

Banking:

The IT paradox



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Despite much higher IT outlays by the retail-banking industry, its labor productivity growth rates have actually dropped. What went wrong?

During the late 1990s, productivity trends in retail banking¹ stood in contrast to those in much of the rest of the economy: the industry's information technology investments accelerated substantially, but its labor productivity growth rates, though higher than the economy-wide average, actually declined (Exhibit 1, on the next page), from 5.5 percent (1987–95) to 4.1 percent (after 1995). Research into this paradox reveals that the relationship between IT and labor productivity is more complicated than merely adding the former to lift the latter.

The nature of IT investments

Throughout the 1990s, the focus of many retail banks on revenue growth resulted in major new IT investments, the largest involving services and marketing tools for customer information management and support (Exhibit 2, on the next spread). Financial institutions have traditionally been organized around product lines, such as deposit accounts, loans, and credit cards. Coordination among departments was loose, and customer information did not flow easily across the organization.

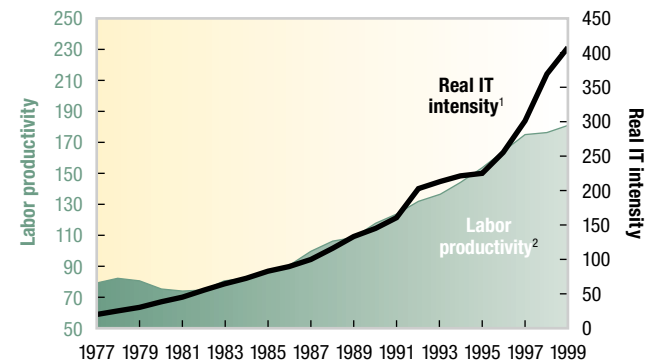
To remedy this problem, banks attempted to create a single customer interface, which forced them to integrate their databases and IT systems. Once this was accomplished, banks adopted applications—or, more precisely, customer-relationship-management tools—to improve their customer retention and to facilitate up-selling and cross-selling. All of this required significant investments in personal computers for branch employees and call-center

¹This industry was studied as part of the McKinsey Global Institute's inquiry into the sources of accelerating productivity rates in the United States during the late 1990s. See "What's right with the US economy," in the current issue.

EXHIBIT 1

Paradoxical productivity

Index: 1987 = 100



Compound annual growth rate, percent				
	1977–82	1982–87	1987–95	1995–99
Labor productivity	–1.1	6.1	5.5	4.1
Real IT intensity	21.5	12.6	11.4	16.8

¹Measured as real output (transactions + loans + fiduciary activities) ÷ hours worked.
²Measured as real IT capital stock ÷ PEP (people employed in production); analysis based on US Bureau of Economic Analysis sector data for depository institutions.
Source: US Bureau of Economic Analysis; McKinsey analysis

representatives, as well as the integration of complex systems. At the same time, rapid changes in operating systems in the late 1990s caused banks to update their servers and PCs frequently.

In a further effort to attract customers, banks increased the number of product combinations and pricing options available. One credit card executive explains, “In 1994 and 1995, there were a couple of credit cards, one at 17 percent interest and the other at 19 percent interest. When I left [in 1999] there were

43,000 pricing combinations.” Of course, these much more complex product options required vastly more computing power.

At the same time, bank mergers were getting larger. Although the industry consolidated at a steady pace before and after 1995, the size of the banks engaged in mergers grew, largely because of a 1997 regulatory change that lifted the prohibition against interstate bank mergers, which tend to involve larger players. The average assets of bank merger participants increased from \$700 million (1994–96) to \$1.4 billion (1997–99). Naturally, the integration of larger systems involves greater complexity.

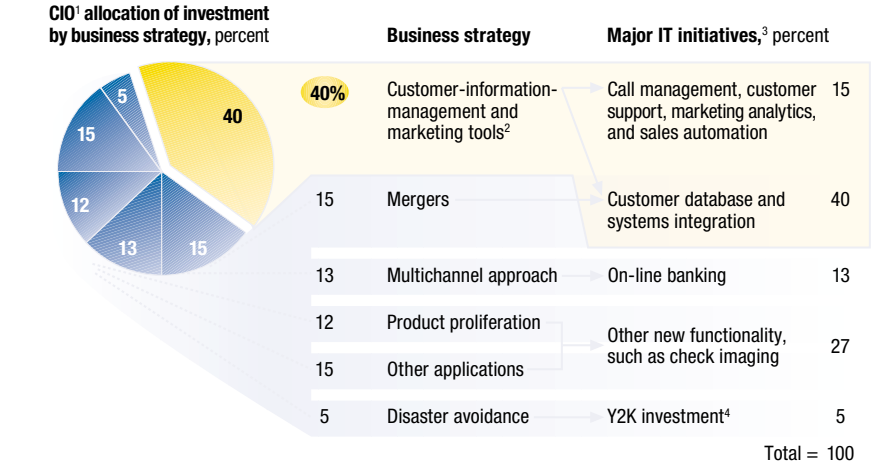
Finally, banks began investing in the Internet as a sales channel during the late 1990s. New entrants into on-line banking had to make large IT investments to compete with traditional players, which in turn were forced to invest in on-line services to avoid losing market share.

A disappointing impact

Most, though not all, of these IT investments had a disappointing impact on productivity. Some produced benefits—such as the convenience of conduct-

EXHIBIT 2

Retail banks: Investing in the customer



¹Chief information officer.
²Includes investments in additional mainframe processing power required by increases in transaction volume.
³Estimates include all direct and indirect capitalized IT investments in hardware, software, and communications equipment.
⁴Represents only half of total Y2K costs; remaining half was expense.
Source: International Data Corporation; *InformationWeek 500*, 1996–99; TowerGroup; interviews; McKinsey analysis

ing transactions on-line and the improved account information available through call centers, automated teller machines, and World Wide Web sites—that were not captured by productivity data. (Output is measured by the number of transactions and does not reflect the quality of transactions.) However, since on-line transactions accounted for only 2 percent and information transactions for only 7.5 percent of the total number of transactions processed in 1999, unmeasured improvements would not be large enough to reverse the industry-wide decline in productivity growth.

What went wrong? Many post-1995 technology investments were designed less to reduce labor costs than to increase revenue, and this is inherently more difficult in a mature industry: managers don’t know whether the substantial investment in customer-relationship-management sales tools, for instance, has paid off (Exhibit 3, on the next page). Despite more customization of products (which greatly increased the complexity and cost of IT systems), a University of Michigan survey of banking customers found that their level of satisfaction declined from 1995 to 1999. A McKinsey survey found that consumers care most about reliability, service, and interacting with institutions they can trust. A wide choice of products and services is not a priority for them.

In addition, many banks overinvested in personal computers. To be precise, from 1995 to 1999 banks spent more than \$5,000 per employee on IT,

enough to buy two PCs; the rest of the private sector spent just \$440 per employee. Industry participants say that much of this computing power is not being used, nor is it likely ever to be.

Overinvestment resulted largely from the way banks (and many other companies) purchase IT. To simplify IT maintenance, companies typically buy either a single or a small number of computer models, chosen to satisfy the most demanding users, which means giving unnecessarily powerful machines to everyone else. High-end users also demand new computers more frequently than do average ones, thus generating unneeded upgrades. Department managers have little incentive to oppose this pattern, since IT purchases are capitalized and do not affect current profitability.

What's ahead

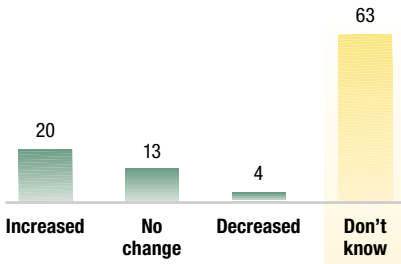
Despite the generally disappointing results, certain IT investments, particularly in back-office processes, have boosted labor productivity. Check-imaging technology has replaced microfilm, thereby reducing labor and

storage costs by as much as 40 percent and check-retrieval time by as much as 75 percent.² Automated voice response units handled 55 percent of all telephone inquiries in 1999, reducing the number of call-center representatives by almost half.

EXHIBIT 3

Were customer sales tools worth it?

Impact of customer-relationship-management sales tools on retail-bank profitability, percent of respondents



Source: 1999 Special Report Technology in Financial Services: E-Commerce, Ernst & Young

In all likelihood, retail-banking productivity levels will remain high. Opportunities for improvements lie in reengineering back-office processes, migrating customers to more efficient sales channels, and increasing electronic-payment trans-

actions (on-line and through debit and credit cards). If consumers replaced just one-third of their checks with electronic transactions, thus reducing the need for bank tellers and back-office personnel, labor productivity growth rates, we estimate, would increase by 1.8 percentage points annually—enough to offset the decline from 1995 to 1999.

It is unlikely, however, that electronic payment is the future of banking. Government regulations require funds for electronic payments to be made

²TowerGroup.

available the day following the transfer, whereas funds for some types of paper checks can be paid up to five days later. Banks earn \$60 billion annually from the interest rate float, from the spread that low-interest checking accounts afford them, and from fees. For electronic payment to take off, banks would have to figure out some way of making it equally profitable. For retail banks, there is no productivity miracle on the horizon. **Q**

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