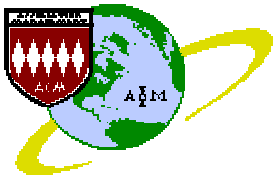

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LEADERSHIP ACTIONS FACILITATING SUCCESSFUL IMPLEMENTATION OF ATMS AND INTERNET BANKING IN EGYPTIAN PRIVATE SECTOR BANKING

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ABSTRACT

This research draws on banking sector data to explore the role of leadership actions in facilitating successful implementation of automatic teller machines (ATMs) and Internet Banking in Egyptian private sector banking. IT-related innovations in everyday business functions have elicited a great many reforms in the Egyptian banking sector since the 1990s. Achieving strategic competitiveness through IT is challenging as it involves an in-depth understanding of how to successfully deploy IT. In this study, differences in leadership actions were found to have an impact on organizational commitment and successful implementation of the same kinds of IT enabled-systems and hence a bank's strategic competitiveness. This qualitative study used the case study methodology to explore a this topic, to share experiences about best practices in managing change, to discuss lessons learned and to achieve transferability of successful practices to low performing banks and similar organizations.

Keywords: Strategic competitiveness, Information technology, Leadership activities, Organizational development, Organizational resources, Organizational commitment, Banking technology, ATM banking, Internet banking, Organizational culture.

INTRODUCTION

Several studies show an association between the existence of effective change leaders and organizational change and development [15, 16, 21, 23, 26]. Some studies reveal that managers who are able to demonstrate competencies in management of change through effective knowledge of change processes and change management skills, such as interpersonal skills, teaming skills, communication and persuasion skills, and creative and innovative thinking, and so forth, will be perceived as effective in managing organizational change [6, 7]. Such managers may cause changes in the organization's culture and eventually will enhance organizational commitment. As Hitt *et al* note: "A firm's ability to achieve strategic competitiveness and earn above-average returns is

compromised when strategic leaders fail to respond appropriately and quickly to changes in the complex global competitive environment" … "strategies cannot be formulated and implemented to achieve above-average returns without effective strategic leaders." [18, pp.489-490]

Our approach reported in this study relies on sources of strategic competitiveness drawn from inside the organization, namely resource-based drivers of strategic competitiveness, and assumes that banks can achieve strategic competitiveness by effective management of change through information technologies. More specifically, it is proposed that given the same kinds of IT enabled-systems, different levels of strategic competitiveness are achieved depending on different leadership actions, personal and organizational attributes and strategies [18, pp.112, 390]. For this research, IT used in banks will include the implementation process of ATMs and Internet Banking products and services. The term "Information Technology" is used interchangeably with "Information Technology applications", "IT-based Technologies", "IT enabled-systems", "IT-based delivery systems", and "electronic delivery systems."

PROBLEM DEFINITION AND RESEARCH CONTEXT

Capitalizing on IT systems to earn strategic competitiveness is challenged by the extent to which organizations deal with a "change-management" condition and by developing proper strategies. With the value-creating nature of new technologies and their compelling impact on business practices, banks in Egypt revised their tools for building strategically competitive organizations. To improve its performance the banking industry incorporated IT into many of its banks' systems in the early 2000s, with the aim of enhancing financial status and accounting standards, product quality, and excelling in customer service processes seeking strategic competitiveness. Yet, the situation in the industry remains difficult as the sector's data still demonstrates great discrepancies in profitability levels among individual banks. Profitability indicators (ROA and ROE) revealed a large gap between public and private sector banks. In 2003, for example, ROA in public banks was 0.36%; whereas, in private banks it reached 1.33%. ROE was also 10.85% for public banks, versus 16.01% for private banks. The poor performance of public banks was mainly attributed to great increases in their loan-loss provisions [2]. Together with weak utilization of IT in some public and private banks, such banks are not able to compete effectively for profitable businesses. In fact, the banking sector in general still suffers from an underdeveloped technology infrastructure; many banks are still not fully computerized, experience a lack of investment in technical infrastructure, and have underdeveloped information systems for better liquidity and risk management (e.g., the statistical and mechanical techniques used to calculate risk are outdated). On the management side, managers lack global insight and keep the local status quo that is not capable of adapting to changes and global banking standards and techniques. Choice of bank management is based on seniority rather than efficiency and it is only since March 2002 that there have been movements towards choosing managers with international experience and appointing them to senior management positions. Accordingly, most profitability and competitiveness is referred to a few private banks who act as catalysts of development with more innovative products and operations, customer focused behavior, human resources of higher caliber, good change management practices, human resources of higher caliber, and the development of retail banking - a field previously untapped by the public sector banks [11].

As few private banks succeed in reaping the best quality businesses and accordingly earn the most value, and in such an undifferentiated business, differentiating success factors comes down to management of change and the human side of the business. Herein lays the research problem, as some banks are better than others at using IT. The main question discussed and explored in this article:

What are the leadership actions necessary for an effective management of change through information technology in Egyptian banks?

Some research studies [24, 34, 49] have discussed the importance of both leadership actions and managers' skills in effective management of change. Other studies found a correlation between successfully aroused need for change, or motivation for change, and greater commitment to the agreed upon plan of action that eventually will contribute to the transformation success [3, 14, 21, 23, 43]. Senge [41] focused on building learning organizations and committing people to a long-lasting attempt to understand and change ways they think, which ensures superior performance, improves quality, increases customer satisfaction, produces an energized and committed workforce that easily embraces change, builds efficiency, allows people to act proactively, and encourages collective thinking and brainstorming. Researchers who have further studied the relationship between organizational culture and organizational commitment have found a positive relationship between a strong organizational culture and performance [38], and

conducive organizational culture and well-built commitment of employees [25].

The main objective of this article is to investigate the relationship between leadership actions and achieving successful implementation of IT (ATMs and Internet Banking) in the private sector banking in Egypt. Though not without limitations, this research provides more insights about ways of strengthening the capacity of other Egyptian organizations and accordingly contributes to strengthening the Egyptian economy in general. To fulfill the purpose of the research, we reviewed literature on strategic competitiveness, the impact of IT on banks' strategic competitiveness, change management, and the condition of the banking sector in Egypt. From this literature, a theoretical framework was developed. Based on this framework, the following proposition of the study was forwarded:

Banks that effectively manage change through information technology intentionally emphasize certain leadership actions.

RESEARCH METHODOLOGY

Research Design: Case Study

This study used the qualitative multiple-case study design in connection with theory to gain full understanding of a phenomenon within its natural setting, and as a comprehensive method of substantiating or un-substantiating the topics of interest and answering the research question [10, 46, pp. 129-133]. There is also an increasing tendency among researchers to utilize the case-study research method in the social sciences field [33] and investigating issues of developments of technology and managerial techniques [30].

Data Gathering (Research Method)

Prior to the data collection phase, a case study protocol was communicated to the subject organizations through a letter of introduction. We utilized multiple sources of data collection, including interviews, documentation, and archival records as primary and secondary techniques to obtain information. Primary sources of data include semi-structured interviews (face-to-face) that were addressed both to industry authorities and to managers, executives responsible for implementation (mainly IT), and retail banking departments of the four banks selected for study, all of which involved interactions with interviewees to gather information in a narrative form [40, pp.32]. Individuals interviewed were selected based upon the experience that they might contribute to this research.

Case Selection

The researchers chose the population of the study to be private banks in Cairo, Egypt, that seemed to be most illustrative of the research topic since the purpose of the study is to share experiences and best practices in managing change, and discuss lessons learned and key issues, and explore potential transferability of such practices to low performing banks.

Both the website of the Central Bank of Egypt and Directory of Egypt's Banks (2005-2006) guided the research in locating private banks. In 2006, the Egyptian banking system comprised 25 commercial banks (4 public banks, and 21 private), and 24 non-commercial banks (5 public specialized banks, 19 private business and investment banks, and 8 branches of foreign banks) [8]. A preliminary survey was further undertaken in all private banks in Egypt to determine IT-based delivery systems utilized and the type of products and customers they supported. Telephone interviews were helpful in obtaining the survey data. The survey showed that approximately 69% of all private banks in Egypt implemented ATMs, while only 38.8% had phone banking delivery systems; 38.8% implemented mobile banking systems, whereas only 36% had Internet Banking systems installed. Pioneers in introducing Internet Banking systems in 2002 were Arab Bank PLC Egypt and Egyptian Gulf Bank. HSBC, Citi Bank, National Scociete Generale Bank, and Commercial International Bank followed suit in 2003. Finally, Faisal Islamic Bank, BNP Paribas Le Caire and Egyptian American Bank introduced such banking in 2004 and 2005 respectively. Upon the survey's results, two retail electronic delivery systems were selected as innovative and IT-dependent products and services that were introduced into the retail banking market to contribute to enhancing banks' competitiveness. These were ATMs and Internet banking that were introduced in the early 1990s and 2002 respectively. The survey revealed that only six banks in Egypt used both delivery systems chosen for the study, made them technically feasible to customers, and had changed work settings distinctly. Of those banks ruled out of the sample, one was an Islamic bank and therefore was different in terms of its financial retail and corporate banking operations; and it was difficult to access primary data from the second bank ruled out. Since confidentiality was an issue in releasing data in banks, names of cases and banks' executives were disguised, and banks were given the names Bank A, Bank B, Bank C, and Bank D. This helped participants to talk about and discuss the case freely.

"Replication Logic" is followed rather than the "Sampling Logic" in the selection of the case studies [47,

pp. 48-53]. Theoretical replication concentrated on successful management of change that permits explaining how top management in the studied banks effectively directed organizational change. To increase confidence in results, conditions such as sampling procedures, measuring and data analysis methods are duplicated in each of the four case studies (literal replication).

The sampling design of the study is non-probability and, in particular, a purposive sample, which targeted a specific group that can provide the desired information [46, pp.85-88], and satisfy the nature of research objectives and help the researchers in gathering sufficient data [4], and is appropriate in the early steps of an exploratory research. Using a purposive sample did not prevent drawing general conclusions from findings though, since case studies aim at generalizing theories (analytic generalization) and not populations (statistical generalizations) [47]. All interviewees were experienced in management within the banking sector, were efficient in leading and motivating staff to meet targets, had operations and/or IT skills, and had a good knowledge of the local economy and environment in general.

Data Analysis Methods

Since this study is both descriptive and explanatory, the researchers used the pattern-matching mode of analysis to analyze multiple-case study design evidence and understand the circumstances under which new research outcomes can be useful. The pattern of outcomes in each case was compared to the proposition advanced by the researchers based on these models in a pattern-matching mode. As both patterns correspond, theory testing by pattern matching enhances internal validity [48, pp.116-120]. Each case study was, therefore, designed to provide a short background about the bank during IT-based technology implementation, operations and activities involved, leadership actions and strategies, and organizational cultures and structures triggered to achieve a competitive position. Content analysis was employed in coding and understanding the content of survey responses to open-ended questions.

Measurement Quality: Validity and Reliability

Using multiple sources of data (triangulation) and facilitating key executives to review the case study draft facilitated construct validity, using the pattern-matching mode in analyzing data helped to establish internal validity, and using the replication logic in multiple-case study design, rather than the sampling logic, helped to ensure external validity or generalizability (analytic generalization) of results. Finally, developing a case study protocol, strengthened reliability as it made it possible to replicate the study and obtain similar outcomes.

PRESENTATION OF RESULTS AND CROSS-CASE ANALYSIS

Action Planning

The researchers treated ATM and internet banking products side-by-side throughout each individual bank's case. Though we intended originally to present a detailed case study on management of change for each product for each individual bank we found that action planning was the same for each product. In fact, outcomes revealed great commonalities. Thus, guided by the study's theoretical model representing the relationships among concepts that have been identified as significant to the problem, the research presented a single case study for each bank; whereby, each individual case provided a detailed description of each bank's approach to managing change through IT with regards to leadership actions, overcoming resistance to change, personal and organizational attributes, strategies, structures, business processes, culture, as well as organizational commitment. The arrangement of cases followed a question-and-answer format rather than the traditional narrative to provide readers with different interests with an easy-to-read text so that they can examine answers to the same questions across the cases, thereby satisfying their specific needs and interests [48, pp.147].

By examining activities carried out by individual banks, it was realized that there were two groups. The first one included highly performing banks (A, B, and C), while the second comprised the low performing bank D. Groups differed with regards to activities and practices performed in managing change.

There were commonalities among banks of Group One, as opposed to Group Two, in quickly responding to changes in technology, providing their customers with a variety of financial transactions through new systems, advancing through the change initiative process by going through a sequence of steps, taking the right leadership actions at each stage, and guided by a preset vision, conducting information sessions to reveal facts, concepts, and models, about technology applications that permitted them to find a common base, and also empowering employees to effect ongoing change by increasing layers of management, and establishing new departments. Also, new systems improved track of transactions and prompted short-term plans to meet banks' targets of delivering the service quickly and

efficiently in the first group. Employees were committed too, in contrast to those of the second group. Moreover, in assessing strategic competitiveness levels in terms of accounting values, such as return on assets (ROA) and return on equity (ROE), earning assets to total assets, as well as other measures, the first group achieved higher financial ranks in comparison to the second group. It was difficult though to obtain exact figures throughout all banks for some measures such as response to customers, customers working online, and rate of customer to employee due to confidentiality of information among such communities. By further examining the ratios across banks, it was found out that Bank B had the highest financial performance for the years 2002-2005, which although it attained the second position with regards to profitability measures, it maintained a good liquidity measure and the best figures with regards to performance and efficiency of bank managers in employing available resources to work, which is the main concern of the study.

Financial Performance

Appendix A provides the financial ratios of the four banks of concern over the years 2002-2005, with the exception of Bank D's measures, which were very hard to obtain for year 2002. Performance of the four banks varied across the years. Though ROA of all banks increased in absolute terms showing management's efficiency in making earnings with available funds to them, comparison of ROA ratio among banks shows that Bank A ranks the first throughout the years of study, which indicates maximum management efficiency in making earnings with funds available to them (see Appendix A). Bank A is followed by Banks B, C and D respectively.

ROE rates show an increasing earning power of common stock equity or stockholders' investments for all banks and a much higher rate than the rate of interest paid on liabilities which is 4.449% and 3.67% for Banks A and B respectively as of end of year 2005. However, although Bank D's ROE rate shows an increasing earning power of stockholders' investments, it is still lower than the rate of interest paid on a liability (which is 9.67%) for the same year. Increasing ratios of earning assets to total assets are indicative of better performance for Banks B and C, and indicates the efficiency of bank managers in employing available resources to work in those banks as opposed to decreasing rates for Banks A and D. Increasing return on earning assets in all four banks indicates increasing profitability (considered along with the return on assets and the return on stockholders' equity).

By analyzing the financial statements of the four banks it is possible to demonstrate that individual banks' effective management of change through the use of advanced technologies has affected contingent conditions of strategic competitiveness, namely banks' ratios for productivity, profitability, growth, investors, creditors, and stockholders' value, and that is in accordance with previous studies on competitiveness [18, pp. 112, 390]. Bank B had the highest financial performance for the years 2002-2005. And though it attained the second position with regards to profitability measures, it maintained a good liquidity measure and the best figures with regards to performance and efficiency of bank managers in employing available resources to work, which is the main concern of the study.

Products and Services

All banks had ATM systems that enabled their clients to access their accounts around the clock, pay their telephone bills, and many other services such as cash withdrawals, cash deposits, exchange of foreign currency, balance inquiry, recharge of Vodafone mobile card, MobiNil bill settlement. ATMs also allowed customers to advertise their products and services, and provided ATM cash withdrawal services to Visa, Master Card, Diners Club, Cirrus, Maestro, Plus, Visa Electron and 123 card holders. An exception was Bank D that only provided its customers with cash withdrawal and balance inquiry services through its ATM.

Through Internet Banking Service in most banks, clients easily viewed their accounts and checked their balances, transmitted money to or from any account, made standing instructions or request payments relative to any account, as well as revised their personal details held by the bank for any of their accounts. Clients who accessed their accounts through that service could also make payment transfer from their accounts to another person's account within the same bank in Egypt. An exception also was Bank D that only offered inquiry.

By analyzing IT-based delivery systems that were implemented in the four banks, it was discovered that there were differences in terms of financial activities supported by ATMs and Internet Banking between banks with high financial performance levels on one hand, and that with low levels on the other hand. All highly performing banks had ATM and Internet Banking systems that allowed their clients to perform a variety of financial transactions. However, Bank D only provided its customers with cash withdrawal and balance inquiry services through its ATMs and no more than inquiry services through its Internet Banking services.

Analysis of Phases in implementing ATMs and Internet Banking

1. **Planning:** In Banks A and D, ATMs and Internet Banking were already implemented and tried in the parent bank before introducing them to Egypt's branches. Main activities in the planning phase included decisions on key players' responsibilities, coordination among departments, decisions on technical issues, security issues, management of logistics, and so forth, which are pertinent to implementation of new systems. Implementation of ATMs started with bank branches first and then expanded with offsite machines in all banks. In Banks B and C, which mainly depend on in-house resources rather than outsourcing the tasks, key executives took decisions with regards to selecting the software driver, purchasing the needed hard ware and software, selecting the hardware brand and type of machines (lobby or wall) to be installed. Bank D, however, outsourced delivering machines and providing technical solutions to the NCR vendor, and networking, operating, and following up of service quality, reporting, and updating clients accounts to Egypt Bank Company because of the small size of the bank. So the bank's role was limited to just purchasing the hardware from NCR and supervising implementation. All banks followed the same procedures in planning for implementation for Internet Banking, and making decisions with regards to work on website for customers, choosing and installed the right software (database, communication software, and modules to link website (internet server) with the mainframe (customer database).
2. **Training:** Banks A, B, and C conducted training sessions for staff, especially those working in customer services. Sessions embraced technical training on implementation of hardware, software components, software use, security issues, maintenance and traffic management, and ATM machine replenishment. Training manuals and presentations clarified how to put the new system into operation. Bank D conducted training sessions on new products' features, marketing issues, and security issues and also on ways to technically manage the new systems.
3. **Conversion:** All banks incorporated the ATM system into the bank's financial transactions with customers, and internal financial reporting and documentation. Banks conducted software runs and special modules to operate the new systems simultaneously with the old system. An outsourcing company in Bank D conducted such activities.
4. **Acceptance Testing**: In Bank A acceptance testing started with global cards to all staff of the bank as a pilot launch and Internet Banking service was launched and tested first on staff members to find out if there were any problems with the new product before it was released to customers. In Banks B and D, acceptance testing was conducted with local cards, and in Bank C testing was carried out on dummy accounts, in addition to employees' accounts, before launching the product. The outsourcing firm also accomplished the testing phase in Bank D.
5. **Post-Implementation Audit:** All banks predetermined cut-off times and value dates for all its clients' transactions' instructions. Clients' instructions received within the cut-off times were executed the same day and given a value date according to the bank's preset value dates indicated.

In all banks, implementation of the new products went through the normal steps of implementing any new technology. The bank's size influenced details of activities during the implementation process. The small size of bank D led to dependence on outsourcing companies to provide technical solutions and networking of new systems. In this respect, the variables influencing management of change through information technology tend to coincide with the determinants of the use of advanced technology [5].

Target Market

The new ATM system targeted all clients who keep personal accounts in all four banks; whereas, Internet Banking is used with success among those who are educated and are computer oriented, have computer skills, and who own or have easy access to computers. There were no significant differences between Group One and Group Two with regards to the target market. However, there were some commonalities with respect to ATMs clients of banks with parent institutions (Banks A and D) on the one hand, and those without who merely depended on local skills and experiences (Banks B and C) on the other hand. Banks A and D were inclined to find multinational companies and expatriates as prospective market segments as they believed they had a global edge and could stand with international standards; whereas,

Banks B and C were more inclined towards local organizations and ministries for payroll administration, small and medium-sized enterprises, and so forth, which all tend to serve the local market. As such, the variables influencing management of change through information technology are likely to agree with the determinants of the use of advanced technology [5].

Overcoming Resistance to Change

By analyzing challenges to change, it was found out that all suffered technical challenges and work overloads, which created tension among staff. It was discovered also that Group One addressed work overload issues by re-dividing tasks, promotion and lay off policies, and highly professional training programs. Group Two, on the other hand, stressed usefulness of the products, and though training sessions included both technical and marketing issues of the products, they disregarded highly specialized training courses since outsourcing companies were responsible for carrying out a crucial part of implementation. People were therefore more involved in implementation of new systems and more committed in Group One as opposed to Group Two. Group One was in fact better able to respond to IT developments and institutionalize change into structures, processes, culture, and so forth, according to Lewin's unfreeze-change-refreeze model of change [28, 29].

Leadership Actions

Part of the exercise of scanning the external environment, examining technology innovations and developments, and establishing a sense of urgency to implement new systems was triggered by parent banks for both Banks A and D. For Banks B and C, the whole process was done in-house. To establish a sense of urgency to implement new systems, product managers in each bank conducted meetings with heads of departments and branches and communicated the bank's goal of having an edge among other banks. Other channels that were used included creating awareness through information sessions, training courses, e-mails, brochures, and so forth.

In all banks, product team managers empowered and delegated staff to act on the vision. People were selected based on their experience and skills. Contributors to implementation were sent letters of thanks and were praised in their annual performance evaluation in Banks A and D. In Bank B, though management constantly developed a progress report, it considered implementation of new systems a reward in itself to employees. In Bank C, management created short-term wins by offering its employees incentive bonuses in addition to reporting a weekly progress sheet.

In consolidating improvements and producing more change, testing new products on staff and dummy accounts helped the banks in proactively discovering challenges of the new systems before introducing them to customers. In institutionalizing new approaches, management had the most important role in all banks. In Bank A, without their service-quality orientation and openness to change, they were not able to pass on the bank's vision to employees and subordinates. In Bank B, management's role was vital to creating a team spirit; which helped in increasing commitment, producing a good product development, and achieving strategic competitiveness. In Bank C, management created a family-like environment by personalizing customer services. They also provided improved services to customers by ensuring that there are no delays in any transaction and by focusing on and controlling denied (rejected) transactions. In Bank D, on the other hand, though management was of a good caliber, in general there was lack of leadership skills or initiative behaviors towards change.

By analyzing leadership actions adopted throughout change it was found that all banks advanced through a sequence of steps, taking appropriate actions at each stage, and followed a preset vision. The banks' status and size influenced the details of leadership actions undertaken throughout implementation. Bank D partly skipped some steps that were undertaken by the parent bank and the outsourcing companies, which eventually produced unsatisfactory results. In fact, staff in Bank D lacked commitment as the bank suffered from a low level of obligation to change and some did not feel that implementation of new technologies was a "change" that needed a response. This is in accordance with findings of the study of Kotter [21]. Organizational interventions also influenced successful transformation efforts. For example, in creating short-term wins, a benefits scheme and remuneration highly motivated employees and paid for creating short-term successes for the bank. Bank B did not offer rewards to its employees throughout implementation (it considered implementation of new systems reward enough).

As such, findings support the suggestion that predicts that there will be differences between executives in the first group who had emphasized certain leadership and management skills, and those of the second group who did not act in accordance with learning from previous studies on leadership [24, 34, 49].

Personal and organizational attributes

By analyzing management's practices throughout implementation, it was discovered that there were great commonalities among banks with regards to employees' diverse fields of experiences and educational background. Advancements in technology and the nature of the industry have led to similar implementation activities among staff, work adjustments, implication on the nature of work and job content, skills required, training and on-the-job training activities/programs, as well as limited stakeholders' involvement. The use of an outsourcing company in Group Two also created differences as to who participated during and after the implementation phases, and details of practices elicited. Group Two's traditional attributes in acquiring innovations was behind its belief that information sessions were not needed. And therefore, being a laggard was behind the limited flow of information, a common base, more innovations, and sharing of experiences [12]. By analyzing personal and organizational attributes throughout implementation in all banks, it was discovered that, in general, activities and practices adopted helped in creating readiness for change according to Lewin's unfreeze-change-refreeze model of change [28, 29].

Strategies

By analyzing banks' strategies during implementation, it was discovered that all followed two main strategies and these were to invest heavily in information technology and training staff, which is in agreement with characteristics of the introductory stage of the product life cycle model [27]. Also, in agreement with McGahan's Four Trajectories of Industry Change model [31], the banks' innovation strategies were aligned with the industry's creative change path as banks enjoyed stable relationships with customers but unstable core assets. In the banking industry, resources and brand capital are constantly jeopardized as technologies turn obsolete and new ones are developed. It was discovered also that the mixture of change strategies (Empirical-Rational Strategies, Normative-Re-educative Strategies of Change, Power-coercive techniques to effective change, and Environmental-Adaptive methods to change) adopted by the two highest performing banks reflected sufficient expertise in managing change. The lowest performing bank in Group One, Bank C, adopted strategies (Normative-Re-educative Strategies of Change, and Power-coercive techniques to effective change) that implied some resistance to change with which the bank had to deal, as well as short-term plans to meet the bank's target of delivering the service quickly and efficiently to keep up with other competitors. Unlike Group One, Group Two did not utilize power-coercive techniques to effective change despite their particular usefulness when speed is a critical factor to affect change according to Chin & Benne [9]. This, accompanied by bank's traditional attributes in acquiring new technologies, in accordance with Rogers' Diffusion of Innovation Theory [39], contributed to major differences between both groups regarding an innovative entrepreneurial culture and strategic competitiveness.

Organizational Structure

By analyzing banks' structures, it was discovered that implementation of technology had an influence on organizational structures in all banks. Increased and easy flow of information reduced tall hierarchies, centralized decision-making, reduced dependence on functional structures, and improved managers' ability to coordinate and control operations. It was also discovered that the nature of the banking industry, characterized by standardization of rules and work procedures, influenced coordination of tasks and work processes. Moreover, new management layers and establishing new departments, using project teams, and so forth empowered employees and contributed to their commitment levels. In Bank D of Group Two, new systems did not have an impact on layers and did not contribute to establishment of new departments since the service was outsourced due to the small size of the bank, which consequently led to low commitment levels. Extra workload was distributed on existing resources thereby creating work overload on employees. Additionally, and in accordance with Rogers' Diffusion of Innovation Theory [39], Bank D's small size hindered creation of an innovative entrepreneurial culture thus lacking the paradigmatic shift of their competitors [14, pp. 31, 80-82, 15, pp. 4-10, 32, pp. 1, 42, pp. 334, 44).

Organizational Culture

By analyzing the banks' culture, it was discovered that the conservative nature of the banking industry and the prevailing uncertainty avoidance cultural pattern in Egypt in general led to a limited involvement and empowerment of employees in accordance with previous studies of Hofstede, Hatem and Wah [17, pp. 249-250, 252-253, 260-261, 19, 20, 45, pp. 10-14]. Employees' actions were controlled by banks' rules, policies, procedures, and regulations that abided by those of the Central Bank of Egypt. Moving from command to empowerment throughout the day depended on the extent of experience the staff member had and was only related to how the job was done. It was also apparent that a mixture of two cultures dominated. These were a culture

that emphasized achievement, self-actualization, encouragement, and affiliation on one hand; and one that was characterized by approval, conventional, dependency, and avoidance patterns on the other hand. The share of each style was different among banks though with achievement, self actualization, encouragement, and affiliation being emphasized greatly in the highest performing banks A and B, followed by Bank C (Group One); whereas, a culture characterized by approval, conventional, dependence, and avoidance patterns was more dominant in Group Two.

Business Processes

By examining banks' performance and primary and support activities, it was discovered that IT triggered changes in the main business processes of all banks in accordance with Porter's Value Chain Model [35, 36, 37]. At the crux were the set of processes that banks used to create value for their stakeholders. Examples could be ATMs' daily replenishment and Internet Banking monitoring for availability of service around the clock. All banks in Group One, in contrast to Group Two, reached above average returns resting upon the way they performed with regards to their main activities. For example, new systems improved track of transactions in all banks except for Bank D. Moreover, according to Alter's Work Centered Framework (WCA) [1], both groups were similar in their business processes with regards to how the work systems operated, their links and so forth (an architecture perspective), and how systems worked to generate product/services improvements (a performance perspective). According to WCA, the Groups were different though with regards to risks or the anticipated incidents (new systems did not improve track of transactions in Group Two) whose happening could result in system deterioration.

Prevailing Commitment Profile

By analyzing commitment levels of employees in the four banks, it was discovered that in Group One, employees of Banks A and B were highly committed and the evidence was successful implementation and performance of both ATMs and Internet Banking products. In Bank C, Only 30-40% of employees were committed to change. The rest participated in change because they had to do the tasks required of them. It was discovered that low commitment levels in Bank D of Group Two are attributed to low involvement of employees in the change process. Implementation sharing with the outsourcing companies rendered employees undedicated to new changes. This was in accordance with previous studies [3, 14, 21, 43], which showed that successfully aroused need for change, or motivation for change, contributed to greater commitment to the agreed upon plan of action that will eventually contribute to the transformation success. Findings are also in agreement with earlier research that found a positive relationship between a strong organizational culture and performance [38], a conducive organizational culture and well-built commitment of employees [25].

Strategic Competitiveness

By analyzing groups' strategic competitiveness levels, it was discovered that Group One's organizational commitment profile positively influenced the banks' strategic competitiveness. In Bank A, organizational commitment improved customer services provided and created value, which also contributed to strategic competitiveness. In fact, employees who were emotionally attached to the bank (70% of total number of staff members) contributed to 95% of the bank's strategic competitiveness. In Banks B and C, employees' experience and their dedication to work contributed to the bank's strategic competitiveness. In Group Two, there was no impact of organizational commitment on strategic competitiveness because of low commitment levels and since the bank had a problem of little strategic positioning. For example, a client could wait for six months to get an approval on a loan. Hence, there was no proper outflow of strategies towards different parts of the organization. Added to the low commitment levels prevailing in the bank, this influenced market share that had an effect on the bank's competitiveness among other banks.

Interviewees in all banks believed that a sophisticated IT system is indispensable to achieving strategic competitiveness. In Group One, interviewed executives also emphasized the important role management played throughout implementation, and believed that an effective management of change was very important for the success of the bank since quality service does not happen without a proper IT catered and revised strategy every now and then system. In Group Two, on the other hand, though management was of a good caliber, in general, there was lack of leadership, initiative behavior, commitment and cooperation.

The analysis of cases revealed that sources of strategic competitiveness in private sector banks studied are in accordance with prior research on competitiveness. A bank's strategic competitiveness and above average returns were measured in terms of accounting values, such as return on assets (ROA) and return on equity (ROE) [18, pp. 5]. High ratios of Group One were indicative of high performance and strategic

competiveness levels. Additionally, all banks set criteria such as response to customers, customers working online, rate of customer to employee, and waiting time to be served after implementation of new systems and that measured the impact of management of change through information technology on strategic competitiveness. In this respect, banks sought to understand the broader picture of a system that not only includes technology but also includes customers, products, business processes, participants, and information according [1]. Moreover, they focused on the way a particular system's components interrelated and operated over time in relation to the larger system.

Findings of the research also show that managers who were able to demonstrate competencies in management of change through effective knowledge of change processes and change management skills, such as interpersonal skills, teaming skills, communication and persuasion skills, and creative and innovative thinking, and so forth, were perceived as effective in managing organizational change [6, 7], as this caused changes in the organization's culture and eventually helped in enhancing organizational commitment. And in agreement with Hitt et al [18, pp. 489-490], Group Two's ability to achieve strategic competitiveness and earn above-average returns was compromised when management failed to react properly and quickly to changes and threats of the complex global competitive environment (see Table 1 for differences between the two group's ratios). Findings also support previous studies with regards to the association between the existence of effective change leaders and organizational change and development [15, 16, 21, 23, 26].

Table 1: Groups' Ratios

Measure/Year		First Group's Average Financial Ratios			Second Group's Average Financial Ratios		
		2005	2004	2003	2005	2004	2003
Profitability Measures	ROA %	5.20	4.79	5.06	3.02	2.46	3.18
	ROE %	34.89	30.77	18.71	9.28	5.36	-94.91
Bank Ratios	Earning assets to total assets %	65.76	65.95	67.10	45.39	47.72	56.32
	Return on earning assets %	3.85	3.39	2.16	0.65	0.23	-0.43
	Interest margin to average earning assets %	4.41	4.05	3.02	1.77	1.09	0.86
	Deposits times capital ratio	11.02	11.26	10.95	9.03	19.43	18.27
	Loans to deposits ratio %	44.21	43.17	48.87	46.03	44.98	30.78
	Equity capital to total assets %	8.39	7.80	8.12	6.98	4.35	4.50
Investors & Stockholders	Earnings per share of common stock	21.06	17.63	9.11	5.42	1.24	17.8
	Leverage ratio %	8.54	7.91	7.47	8.41	4.19	4.53
Analysis by Creditors	Interest coverage ratio %	137.95	114.12	121.71	82.73	65.49	73.47
	Debt ratio %	90.92	91.98	91.69	91.59	95.81	95.47

Source: Annual reports of Banks A, B, C, & D

MAIN FINDINGS AND CONCLUSION

This article reflects on antecedents of strategic competitiveness, mainly leadership actions, in private sector banks in Egypt who simultaneously provided both ATM and Internet Banking services. The implication of this research to top bank executives and strategy creators extends the validity of earlier literature as follows.

Certain leadership actions facilitated successful implementation and had an impact on strategic competitiveness through their impact on organizational commitment. It was discovered that given the same kinds of IT enabled-systems, different levels of strategic competitiveness were achieved in Group One and Group Two depending on disparities in leadership actions. To achieve successful change, Group One banks advanced through the change initiative process by going through a sequence of steps, taking appropriate actions at each stage, and using as a guide a preset vision. Group Two, however, skipped some steps that were undertaken by the parent bank and the outsourcing companies, which eventually produced unsatisfactory results. As such, people were very uncommitted. In fact, some did not feel that implementation of new technologies was a "change" that needed a response and the bank suffered from a low level of commitment to change. The research measured the performance of leaders by mingling hard and soft indicators. The former incorporated measures of banks' financial performance (profitability and efficiency measures), both in absolute terms and by comparing banks together. The latter included viewpoints of people who worked with change leaders. By means of this approach, the research judged change leaders in the first group (of highly performing banks) to be doing a very good job as compared to those in the second group (low performing bank) who, though of good caliber, did not have leadership skills or initiative behaviors that could inspire their employees to adapt and compete in a constantly changing environment.

Based on previous research, intensive interviews with leading academics and banking executives, logical reasoning, along with more than a dozen years of experience in banking, it is evident that individual banks' effective management of change through the use of advanced technologies facilitates successful implementation of new technologies [18, pp.112, 390], namely banks' ratios for productivity, profitability, growth, investors, creditors, and stockholders' value.

The research findings demonstrate that banks who most effectively managed the use of advanced technologies and organizational change most intentionally emphasized certain leadership actions. In highly performing banks the following management practices, actions and strategies were emphasized:

1. Banks with highest strategic competitiveness levels were those who rapidly responded to changes in IT and who quickly implemented and institutionalized these changes in their every day operations.
2. All highly performing banks were able to create more value for their stakeholders including customers, shareholders and employees.
3. Banks with the highest strategic competitiveness levels were those who relied on in-house resources in implementing new IT-based delivery systems.
4. Larger-sized banks were more able to achieve strategic competitiveness.
5. There were differences among banks with regards to personal and organizational attributes throughout implementation phases, particularly with respect to management of resources and flow of information.
6. The conservative nature of the banking industry had an impact on employees' involvement and participation in the implementation of new technologies.
7. In highly performing banks, certain management practices, actions, and strategies were emphasized.

Additional implications of the study that might be explored in future research

The research discovered that banks with better strategic competitiveness levels relied on in-house resources in contrast to outsourcing in implementing new delivery systems. This provides researchers with an opportunity to further study utilization of outsourcing as a factor that could influence banks' performance and ability to create value to stakeholders up to the level of strategic competitiveness.

Research findings show that "involvement" of staff is crucial for strategic competitiveness. Further investigation is recommended to find out the extent of involvement of staff in the banking industry in general in light of dictated standardized rules and regulations. It might also be useful to make comparison of involvement levels between the banking industry and other industries.

The research discovered that action planning was the same for each of the two products implemented, and hence, we presented both products side-by-side throughout each individual bank's case. This provides

researchers with an opportunity to further study implementation of other products as well on both personal and corporate banking levels towards discovering the action planning process.

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AUTHOR BIOGRAPHIES

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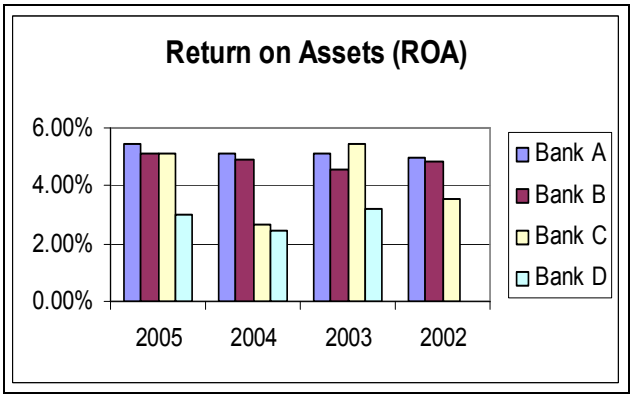
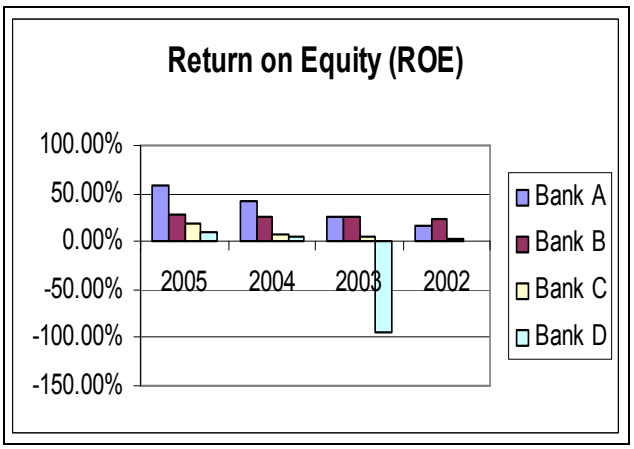
APPENDIX A

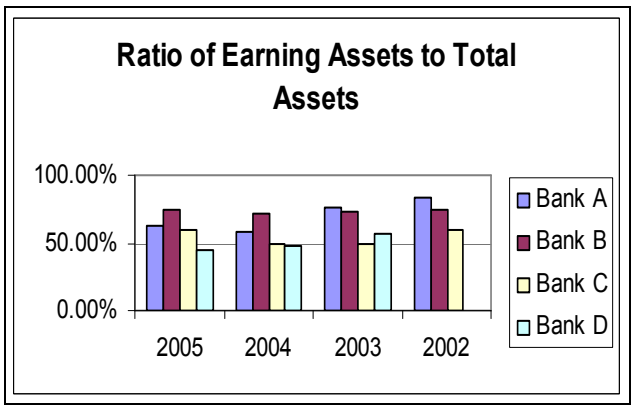
Comparison of Individual Bank's Financial Performance

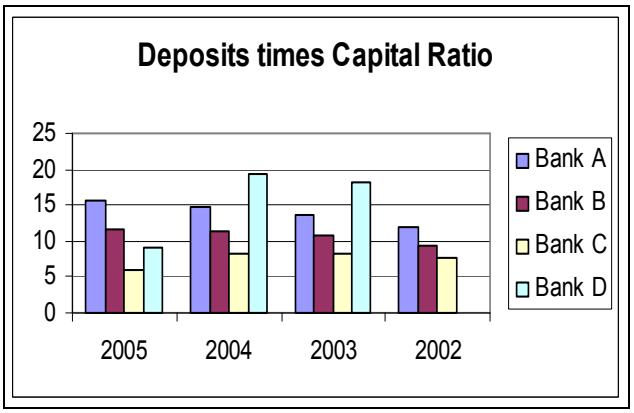
Profitability Measures

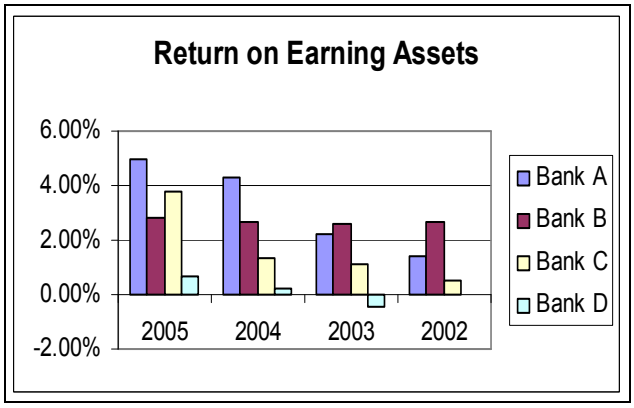


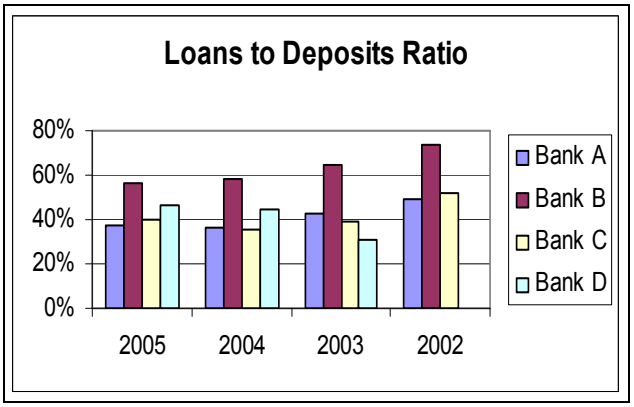


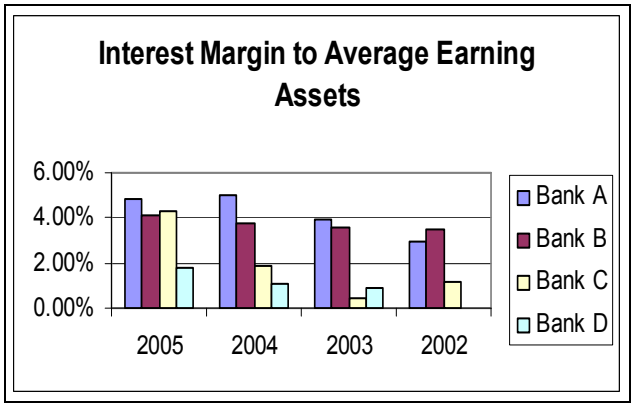
Banks' Ratios

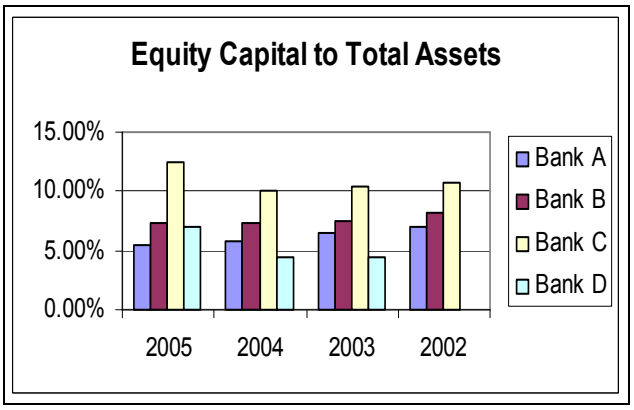




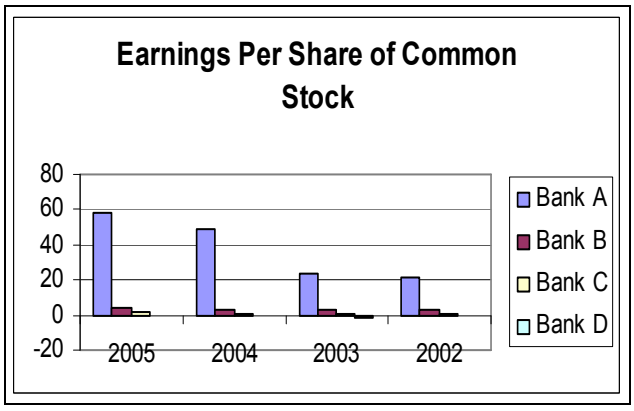




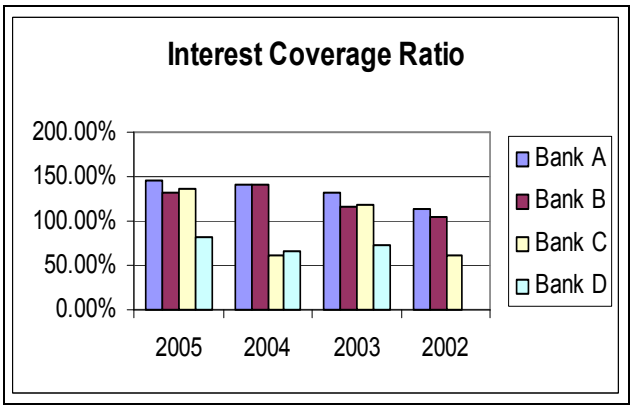


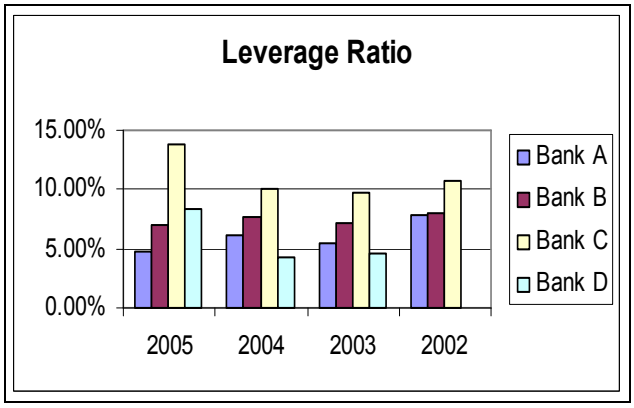


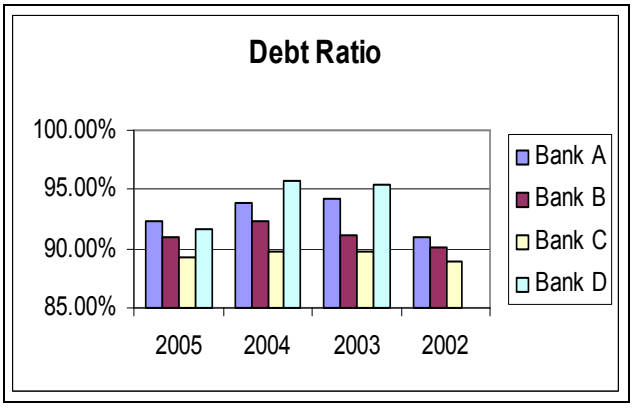
Investors and Stockholders Measures



Analysis by Creditors

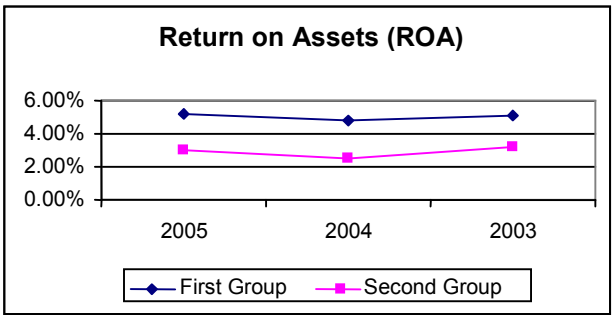


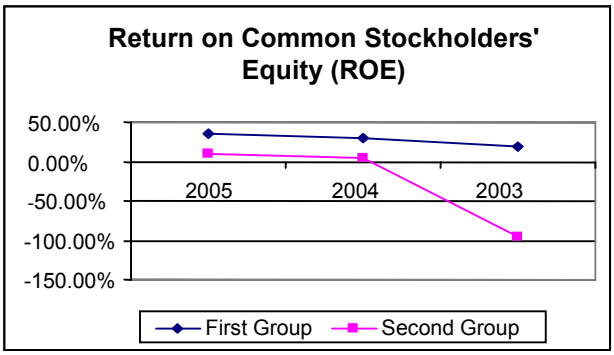




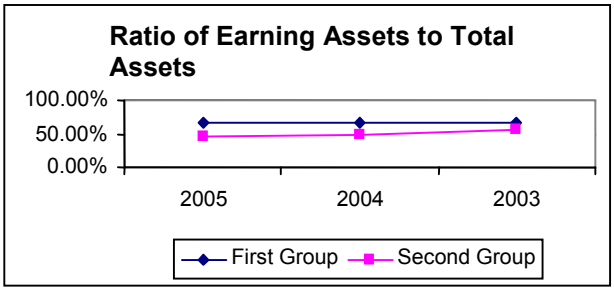
Comparison of Groups' Financial Performance

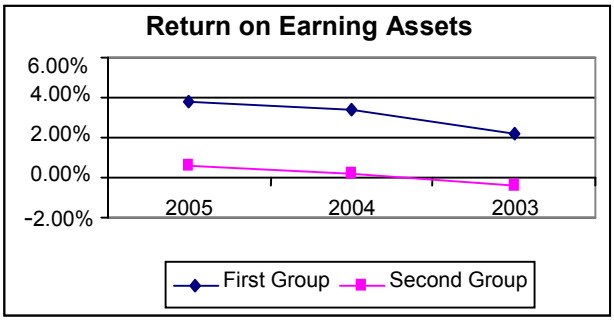
Profitability Measures

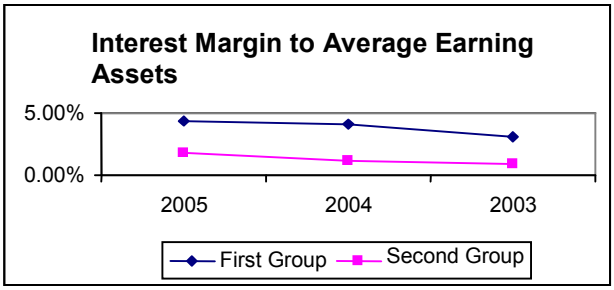


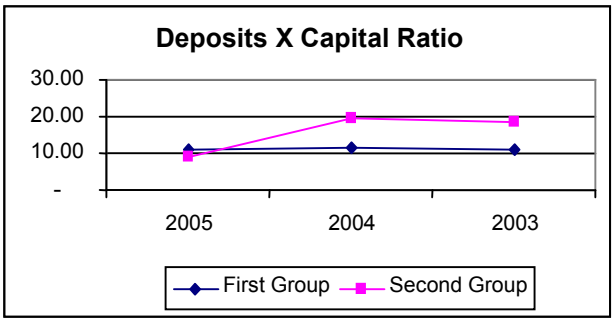


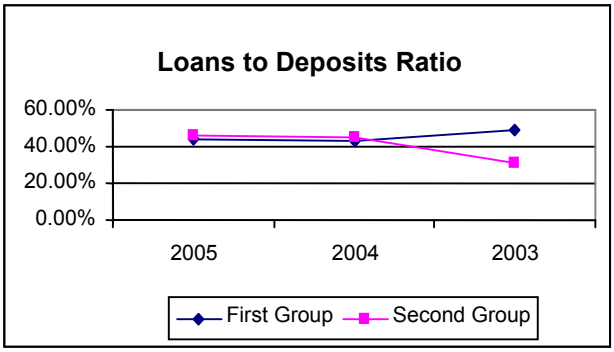
Bank Ratios

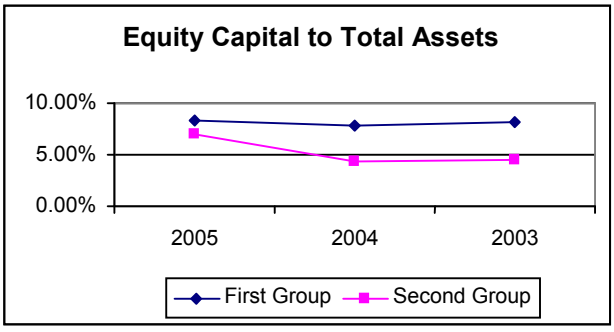




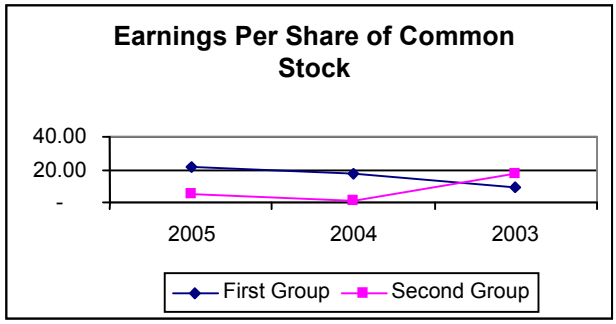


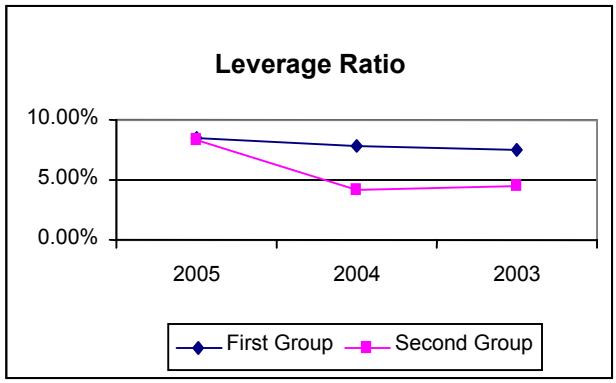






Investors & Stockholders





Analysis by Creditors