank Systems and Technology, 36 (4), 54.

Anonymous, (1999). Bank it decisioning needs tuning up. Bank Systems and Technology, 36 (2), 18.

Caner, J. (1999). Soaring performance. Mortgage Banking, 59 (6), 58-64.

Christopher, B. B., & Craig, V. V. (1996). Recent developments affecting depository institutions. Federal Depository Insurance Corporation: Fall 1996 Banking Review (electronic edition).

Cline, K. (1999). Harnessing customer information. Banking Strategies, 75 (2), 48-54.

Deutsch, B. I. (1990). A conversation with Philip Kotler. Bank Marketing, December, 14-20.

Elliott, M., Swan, A., & Whitmyer. L (1995). Pursuing profits in retail markets: Focus on consumers' hot buttons. Bank Management, September-October, 70-73.

Federal Deposit Insurance Company (FDIC) Third Quarterly Banking Profile (1997) (electronic edition).

Federal Deposit Insurance Company (FDIC) Statistics on Banking (1998) (electronic edition accessed 6/21/99).

Fornell, C., Johnson, M. D., Anerson, E. W., Cha, J., & Bryant, B. E. (1996). The American customer satisfaction index: Nature, purpose, and findings. Journal of Marketing, 60 (4), October, 7-18.

Helfer, R. (1997). History of the eighties: Lessons for the future. published remarks at FDIC Symposium, Arlington, VA, January 16, 1997 (electronic edition).

Hill, M. (1998). Technology investment in business banking. Journal of Lending and Credit Risk, 81 (6), 30-35.

Kavan, C. B. (1998). Profit through knowledge: The application of academic research to information technology organizations. Information Resources Management Journal, 11 (1), 17-22.

Kavan, C. B., Frohlich, C. J., & Samli, A. C. (1994). Developing a balanced information system. The Journal of Services Marketing, 8 (1), 4-13.

Kotler, P. (1997). Marketing management, Englewood Cliffs: Prentice Hall.

Lengnick-Hall, C. A. (1996). Customer contributions to quality: A different view of the customer-oriented firm. Academy of Management Review, 21 (3), 791-824.

Licata, J. W., Weber, J. M., & Reed, P. F. (1998). Satisfaction surveys: Staying on the right side of the tracking. Bank Marketing, 30 (12), 26-32.

Lovelock, C. H. (1991). Why marketing management needs to be different for services. Marketing of Services, J. H. Donnelly and W. R. George, eds., Chicago: American Marketing Association, 5-9.

McCormick, J. M., McMahon, S. P., & Kuenne, C. B. (1996). Scaling the ladder to marketing excellence. Banking Strategies, 72 (5), 46-52.

Nelson, W. L., & Owen, A. L. (1996). Profits and balance sheet developments:Commercial banks in 1996. Federal Reserve Bulletin, 83 (6), 465-489.

Pare, T. P. (1995). Clueless bankers. Fortune, November 27, 151-158.

Samli, A. C. (1989). Retail marketing strategies, New York: Quorum Books.

Samli, A. C., & Frohlich, C. J. (1992). Service: The competitive edge in banking. The Journal of Services Marketing, Winter, 15-22.

Schoderbek, P. P., Schoderbek, C. G., & Kefalas, A. G. (1985). Management systems. (3rd ed). Homewood, IL: BPI/Irwin, 22.

Takac, P. & Singh, C. P. (1992). Strategic alliances in banking. Management Decision, 30 (1), 32.

Cheryl J. Frohlich is an Associate Professor of Finance at the University of North Florida. She received her Ph.D. in Finance from the University of Illinois. Dr. Frohlich has taught in numerous management development seminars and has served as a consultant for local banking organizations. The majority of her research has been conducted in the banking industry both on performance and management issues. In addition, she has done substantial research in the mutual fund performance area.

C. Bruce Kavan is the NationsBank Professor of Information Technology at the University of North Florida. Prior to completing his doctorate at The University of Georgia in 1991, he held several positions with Dun & Bradstreet including vice president of Information Services for their Receivable Management Services Division. Dr. Kavan is an extremely active consultant in the strategic use of technology, system architecture, and client/server technologies. His main areas of research interest are in interorganizational systems, the delivery of IT services, and technology adoption/diffusion. His research has appeared in such publications as MIS Quarterly, Information Strategy: The Executive's Journal, Journal of Strategic Performance Measurement, Journal of End User Computing, Information Resources Management Journal, Auerback's Handbook of IS Management, and Journal of Service Marketing.

A. Coskun Samli is Research Professor of Marketing and International Business at the University of North Florida. He received his doctorate from Michigan State University where he was a Ford Foundation fellow with postdoctoral work at UCLA, The University of Chicago and New York University. Dr. Samli is a Distinguished Fellow in the Academy of Marketing Science and a past chairman of its Board of Governors. He is a frequent international speaker and has served on the Fulbright Commission. Dr. Samli is a prolific author with numerous journal articles, books and monographs.