SECTION 33
FINANCIAL SERVICE INDUSTRIES

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INTRODUCTION

What is financial service? Financial services are services related to cash and other financial assets. There are seven types of service that financial services institutions may perform. The first four are distinctly *financial* services:

1. Safekeeping of customers' currency or other assets and fiduciary responsibility for them.
2. Conversion, transfer, and transformation of currency and other customer assets.
3. Adding value to customers' assets by means which may include:

- *Return on deposits:* Providing return on capital or assets which the customer places, deposits, trusts, or invests with the financial institution.
- *Investments and loans:* Providing the customer with capital or other assets to generate value.
- *Insurance:* Providing protection against possible financial loss in the event of certain predefined risks.

4. Underwriting or guaranteeing customer projects through some combination of advice, marketing of customer instruments (stock and bonds, for example), and guarantee of minimum financial support (providing line of credit, buying an amount of stock, or insuring against a loss).

The last three services are common to many service institutions and are not unique to financial services.

5. Interacting with customers in a variety of ways, including sales presentations, responding to customer service inquiries, and providing advice.
6. Accounting and reporting to detail and summarize the transactions related to the customers' relationship, including billing and tax information.
7. Providing a profit to the owners of the company—those who provide the operating capital (common to all kinds of companies).

THE FINANCIAL SERVICE SECTOR

The financial service sector comprises companies engaged in the creation and delivery of financial services. Traditionally, these companies are organized by industry, where each industry is concentrated on a common line of business, such as commercial lending, credit card services, or casualty insurance. Commercial banks, savings and loan institutions, brokerage firms, investment companies, investment banking institutions, insurance companies, credit card companies, and credit companies (including pawn shops) are all part of the financial service sector.

This tidy description of the organization of the financial service sector provides a convenient point of departure. It should be kept in mind, as discussed below (Sector Organization; Boundaries; History), that the sector is undergoing rapid change and this description does not always square with the growing complexity of the sector as it is emerging.

Sector Organization; Boundaries; History. A special word should be said about the boundaries which divide the various industries within the financial services sector, their history, their present status, and the implications these boundaries have for the activities within each of the industries. Most commercial and retail customers are in the habit of labeling financial institutions on the basis of a memory of financial institutions of the recent past. Labels like "bank," "savings and loan" and "credit union" are generic terms which were once precisely defined in the United States by the regulations which governed the financial services sector. U.S. consumers associated these generic institutions with their products: loans, deposits, and transactions related to them. Similarly, insurance companies were associated with the insurance products they created and sold, and brokerage and investment firms were associated with packaging, promoting, and selling investment in stocks, bonds, and other assets, such as real estate.

There is good historical reason for the structure of the financial services industries. In 1933, at the depth of the Great Depression, which was precipitated by the stock market crash of 1929 and subsequent bank failures, the U.S. Congress reacted to the economic devastation by passing the Glass-Steagall Act (Werner and Stoner 1995). Because Congress saw the root cause of the Great Depression to be the involvement of banks in the promotion of securities, Glass-Steagall limited this activity. This act and other regulatory measures drew boundaries around various segments of the financial services sector and prohibited the companies within each of these industries from participating in business outside the limits of their respective industry territories. Thus, banks were pro-

hibited from dealing in securities, brokerage firms were prohibited from performing certain banking functions, and so on. The resulting model of distinct financial businesses was, to a great degree, adopted and enforced internationally by a great majority of countries.

Today, various legislation in the United States has modified portions of the Glass-Steagall Act. The pattern began to change in 1980, with the passage of the Depository Institutions Deregulation and Monetary Control Act, which took the first steps to reduce differences between commercial banks and thrift institutions. By 1994, with the passage of the Riegle-Neal Interstate Banking and Branching Efficiency Act, which removed restrictions on interstate bank branch operations, the system of regulations which had maintained the pattern of financial services for over half a century was virtually gone. The effort to redefine and restructure the industry which began in 1980 is clearly evident in the mergers, acquisitions, and restructuring throughout the financial services industry in the late 1980s and 1990s.

As a result of this deregulation, the lines of demarcation are becoming blurred. For example, today banks can earn up to 10 percent of their revenue through underwriting activity. They can sell securities and the insurance of other companies (though they cannot underwrite them). They are forbidden to make the related investment decisions or to hold the resulting portfolio.

Another example of the blurring lines is seen when a bank sells mutual funds or allows sales agents of an insurance company to operate in a bank branch. Such cooperative arrangements enable the bank to offer a more complete line of financial services in order to keep and attract customers. Such intrasectoral cooperation has extended competition beyond the competition that existed between organizations within a sector; the competition now takes place between sectors. Table 33.1 summarizes the activity of the financial services companies, by industry, represented in the 1996 Fortune 500.

Customers now face a wide choice of providers for services that once resided securely in companies of a single industry. For example, checking accounts, once the exclusive domain of the commercial bank, can now also be obtained from a savings and loan, a savings bank, even from a stock brokerage or mutual fund provider.

DEFINITION OF QUALITY IN FINANCIAL SERVICES

Juran (Section 2, How to Think About Quality) proposes a definition of quality which we will use here. Quality is the combination of: (1) features which attract customers and satisfy their needs and (2) freedom from deficiencies, which avoids dissatisfying customers.

TABLE 33.1 Profile of Financial Services Sector

Industry (no. of organizations)	Revenue*	Profit*	Profit as a percent of:			Employment	Revenue per employee
			Revenue	Assets	Equity		
Commercial banks (55)	$271,691	$32,728	13	1	15	1,041,623	$260,834
Insurance: life and health (mutual) (21)	$180,286	$4,438	3	1	11	255,396	$705,908
Diversified financial (15)	$105,264	$9,660	10	1	18	232,804	$452,157
Insurance: property and casualty (stock) (27)	$100,947	$13,953	8	2	13	296,814	$340,102
Insurance: life and health (stock) (20)	$89,053	$4,426	7	1	11	209,567	$424,938
Insurance: property and casualty (mutual) (9)	$60,337	$2,657	8	3	11	116,187	$519,309
Brokerage (7)	$53,957	$2,452	5	0	10	105,561	$511,145
Savings institutions (8)	$16,373	$1,226	8	1	10	41,983	$389,991

*000,000 omitted.

Source: *Fortune.* April 28, 1996.

Features. Features are those attributes or characteristics that combine to constitute a product.

The thing sold to customers is some bundle of services, generally referred to as "product." Usually, the product includes some tangible elements (a report, a receipt, cash in hand) and much that is intangible (a feeling of safety and security; speed of information access by 24-hour telephone line; speed, accuracy, and pleasantness of response to an inquiry). In many cases the intangible aspects are more important to the customer than the tangible ones.

Salable services require features that customers want and need. Sales and revenue depend on an understanding of those wants and needs throughout the duration of the supplier's relationship with the customer—from initial inquiry, through sales presentation, purchase decision, and the customer's subsequent decisions, conscious or unconscious, to maintain the relationship or make further purchases.

The variety of features which financial products and services offer is growing each year. The growth is propelled by the ever-growing capabilities of available computer hardware and software. One result is increasing customization of financial products to the needs of individual customers and classes of customers.

In addition to features associated with services generally, there are three features that are especially important to financial services: fiduciary responsibility; return on an investor's investment (ROI) (from the borrower's viewpoint this is interest paid on a loan); and risk.

The suitable combination of fiduciary behavior, return on investment, and risk is an important feature that customers use to: (1) decide what company to do business with, (2) select which products and services to utilize for each company the customers choose, and (3) how much of the product or service the customers will utilize or purchase.

Features: Fiduciary Responsibility. Fiduciary responsibility is the exercise of prudent judgment and acting in the best interests of the customer. It includes keeping the customer's assets safe, as well as those of the company, and earning the best return possible given the amount of risk the customer and company have agreed to accept. These responsibilities are clearly written in company policy and procedures. In the case of larger transactions, such as underwriting stocks or bonds for issue, commercial loans, trusts, arranging large customer investment portfolios, or managing large company insurance portfolios, the fiduciary responsibilities are also written in the contract.

Fiduciary responsibility is an important feature of any financial transaction. As important as its actual exercise is the customer's perception that it is being exercised. Once the customer loses faith in the fiduciary responsibility of an institution, that trust may be impossible to repair. When many customers lose faith simultaneously the result can be calamitous for the institution. In the early 1980s, Continental Illinois National Bank was forced to "write off" over $1 billion of loans. (Writing off is a recognition by the managers that there is no hope of recovering any of the principal or interest due on the loan.) The effect of the disclosure of this massive write-off was to stimulate a "run" on the bank, in which many depositors, fearing the loss of their assets, sought simultaneously to withdraw funds from the bank. They withdrew so much money the bank became illiquid. The Federal Reserve stepped in and loaned the bank what was necessary to meet depositor demands, but the damage was done. The bank's stock value dropped from over $20 per share to under $2, where it remained until dramatic steps were taken, including rechartering. Many customers never returned. Half of the 16,000 employees lost their jobs.

Features: Return; Interest paid. Return on investment (ROI) and interest rate paid (I) on a loan are computations of the same quantity (the annual cost of money, in percent) from two different viewpoints—that of the investor and that of the borrower. Where the loan (or investment) period is 1 year, the computation is straightforward:

$$I = \text{ROI} = \frac{S - P}{P}$$

where P = the amount borrowed (or the amount invested) and S = the amount paid back (or the amount collected) at the end of one year.

Complexity increases as the number of interest periods increases, and when fees, compound interest, currency translations, taxes, and the like are introduced. As the computation becomes more complex, it also becomes more difficult for the customer to compare competing financial products.

The largest and most sophisticated customers have complex models to make the calculation and comparison. The small retail customers must do the best they can from what they read and are able to calculate. For example, it is very difficult to compare the interest cost of an automobile purchase loan with that of a lease, despite the fact that many laws exist in retail consumer financial services to simplify the products and allow comparison by the consumer. Because of these difficulties, some consumers depend on their financial institution and accept on faith its advice on investment return and interest rate.

High-trust fiduciary responsibility, linked with other features of very high importance, such as ease of doing business, computer access, and personalized service may reduce the importance of return on investment or interest rates paid. As long as these rates are in the "ballpark" compared to competitors, they may become less important features.

Features: Risk. Risk is a correlate of return. Greater risk generally accompanies greater return. All financial transactions are accompanied by risk—conditions which threaten the success of the transaction and realization of the return.

The risk associated with a transaction is generally expressed in terms of the uncertainty of success, in the language of probability and statistics. For a given transaction, the best data available are used to create a statistical model as a prediction of the outcomes of the transaction. Risk is expressed in terms of the dispersion or spread of those outcomes.

The quantification of risk is illustrated by the risk associated with investing in a hypothetical stock index fund. (An index fund is a mutual fund comprising a package of common stocks selected to emulate the price behavior of some stock index such as Standard & Poor's 500.) This hypothetical fund will emulate the Dow-Jones Industrial Average ("the Dow"), chosen because among stock indices representing the behavior of the U.S. stock market, the Dow has the longest history, having been established over 100 years ago. Though an imperfect representative of the broad market, the Dow will serve to illustrate the relationship of income and risk.

Although every investment primer and the prospectus of every mutual fund will tell the prospective investor that past performance is no guarantee of future performance, the fact remains that past performance is important and often is the only guide to future performance. Table 33.2 is a portion of the data table based on the annual closing value of the Dow for the years 1914 to 1990, inclusive. We assume that dividend income from our stock is small compared to the price appreciation over time. Likewise, we assume the costs of trades to keep our portfolio composition identical to the Dow are negligible. Thus, we define the income from the fund for a given year as that year's capital appreciation. From these values it is possible to compute the effective annual rate of return on investment for 76 periods of 1 year, 75 periods of 2 years, 74 periods of 3 years, and so on to the one period of the entire 76 years. For each of those groups of periods, we can compute the sample standard deviation s.

The assembled results of these computations provide a statistical description of the behavior of the Dow over the 76-year period. Those with confidence that the Dow will continue to behave like this over the long term can use this model to predict the statistical picture of future behavior. In any case, the numbers give a sense of the magnitude of risk faced by an investor in this hypothetical fund.

The distribution of annual interest rates for each of the 76 years, is assumed to be reasonably approximated by the standard normal distribution. On this basis, we use the sample standard deviation s as an estimate of the standard deviation σ (sigma), and estimate the probability of any given range of return for an investment in the "fund." For example, for any given year, absent any other knowledge of the market conditions, we can say that with about 95 percent probability the ROI will fall between $\pm 1.645s$ of the average annual ROI. The computation yields values of these limits of -39.56 and $+49.92$ percent.

Before despairing that the range is too large to be of use in decision making, it is well to remember that in predicting next year's performance from the vantage point of this year, we have much more information on which to base the prediction than is suggested by these data; further, the data have more to tell under further analysis (see Figure 33.1).

The data tell us that over the period covered the expected (average) annual return is 9.5 percent; 5 percent of the individual years experienced a return of -4.0 percent or less; 95 percent of the individual years experienced a return of 29.0 percent or less; thus, 90 percent of the time the annual

TABLE 33.2 Dow-Jones Industrial Average: Annual Closing Prices, 1918 to 1990

		Annualized percent return for varying investment periods				
Year	Close	1 year	2 year	3 year	4 year	5 year
1914	56.76					
1915	99.15	74.68				
1916	95.00	−4.19	29.37			
1917	74.38	−21.71	−13.39	9.43		
1918	82.20	10.51	−6.98	−6.06	9.70	
1919	107.23	30.45	20.07	4.12	1.98	13.57
1920	71.95	−32.90	−6.44	−1.10	−6.71	−6.21
1921	81.10	12.72	−13.03	−0.45	2.19	−3.11
1922	98.73	21.74	17.14	−2.72	4.69	5.83
	...	...	...	...	...	...
	...	...	...	...	...	...
1984	1211.57	−3.74	7.60	11.46	5.88	7.63
1985	1546.67	27.66	10.85	13.91	15.30	9.92
1986	1895.95	22.58	25.09	14.63	16.02	16.72
1987	1938.83	2.26	11.96	16.97	11.41	13.12
1988	2168.57	11.85	6.95	11.92	15.67	11.49
1989	2753.20	26.96	19.17	13.24	15.51	17.84
1990	2633.66	−4.34	10.20	10.75	8.56	11.23
Average		5.18	5.18	5.18	5.18	5.18
Min.		−61.69	−44.01	−37.75	−33.15	−21.61
Max.		74.68	38.14	33.98	31.63	25.72
s		22.37	15.24	11.64	10.14	8.97
99th percentile		57.24	40.64	32.26	28.78	26.05
95th percentile		41.98	30.25	24.33	21.86	19.93
90th percentile		33.86	24.72	20.10	18.18	16.68
50th percentile		5.18	5.18	5.18	5.18	5.18
10th percentile		−23.50	−14.36	−9.74	−7.82	−6.32
5th percentile		−31.62	−19.89	−13.97	−11.51	−9.58
1st percentile		−46.88	−30.28	−21.91	−18.42	−15.70

Source: *Dow-Jones Averages 1885–1990, Phyllis S. Pierce, ed, Business One Irwin, Homewood, IL, 1991.*

return lay between −4.0 percent and 29.0 percent. These values become, for lack of any better basis for prediction, our estimates of probability for a time horizon of 1 year. Similarly, we estimate the 90 percent envelope of probabilities for the time period (in years) *N* of 2, 3, 4, etc.

The data, plotted in Figure 33.2, help us visualize and quantify the uncertainty suggested by these numbers and the way in which time reduces uncertainty. The long-term average return of 9.5 percent, while attractive, is by no means certain in an investment of just 1 year. The range from 4.0 to 29.0 may be unacceptably wide. The prospect of such uncertainty may drive us to invest in a bank certificate of deposit with a rate of return of only 5 percent, but with far narrower limits of uncertainty.

Credit application data can be compared with statistical models of data on repayment behavior of loan holders to assess creditworthiness of the loan applicant, based on the estimated risk of loan default. For life insurance products, mortality data are statistically modeled to create and price life insurance products on the basis of estimated risk of death of a beneficiary while the insurance is in force.

Risk and Risk Assessment. A key to profitability is accurate risk assessment. When a financial institution underwrites a project, it is investing funds in the completion of that project in expectation of a competitive return on that investment. Some level of risk is always associated with profitability, irrespective of the product, service, or the industry which offers them. In financial services the risk is the more apparent because the product itself directly involves money.

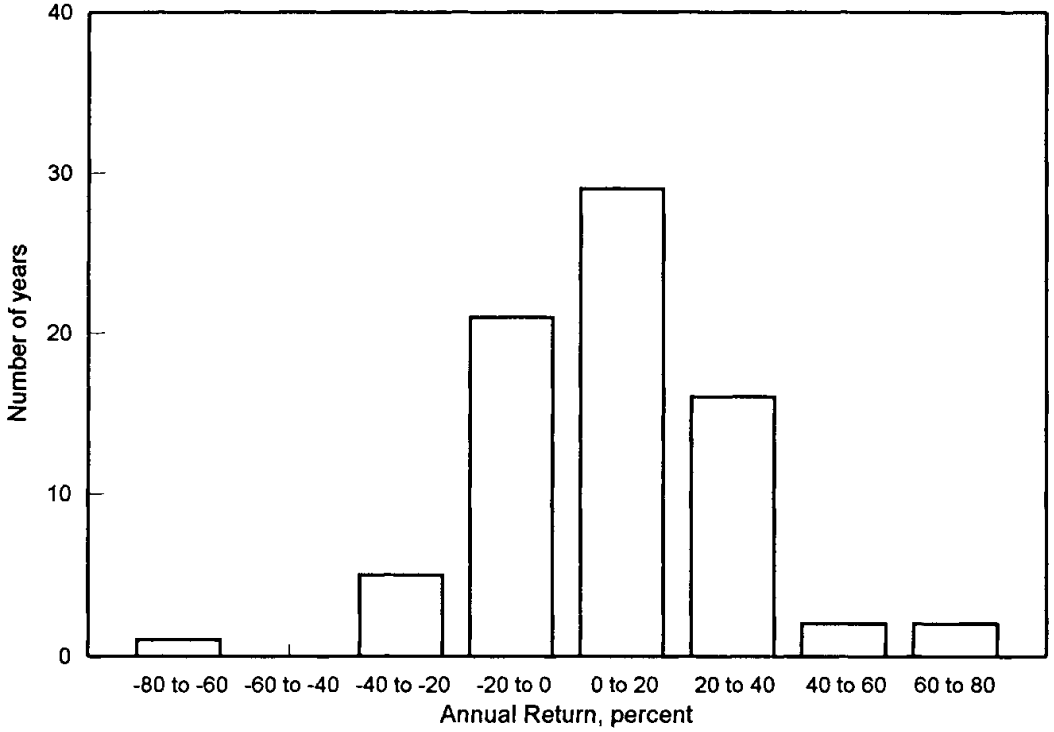

FIGURE 33.1 Distribution of annual ROI values for the years 1918 to 1990 of a hypothetical fund of the Dow Jones Industrial Average. (*Source: Adapted from Dow-Jones Averages 1885–1990, Phyllis S. Pierce, ed., Business One Irwin, Homewood, IL, 1991.*)

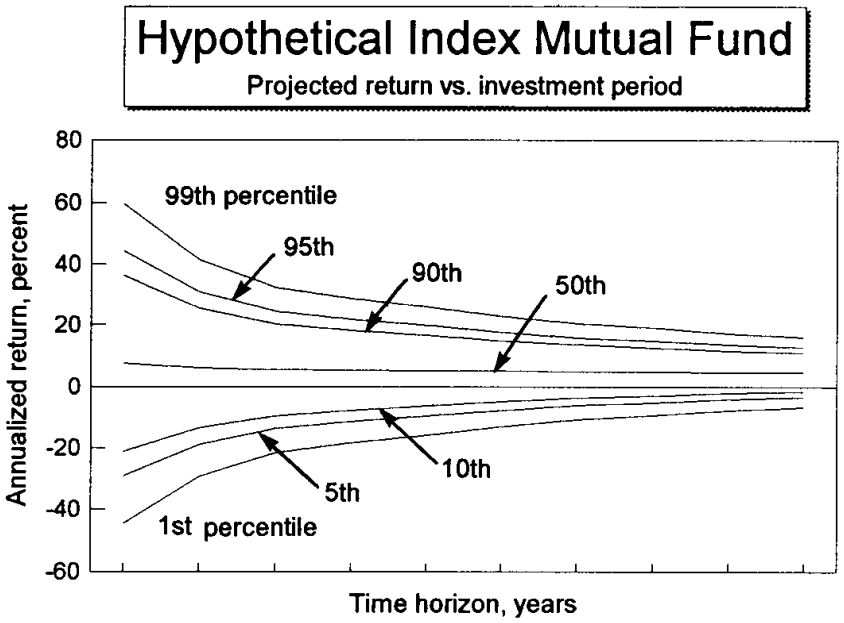

FIGURE 33.2 Risk versus investment time horizon. (*Source: Adapted from Dow-Jones Averages 1885–1990, Phyllis S. Pierce, ed., Business One Irwin, Homewood, IL, 1991.*)

It is important for both parties to a financial transaction to be able to assess the comparative risk of the transaction; the penalty for mistake may in some cases exceed the amount of the investment. Both parties will seek to make the ratio of cost of risk to reward acceptably low. The ratio is an important measure on which a customer bases such decisions as selection of financial-service provider, selection from among competing financial products, and allocation of investment among selected products. In other words, the estimated ratio of cost of risk to reward is an important measure of quality in financial services.

Defects or Deficiencies. A defect or deficiency occurs whenever a product fails to perform as designed or as promised. Defects can be tangible (e.g., incorrect terms on a loan document, a deposit or delivery of currency in incorrect amount, missing pages in an insurance policy, delivery of stock or bond certificates too late to complete a trade, unavailability of an automatic teller machine) or intangible (e.g., surly behavior of a bank teller or customer service inquiry clerk, misquote of loan application fee, failure to open the office or switchboard at the advertised time, chronically busy telephone lines, failure to answer an incoming telephone call).

Many of the features and deficiencies mentioned above are common to services in general. Significant features that are most usually associated with financial services are fiduciary responsibility, risk, and financial return (or interest paid).

Challenges and Obstacles for Quality in Financial Services. There are a few quality issues which stand out in the financial services sector: creating uniformity of service, comparison with leaders in other service sectors, quality-initiatives fatigue, downsizing and consolidation, and automation.

Creating Uniformity of Service. Many financial service organizations have branch operations and extensive telephone service networks. In this environment, creating and maintaining uniform service of the highest level is extremely difficult. A customer who is overserviced at one location and underserviced at another will probably be disappointed. In most financial service companies it is primarily the actions and attitudes of people that constitute the service. Trust in individual employees is as important as trust in the institution and in the branch office. Therefore, hiring, training, developing, motivating, and rewarding are extremely important.

Comparison with Leaders in Other Service Sectors. There is a carryover effect from other service companies, even companies in other sectors. Fast, competent, friendly and high-value service from a fast-food restaurant, a dry cleaner, or an auto repair shop creates expectations for the same from bank, broker, and insurance agent. Many surveys show that financial services lag in this respect. [See the discussion under The American Customer Satisfaction Index (ASCI), below.]

Quality-Initiatives Fatigue. Many financial service organizations went through "Quality" in the past three decades: "smile training" in the 1960s, quality circles in the 1970s, and culture modification in the 1980s. Having tried all these, they either feel they have done it all or are just tired of all the quality initiatives which have come and gone without much effect.

Downsizing and Consolidation. Financial services, like many other sectors, is experiencing corporate downsizing and consolidation. For example, between 1980 and 1990 the number of commercial banks in the United States fell from 14,000 to 12,000, and by 1996 to 9800—a reduction of 30 percent in just 16 years. Although the pattern in other western countries like Canada and Great Britain is to consolidate into five or six giant institutions, experts in the United States have predicted that several thousand commercial banks will remain in this country in the long run. In fact, in banking, dozens of banks start up successfully each year to serve customers that larger consolidated banks are not satisfying.

Consolidation is also the prevailing trend in other financial services—brokerage, savings bank, insurance, credit card, mortgage, and trust.

The reduction of personnel has been even greater than the reduction in the number of institutions. When a merger occurs, a reduction in combined staff of from 10 to 20 percent is common. In addition, ongoing efforts at productivity improvement and cost reduction have created a sectorwide reduction in work force of between 5 and 8 percent. These changes have placed a significant burden on the remaining staff, and in many cases have been reflected in reduction of service to customers.

Automation. Much increase of efficiency and productivity has come from automation in financial services. In banks, for example, computerizing customer interfaces and transaction activity cuts cost significantly. Unfortunately, it also keeps customers out of the branches, where sales of new service traditionally occurs—person to person. Pressure from shareholders to increase profits has caused many companies to reduce costs by automating operations and eliminating staff.

PROOF OF THE NEED—EVIDENCE OF QUALITY TROUBLE IN FINANCIAL SERVICES

There is much evidence of customer dissatisfaction with the quality of financial services. Some of the evidence follows:

The American Customer Satisfaction Index (ACSI). The index is a cross-industry measure of the satisfaction of U.S. household customers with the quality of the goods and services available to them. Included are goods and services produced within the United States and those provided as imports by foreign firms that have substantial market share or dollar sales. The index provides an objective economic measurement of the improvement needed in financial services as well as in other industries. The ACSI is cosponsored by the University of Michigan Business School, where its methodology was developed, and the American Society for Quality (ASQ, formerly the American Society for Quality Control). Results of the first ACSI assessment, based on data collected May 10 to July 22, 1994, were released in October 1994.

The ACSI measures customer satisfaction on a uniform scale scale from 0 to 100, where 100 is best. The first value of the national ACSI was 74.5. This baseline measure is the benchmark for comparing customer satisfaction over time. The ACSI covers seven sectors of the economy and key industries within each sector. These sectors are (1) Manufacturing/Nondurables, (2) Manufacturing/Durables, (3) Transportation/Communications/Utilities, (4) Retail, (5) Finance/Insurance, (6) Services, and (7) Public Administration/Government. These sectors account for 75 percent of the Gross Domestic Product. (For a detailed description of the ACSI, contact the American Society for Quality, 611 East Wisconsin Avenue, Milwaukee, WI 53201-3005; phone 414-272-8575.)

Table 33.3 shows those financial service companies large enough and receiving enough national responses to receive individual indices. The index values may be interpreted as relative ratings. Of special interest is the fact that the 3-year trend is slightly downward, suggesting an opportunity for companies applying quality management methodology to gain a competitive edge.

Quality Costs. Section 8, Quality and Costs, proposes four categories of quality-related cost: prevention, appraisal, internal failure, and external failure. Examples of these costs from the financial service sector follow:

Prevention: New product review, quality design or quality planning activities, training programs, creation of written policies and procedures, analysis of quality information, and conduct of quality improvement projects.

Appraisal: Inspection of incoming work, supplies, and material; periodic inspection of work in process; checking, balancing, verifying, and final inspection of account transactions; conducting customer surveys; and analysis of customer correspondence/complaints.

TABLE 33.3 ACSI Scores for Representative Companies in Financial Services

Commercial bank		Insurance: life		Insurance: property and casualty	
Organization	ASCI score	Organization	ASCI score	Organization	ASCI score
Banc One Corporation	74	Aetna Life & Casualty	73	Allstate Insurance Group	73
BankAmerica Corporation	67	Metropolitan Life Insurance Company	73	Farmers Group, Inc.	71
Chase Manhattan	70	The Prudential Insurance Company of America	74	State Farm Insurance	79
CitiCorp	70	Travelers, Inc.	NA	Other companies	75
First Interstate Bancorp	71	Other companies	74		
First Union Corporation	73				
Key Corp.	76				
Nations Bank Corporation	73				
Norwest Corporation	76				
Wells Fargo & Company	71				
Other banks	77				

*NA = not available.
Source: American Society for Quality, Milwaukee.

Internal failure: Machine downtime, scrap and waste due to improperly processed forms or reports, and rework of incorrectly processed work.

External failure: Investigation time for complaints, payment of interest penalties, reprocessing of an item, scrap due to improperly processed or incorrect forms or reports, time spent with disgruntled customers, and lost business due to providing poor service.

The sum of failure costs plus the portion of appraisal cost necessitated by a high failure rate is referred to as "cost of poor quality." These are costs which would disappear if the product or service were defect-free.

The sum of all four categories of quality costs constitutes the total cost of quality. Experience shows that the latter three categories, called the "cost of poor quality," range from 10 to 30 percent of sales income or 25 to 40 percent of operating expense, not including the cost of funds. This magnitude, frequently verified, represents a large opportunity for improvement. Organizations such as Banc One Corporation, American Express, and Prudential Insurance Corporation use cost of poor quality to drive quality improvement. The data in Table 33.4 give examples of this opportunity in one large bank organization.

Customer Loyalty and Retention. Customer loyalty is the purchasing behavior exhibited toward a financial services provider by a customer who places a major percentage of his or her financial services business with that provider. Customer retention means keeping a customer as a buyer of services.

In financial service companies the rates of customer loyalty and customer retention are often so low that as much as 30 percent of the customer base is lost each year, equivalent to a complete turnover in a little over 3 years. The typical American household uses six different financial service

TABLE 33.4 Quality Costs by Activity

Department/service	Quality cost, % of total expense	Percent of total quality cost		Measured defect rate, %	Individual improvement opportunity, $
		Prev/App	Failure		
Bank card services	94	10	90	25	119,000
Credit card processing	NA	36	64	10	93,240
Word processing	25	43	57	0.69	77,480
Commercial credit	48	56	44	NA	40,810
General accounting	49	45	55	5	29,200
Automatic teller machine	37	32	68	0.02	25,200
Customer inquiry center	26	64	36	NA	18,000
Commercial loan operation	50	42	58	NA	16,660
Consumer credit collections	14	77	23	2	11,280
Commercial lending	17	64	36	NA	8,620
Installment loan credit	NA	66	33	NA	5,400
Training	NA	89	11	NA	4,800
Deposit services	NA	30	70	0.01	NA

NA = not available.

organizations, where one to three could provide the services required. The principal reason for this seemingly unnecessary spreading around of work is poor quality of service. Financial service companies too frequently treat their products as commodities. They often seem unwilling or unable to distinguish their products from those of their competitors, and fail to develop in their customers a feeling of loyalty to the product or brand or to the organization. In that circumstance, the customer's cure for dissatisfaction is to quit and take the business to another provider. At the same time, while companies may be unable to retain customers, they recognize that their competitors share the same problem. This gives rise to marketing efforts aimed at capturing the business of the disaffected customers of other companies by means such as advertising the ease of switching accounts, provision of free checks, instant replacement of existing insurance policy, or waiving of transfer fees in a new brokerage account.

When poor quality service translates to a lack of customer loyalty and poor customer retention, the costs are almost always larger than they appear at first. Casual analysis of a lost account may suggest that the account was small anyway, with little loss to the company. Deeper analysis frequently reveals that in earlier times—say 6 to 12 months before—the customer had multiple accounts, all with healthy balances. The customer departed a little at a time, not all at once, and in that time took substantial business away.

Further, the cost of replacing a customer is demonstrably greater than the cost of retaining one. The least costly means of gaining sales and market share is to treat the existing customer well, rather than trying to create a replacement.

For more on customer loyalty and customer retention, see Section 7, Quality and Income.

DESIGNING WORLD-CLASS FINANCIAL SERVICES

Customer-Driven or Technology-Driven Product Development? New products and features come to market in two essentially different ways. The first depends on a product based on the "great idea," a novel idea of great potential benefits around which a marketing effort is developed. The automatic teller machine (ATM) is an example of such a product. The customer

can, by introducing a magnetically coded identification card, withdraw cash from any one of a network of machines at any time. For banks, the principal attraction is the reduction of the substantial labor cost of the withdrawal transaction (the cost of a teller to handle the face-to-face transaction, and the costs of processing, transporting, and storing the resulting paper records); for the customer, the advertised benefits are speed and convenience of withdrawing cash at any time of the day or night.

One of the drawbacks of this product development strategy is its reliance on the great idea. Great ideas are difficult to come by and the investment required to promote them can be prohibitive.

The second way to develop product is to begin with a clearly researched profile of customer needs, and design the product with features that address the most important of those needs. While the resulting products may not create dramatic competitive breakthroughs, the approach enables the company to maintain for the product line an acceptable rate of improvement and, for each improvement, acceptable odds of successfully launching and sustaining it.

There is a third way to develop new products which bears mentioning. It is to copy competitors in introducing new products rather than to take the initiative in developing new product. Some refer to this as the "lemming" process, after the legendary behavior of lemmings, which follow the crowd regardless of consequences. Such a process assures that its practitioners will never know the success that the big idea can bring, or even the success which is based on a thorough understanding of customer needs. The lemmings will always be late to benefit from emerging trends. When a trend becomes a boom, and the boom leads to overcapacity, the lemmings are frequently the first victims of the bust that follows.

Developing World-Class Products and Services. The product development process starts with identifying current and potential customers. Next, "listening posts," the mechanisms by which to discover the needs of these customers, are established. These listening posts may be strategically placed individuals (such as sales personnel or customer service personnel), customer surveys, telephone listening/recording, complaints, customer interviews, focus groups, field service personnel, advisory councils, and so on.

In some organizations, sales personnel and customer transaction personnel use every interaction as an opportunity to probe and ask specific questions. See Table 33.5.

When the listening posts are well designed and the information they generate is well coordinated, their contribution can help to develop new products and to sell existing product that is already developed of which the customer is not aware.

USAA and American Express are companies which collect and analyze information generated in all types of customer contact. All written and telephone complaints, compliments, and inquiries are collected, classified, and analyzed. The resulting information provides a clear indication of what is going well, what needs to be improved and what new needs are emerging from the customers.

Information from the listening posts helps to identify needs and to assure that they are associated with the appropriate set of customers, in order to improve service, add features, and develop new products.

For example, funds transfer between accounts is a product useful to an individual who makes transfers among multiple accounts in one bank, as well as to a company with far-flung operations making transfers among hundreds of accounts. While the basic transaction is the same for both customers, the required documentation differs greatly. The individual may be perfectly well served by a monthly statement of all transactions and balances. The company will likely need daily end-of-day statements delivered to multiple locations.

TABLE 33.5 Questions to Discover Customer Needs

- Is there anything else I can do for you?
- Are there any problems or needs today you have in managing your financial affairs?
- Are there any products or services you wish we offered?
- Are you aware of any products on the market that we don't offer?

Needs, once identified, must be translated into measurable terms. This is especially true in the service environment, in which there may exist a belief that "intangible" is a synonym for "immeasurable." Thus, a "fast" transaction must be expressed in days, minutes, or seconds. "Easy" portfolio liquidation must be described in terms which make clear who is authorized to do the liquidating, when they may do it, under what controls, and so on.

Once needs are so translated, the translation must be validated or modified by the customer. Table 33.6 is an example of customer needs and translation for terms associated with one product: check truncation. (Check truncation is a feature associated with the checking account statement. For an account with the check truncation feature, the account statement contains the vital information for each check cleared, but the actual written and processed checks are not returned.)

Each of the needs, clearly stated and measurable, is addressed by appropriate product features. When all the product features are developed, the product emerges and the delivery process can be developed. World-class companies have found that the customers should be consulted at each step of this development process to be sure that the product being developed continues to meet the need. Table 33.7 extends the example of check truncation to product features and process features.

TABLE 33.6 Check Truncation: Needs and Translation

Needs					
Primary	Secondary	Tertiary	Translation	Units of measure	Sensor
Security	Account insurance		Institution, account insured by FDIC	Insurance in place, advertised; Y/N	Consumer
	Financial soundness		Sound financial statement	Expert judgment	Expert
Utility	Acceptability		All recipients will accept checks	Y/N	Marketing survey
	Flexibility		Pay by mail, in person; get cash; deposit money	Y/N	Product design
Convenience	Account information access	By telephone	Account information accessible by telephone	Average call wait time, seconds	Telephone log
	Funds access	By ATM	24-hour deposit/withdraw anywhere	% ATM monthly downtime (minutes × 100/43,200)	ATM log
	Documentation	Payment receipt	Proof of payment available when needed	% items requested but not found	Quality performance report
	Problem resolution	Knowledgeable staff	Staff perceived as capable of solving customers' problems	Survey response	Consumer survey
		By telephone	Problem resolution available by phone	Number of complaints	Complaint log
				% of problem calls abandoned	Phone log
	Overdraft protection	Covers reasonable operation	Covers reasonable overdraft	Survey response	Consumer survey
				Number of complaints	Complaint log
		Overline credit available	Overline credit available	Y/N	Product design

TABLE 33.7 Check Truncation: Product and Process Features

Product feature	Product goal	Process feature	Process goal
Statement	Accuracy: <0.01% error rate	Check encoding	<0.005% miscoded
		Check read/post	<0.005% misread
		Statement design change	Error free Customer driven
	Timeliness: >99% mailed on day of printing	Statement printing	On schedule
		Statement envelope mailing	No delay On schedule
	Readability	Design of layout	Readable
		Words	No complaints
		Statement printing	Clean: readable

CONTROLLING QUALITY AND CUSTOMER SERVICE

Measuring from the Customer Perspective—What They Think Is Important. Controlling quality of service depends on the measurement of performance in terms of the features that matter to the customer— primarily the external customers, but the internal customers, too.

The time to develop measures and performance levels that meet customer needs is during the design of the product. For existing products that have already been developed and are being delivered today, performance measures that do exist are too frequently based on the needs of internal customers.

Developing customer-oriented performance measures to assure products is a task that requires the help of listening posts, discussed above. Most useful is the customer satisfaction survey process.

The customer satisfaction survey begins with the study of the complete service cycle for the product for which measures and performance standards are to be developed. Figure 33.3 shows, from the customers' perspective, all of the features of the product through its entire life. Then each feature is written into a "satisfaction" and an "importance" question (Figure 33.4). Next, an actual performance question is written for each feature. Figure 33.5 offers an example.

In the example of Figure 33.5, suppose a disbursement time of 48 to 72 hours correlates with "satisfied," and 24 to 48 hours correlates with "very satisfied." The goal for funds transfer should be to achieve "very satisfied," and the corresponding numeric goal is 24 hours. Goals should always be set to create very satisfied customers. Customer loyalty research shows that customers who are merely satisfied are not loyal. A satisfied customer is 51 percent likely to buy again, almost literally as likely as not, whereas very satisfied customers exhibit an 85 percent probability of buying again. These probabilities explain why so many individuals and companies have multiple suppliers of financial services. It is difficult for an organization or its products to sustain a customer at "very satisfied," so the customer buys from multiple organizations.

It is instructive, using survey data from questions of the sort in Figure 33.4, to assess the importance of each feature on a simple scale (1 = low to 4 = high), and to use the same scale to measure satisfaction performance. Table 33.8 shows a 2 × 2 matrix into which the pairs of values—importance and performance—can be plotted to guide the measurement effort. Each quadrant suggests an action. The features whose importance ranks high (3 or 4) fall in the right-hand column. All of these must be measured. For any which have no measure, one must be devised. The performance standards can be determined by correlating the numerical performance reported by the customer to the customer's reported level of satisfaction.

Through the administration and analysis of periodic surveys, and through the continuous improvement of service that survey results stimulate, it can be expected that the list of questions can

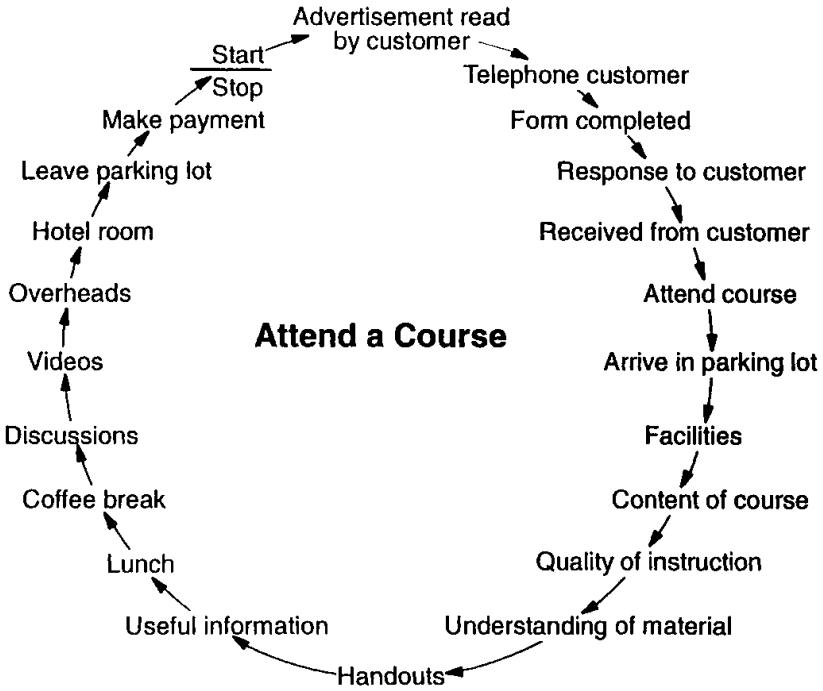

FIGURE 33.3 Service cycle (attend a course).

A. How satisfied are you with following branch staff service features?

	Very satisfied	Somewhat satisfied	Somewhat dissatisfied	Very dissatisfied
1. Greeting you with a smile	1	2	3	4
2. Concerned and caring	1	2	3	4
3. Helpfulness	1	2	3	4
4. Friendliness	1	2	3	4
5. Using you name	1	2	3	4
6. Handling phone transactions efficiently	1	2	3	4
7. Answering questions and resolving problems	1	2	3	4
8. Processing transactions without error	1	2	3	4
9. Knowledge of bank products and services	1	2	3	4
10. Thanking you for your business	1	2	3	4
11. Helpful in identifying your financial needs and solutions	1	2	3	4
12. Ability to help plan, find alternatives, and solve financial problems	1	2	3	4

B. Which FIVE features of the services listed below are MOST IMPORTANT to you in judging performance? Read through the items below and circle the five most important.

1. Greeting you with a smile
2. Concerned and caring
3. Helpfulness
4. Friendliness
5. Using your name
6. Handling phone transactions efficiently
7. Answering questions and resolving problems
8. Processing transactions without error
9. Knowledge of bank products and services
10. Thanking you for your business
11. Helpful in identifying your financial needs and solutions
12. Ability to help plan, find alternatives and solve financial problems

FIGURE 33.4 Customer satisfaction survey.

Timeliness of Funds Disbursements

Very Satisfactory	Satisfactory	Unsatisfactory	Very Unsatisfactory
☐	☐	☐	☐

Length of Time to Receive Funds Disbursements

24–48 Hours	48–72 Hours	72 or More Hours
☐	☐	☐

FIGURE 33.5 Customer evaluation—subjective and objective.

TABLE 33.8 Service Improvement Measurement Matrix

PERFORMANCE		IMPORTANCE: Low (1, 2)	IMPORTANCE: High (3, 4)
High	4, 3	Ignore	Measure; continue
Low	2, 1	Ignore	Measure; improve

be narrowed to a few which capture the essence of customers' assessment of performance. An ongoing monthly survey of a small random sample will assure that service remains at "very satisfied" or is moving toward it.

Internally, proxy measures are needed to track those features that are important to the customer. In the financial services environment, with such extensive use of information technology, many measures can be collected automatically, for 100 percent of transactions and in real time. The time saved in automatic measurement can be used for improvement. Where manual measures are required, sampling should be used. (For more on sampling, see Section 46, Acceptance Sampling.)

Performance measures are processed in a feedback loop. As the data are collected, either by sample or through the automated system, the actual performance is compared to the standard, and action is taken on the difference.

The detailed plan for this measurement—who does it, how often it should be done, with how large a sample—is documented in a control matrix or control plan. Table 33.9 is an example. The plan provides the procedures for sampling and comparing to a standard and specifies the actions to be taken if performance does not meet standard. A graph of the actual data against the standard displays the quality level for easy comprehension and action. The tool that is used most often is a control chart. (See Section 45, Statistical Process Control.)

In successful organizations, performance reporting is designed to facilitate continuous improvement. For example, organizations with duplicate operations want to discover best practices within the organization so as to make them the performance standard throughout. Table 33.10 is an example of a performance report from a multibranch bank. Examples of measures and their standards for a full service, multibranch commercial bank are shown in Table 33.11. Examples of measurement feedback reports for a credit card company are provided in Tables 33.12 and 33.13.

TABLE 33.9 Control Matrix/Plan

Feature	Measure	Standard	How	Sample	Parameter	Action	Who
Accuracy	In balance	Within $2.00	Clerk calculation	100%	<$2.00	Nothing	NA
					>$2.00	Review to find error	Balance clerk
					More than two per shift	Notify supervisor and improvement team	Balance clerk

THE CUSTOMER AS A SUPPLIER

In service organizations, the customer is often a supplier, too. The brokerage customer, in placing an order, must supply the detailed transaction data: buy 100 shares of General Motors stock at a price not to exceed $150 a share. The bank customer that prepares a shipment of coin and currency to be deposited is supplying material input to the bank's sorting/counting process. If the customer, as supplier, errs in providing input, the service provider will be unable to deliver output that will satisfy the customer's needs.

The financial service provider's best defense against customer blame for error in output is to prevent customers from making errors in input. Three approaches used by financial service providers are customer education, errorproofing customer input, and monitoring the quality of customer input.

Customer Education to Be a Good Supplier. At a large bank, a study of a sample of out-of-balance deposit transactions (in which the deposit claimed by the customer does not match the bank's count) revealed that a major cause of the condition was the occurrence of unsegregated currency and coins in the deposit. Further, in addition to the extra work required to balance the deposit, the need to sort the coin and currency imposed its own cost on the transaction. Analysis showed that the total effect was to double the cost of the deposit transaction, a cost which all customers bore, though the increase in cost was caused by only 10 percent of the customers.

Those few customers were targeted for training. The bank's deposit department sent a delegation to the companies' premises to train the personnel responsible for preparing the deposits. The result was to reduce processing time at the bank by more than half, which, in turn, reduced costs and allowed a price reduction. The deposit error rate was reduced from 15 percent to $^1/_{10}$ of 1 percent. The customers reported a reduction of over 30 percent in time spent in deposit preparation. Bank and customers both benefited from this customer education.

Errorproofing. There are a number of ways to errorproof customer input. Paper forms for input by mail, fax, or in person serve as a checklist to assure complete input. Menus—on-screen or by voice—guide input by telephone, kiosk, or computer terminal. "Help" buttons can further assist electronic entry. Requiring the customer to verify a playback of the entered data is another form of errorproofing. Another technique is to have the customer enter the data or information twice and validate the corresponding data entries that don't match. Errorproofing as a part of training makes a powerful combination for reducing customer input error.

Monitoring and Measuring Customer Input. In the application of training and errorproofing, it is important to monitor customer input to verify effectiveness and expose any need for additional improvement. Monitoring should be done as close to the input transaction as possible—to correct errors quickly and to keep error costs down. The ideal is to monitor input as the customer is making the entry. The customer can be given immediate corrective feedback and training in how to prepare and conduct the transaction properly the next time. Training can also include spot tips on errorproofing the transaction, such as double checking, checklisting, and the like.

TABLE 33.10 Performance Report from a Large Multibranch Bank

Project name/affiliate bank	Description	Plan or actual			Improvement					Annual savings or revenue, $
		Start date	End date	Implant date	Customer	Quality	Service	Environment	Product	
Savings bonds/Dallas Contact: Name/#	Streamline processing of corporate savings bond program for corporate customers	11/96	8/97	10/97		X	X		X	4,125
NSF and OD/Houston Contact: Name/#	Review overdraft policies with the intent of: maximizing fee income, minimizing bank loss, providing consistent level of service	3/96	1/97	1/97	X	X	X			100,000
Additional cards/Dayton Contact: Name/#	To find a more efficient method of processing requests from cardholders for additional cards of existing accounts	1/97	6/97	7/97	X	X	X			7,280
.....	.....	.....	.....	.....	...	...	...		...	.....
Home equity service, indirect QIT/Columbus Contact: Name/#	Develop a marketing program to obtain home equity loans through indirect dealers when consumers prefer to use their home as collateral to buy other consumer goods.	9/97	12/97	2/98	X	X	X			54,000
Credit approvals/Cleveland Contact: Name/#	Streamline credit procedures to enhance customer service, minimize delays, improve productivity, document new procedures.	3/97	10/97	11/98	X	X	X		X	142,740
Total contribution					18	20	21	13	19	1,696,131

TABLE 33.11 Quality Measures in a Multibranch Commercial Bank

Operation	Measure	Standard, %
Retail deposits	Number of incorrect new DDA account documents/total number of new DDA accounts	0.50
Retail deposits	Number of incorrect new IRA documents/total number of new IRA accounts	0.50
Retail branches	Number of transaction errors/total number of transactions	0.10
Retail branches	Total dollars over and short/total dollars of cash in and out	0.01
Mortgage loans	Number of applications not committed on time/number of applications underwritten	0.30
Mortgage loans	Number of applications not closed on time/number of applications closed	0.20
Commercial loans	Loan payments posted incorrectly/total loan payments	1.00
Commercial loans	Number of payments backlogged/number of payments received	0.04
Retail installment loans	Number of loans not closed in 45 days/total number of loans closed	0.10
Retail installment loans	Number of complete credit applications not answered within standard	1.00
Accounting/financial	Number of GL entry errors/total number of GL entries	0.05
Accounting/financial	Number of GL reports delivered late/total number of GL reports	0.15
Human resources	Number of payroll errors/total number of employee payments	1.50
Human resources	Number of days of formal training/total number of employees	0.05
Human resources	Number of performance appraisals late/total number of performance appraisals due	0.02

QUALITY IMPROVEMENT—THE NEVER-ENDING JOURNEY

Continuous Customer Input—More on Customer Listening Posts. In addition to their importance in product development and in quality control, customer listening posts are also useful in helping identify what needs to be improved. The customer-complaint desk is a particularly effective listening post for improvement ideas. Customer satisfaction studies and customer loyalty studies also provide useful input for quality improvement efforts.

Customer Complaints and Recovery. For several reasons it is useful to centralize customer complaint and inquiry management. First, it is useful to create a cadre of experts to deal with customer problems. When customers call, it is best that they are greeted by knowledgeable personnel who have available all the tools they need and know how to use them. Availability and capability are extremely important in dealing with customer problems. The speed with which the problem is solved will have a significant impact on the customer's final satisfaction. It is a worthy goal to solve a problem at the first call, if possible, and in the same day in any case. Research shows that each time it is necessary to recontact the customer or transfer an inquiry, customer satisfaction drops by 8 to 10 percent.

The process of fixing the customer problem is called "recovery." The centralized customer complaint group uses a number of strategies for recovery to minimize the customer's dissatisfaction. These include making an apology, replacing the product (including service) quickly, conveying a

TABLE 33.12 Monthly Quality Report

Quality measure	Standard	September	August	July	June	May	April	Avg. perf. to std.
Average time to answer, seconds	20.00	36.00	40.00	25.00	21.00	20.00	18.00	
Performance to standard, %		55.6	50.0	80.0	95.2	100.0	100.0	82.0
Number of abandoned calls/total number of calls, %	2.00	4.00	3.40	2.60	3.10	3.20	3.10	
Performance to standard, %		50.0	58.8	76.9	64.5	62.5	64.5	62.9
Number days to handle cancellation request	5.00	3.00	4.00	6.00	6.00	4.00	3.00	
Performance to standard, %		100.0	100.0	83.3	83.3	100.0	100.0	100.0
Number days to handle written investigation	5.00	6.00	5.00	3.00	4.00	4.00	4.00	
Performance to standard, %	03.3	33.0	100.0	100.0	100.0	100.0	100.0	
Number of unresolved investigations to regulatory agencies	0.00	26.00	41.00	37.00	42.00	40.00	57.00	
Performance to standard, %		.0	.0	.0	.0	.0	.0	0.0
Number of state insertion errors	0.00	.05	.02	1.00	.02	1.00	8.00	
Performance to standard, %		.0	.0	.0	.0	.0	.0	0.0
Number of plastic insertion errors	0.00	.00	.00	.00	.00	.00	.00	
Performance to standard, %		100.0	100.0	100.0	100.0	100.0	100.0	100.0

sense of understanding and empathy, making recompense for value lost, offering a token compensation, and following up later with the customer to be sure that all reasonable effort has been made to put the matter right.

Customers left unsatisfied by a recovery effort represent a loss in at least five ways: (1) they will likely stop giving business to the offending organization; (2) they will probably give future business to a competing one; (3) they may give the offending organization negative publicity by reciting their story of dissatisfaction to business colleagues who are potential customers; (4) they will likely never offer good word-of-mouth publicity, as they might have had the recovery experience been good; and (5) their tie to the offending organization, measured by intent to repurchase, could actually have been strengthened by the combination of initial problem and subsequent recovery, properly handled.

Table 33.14 compares the repurchase intent of customers of a financial services firm who had an unsatisfactory recovery experience to customers who had a very satisfactory one.

This repurchase behavior demonstrates that effective recovery is important as a part of the effort to retain present customers. Courting customers through good recovery practice amounts to an effective and inexpensive alternative to creating a new customer to replace each one driven away by poor recovery. That this makes good business sense becomes clear upon study of the costs associated with developing a new customer, closing the account of a departing customer, and replacing the lost income stream. Additionally, financial service organizations find that immediately after a problem has been fixed the customer is ripe to be cross-sold a service (10 to 20 percent of the time the customer will buy). When an attempted sale follows the fixing of a problem customer satisfaction scores go up 3 to 5 percent more than they do as a result of only fixing the problem, and 5 to 10 percent if the sale is successful.

It should also be recognized that as a customer's relationship with a financial service provider develops, the contribution of that business to the firm's profit increases. The longer-term customer has a larger portfolio, a higher balance, uses more services, and therefore incurs higher fees and provides economies of scale with consolidated accounts and statements.

As important as it is in the short run to solve the immediate customer's problem, it is equally important in the long run to capture information about the problem, code it, and consolidate all such infor-

TABLE 33.13 Quality Trend Report

Meas. no.	Quality measure	Total defects	Total volume	Defect rate or defects	Standard	Performance to standard, %	Weight	Weighted performance
148	No. abandoned calls/total calls	8,594	214,862	4.00%	2.00%	50.0	1	50.0
454	Average time to call pickup, seconds	36	NA	36	20	55.6	1	55.6
455	No. days to handle cancel request	3	NA	3	5	166.7	1	166.7
456	No. days to handle written investigation	6	NA	6	5	83.3	1	83.3
457	No. of unresolved investigations to regulatory agencies	26	NA	26	0	0.0	1	0.0
458	No. of statement insertion errors	11	209	0	0	0.0	1	0.0
459	No. of days statement production not met standard	1	NA	1	0	0.0	1	0.0
460	No. of applications not processed within standard	0	NA	0	0	200.0	1	200.0
462	No. of credit bureau correction requests	1,725	NA	1,725	0	0.0	1	0.0
463	No. of customer complaints about collections	5	NA	5	0	0.0	1	0.0
464	No. of credit inquiries not processed to standard	2	NA	2	0	0.0	1	0.0
465	No. of hours system down	2	NA	2	0	0.0	1	0.0
466	No. of hours credit card system down	1	NA	1	0	0.0	1	0.0
467	No. of payments not posted	1,154	NA	1,154	0	0.0	1	0.0
468	Payments not posted, in thousands of dollars	10,787	NA	10,787	0	0.0	1	0.0
478	No. of plastic insertion errors	0	NA	0	0	200.0	1	200.0
479	No. of other insertion errors	2	211	0.01	0	0.0	1	0.0
		8,594	214,862				17	755.6
	Overall total defect rate, %		4.00			Overall performance, %		44.4

NA=not applicable.

mation as a database to help identify what processes need to be improved. An example of a complaint and inquiry management process which features such a consolidated database is shown in Figure 33.6.

Continuous Improvement—Project by Project. In Section 5, The Quality Improvement Process, the general principles of quality improvement are laid out in detail. The present section highlights some examples of the application of these principles in the financial services sector and resulting lessons.

To focus the improvement effort on quality of customer service can provide high payback for an organization.

TABLE 33.14 Repurchase Intent

Type of customer	Percent who intend to repurchase	Percent who will recommend purchase to others
Typical satisfied customer with no problem	51	65
Customer with problem; unsatisfied with recovery	30	46
Customer with problem; very satisfied with recovery	79	88

Source: TARP.

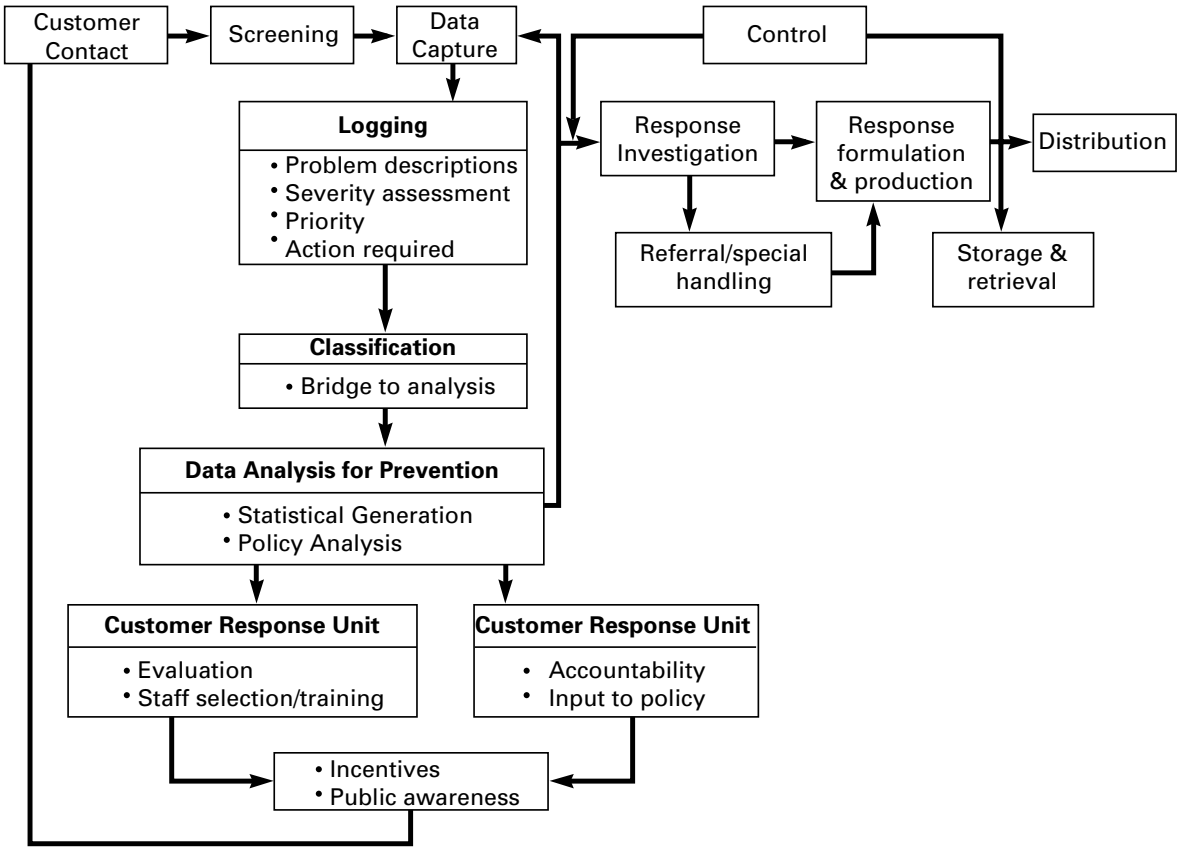

FIGURE 33.6 Customer-response framework: complaint/inquiry management.

In the first year of a quality improvement process, Banc One realized a net savings and revenue enhancement of three-quarters of a million dollars; in the sixth year, net savings and revenue enhancement exceeded 16 million dollars.

In 1991, a study was conducted of over 1000 improvement teams at 35 financial institutions (Aubrey and Gryna 1991). The most successful teams, measured in terms of saving and revenue enhancement, defect reduction, customer satisfaction improvement, and increase in employee satisfaction, shared some important characteristics:

- *Team makeup:* Mix—75 percent officer/manager level, 25 percent nonexempt; average team size—7; "ideal" team size—4 or 5
- *Team member selection:* By management
- *Training:* Two days minimum
- *Project selection:* By management or the quality council

- *Projection Duration:* Three to four months, meeting weekly for 90 minutes.
- *Improvement tools used:* Brainstorming, Pareto analysis, surveys, cause and effect diagram, data collection, flowcharting, work simplification, and cost/benefit analysis.

Table 33.15 is a partial list of projects completed by a large interstate bank during a single year.

In medium- to large-size organizations, tracking projects makes it possible to manage their progress, share essential information about them with other parts of the organization, and to replicate solutions where appropriate. A quality improvement tracking report system is illustrated in Table 33.15.

Project reporting is most effective when it is on line with search mode. In addition to general publicity through press and house organs, it is useful to publicize projects with potential for replication directly to the areas which would benefit from it, to exploit all possible opportunities for replication.

IMPLEMENTING AND GETTING STARTED WITH TQM IN FINANCIAL SERVICE

Section 14, Total Quality Management, covers in detail the process of planning and introducing TQM. The present section offers a few illustrative examples from financial services.

Training and Resource Commitments. Training must be conducted and carried out first with the chief executive officer and the chief operating officer down through all levels of management within the organization. As an example, training for quality was of the utmost importance to NatWest USA. A total of 2500 employees—including the chairman, president, and every senior and executive vice president received training.

TABLE 33.15 Quality Improvement Projects at a Large Bank

Project no.	Department/branch	Project title	Identified cost reduction/revenue enhancement, $
1	Accounting services	Computer output team	466,000
2	Consumer credit collections	Retail collections job descriptions	366,421
3	Financial administration	Employee expense reimbursement	341,040
4	Bank card	Late fee review	288,388
5	Commercial banking	Account profitability/private banking	220,303
6	Operations	Cash and due team	220,124
7	Commercial loan	Commercial loan services	212,610
8	Interbank/cross-function	Cash management	168,364
9	Corporate banking	Small business lending	161,000
10	Branches	Vault cash	153,138
11	Operations	MICR reject	146,656
12	Commercial loans	Commercial loan standardization	145,446
13	Bank card associates	Credit procedure review	142,740
14	Special industries group	Credit services	138,000
... ...	...	...	
61	Asset/accounting	Collateral protection insurance	27,400
62	Bank card/collection	FCS/CMS nondelinquent accounts	26,926
63	Commercial banking	Commercial loan documentation	25,650
64	Operations analysis	PC maintenance	25,640
Total cost-reduction opportunity			6,054,895

All of NatWest USA's 4700 employees attended a 1- or 2-day training sessions. This training ensured a common language and approach and provided a standard set of tools and techniques to address the opportunities at hand.

Each course included a broad-based discussion of quality, creating a common definition of quality, customer/supplier relationships, identifying and meeting customer needs (for both internal and external customers), the cost of quality, quality measurement and reporting, and tools and techniques for data collection and analysis. Case studies utilizing current bank data and processes were key elements of the training.

Different kinds of training with different objectives must be made available to different types of employees. Figure 33.7 demonstrates the array of courses offered by a Fortune 500 financial service company that is relatively mature in the quality management process.

Some of the best-performing financial service companies report 10 to 15 days of training per year per employee.

Strategic Planning. An extremely important element to sustain and drive a total quality effort is strategic planning. Quality must be integrated into the business plans of financial services companies or any company for that matter. This keeps quality from becoming an adjunct activity and elevates it in importance, as it should be, with operations, finance, marketing, etc.

It can become a strategy of its own or can be integrated with other strategies. Quality activities such as measures, goals, standards, projects, training, and teams make the strategic plan a reality by executing the strategies. See Section 13, Strategic Deployment, for more details regarding strategic planning.

Management Involvement—Professional and Personal. Effective leadership of the quality improvement process requires senior management to set an example and tone for quality within their organizations. In some companies, this includes the designation of a chief quality officer, with responsibilities analogous to those of the chief financial officer. These responsibilities include planning and assuring that the organization's plans for quality are developed and are being carried out, assuring that quality is being managed and controlled to plan, and assuring that quality improvement is continuous. The chief quality officer is most able to be effective when the position reports to the CEO, president, or the chief operating officer of the company.

The Dawn of Revolution. More and more financial services are becoming automated every day; this is especially true in retail services. In banking, there is a fundamental shift underway—from brick-and-mortar, people-intensive service to service which is totally electronic. According to the American Bankers Association, as of 1996 over 40 percent of transactions were electronic; the figure is projected to be 60 percent by 1998. Soon, it will not matter whether the bank, broker or insurance company is in Boston, Beijing, or Barcelona.

Managing the quality of customer service
Leading and facilitating teams
Customer satisfaction measurement
Quality measurement
Quality cost measurement
First impressions
Beyond customer satisfaction
Customer-first teams
Customer inquiry handling
Market damage measurement

FIGURE 33.7 Content of financial service quality training.

- In obtaining a loan, the original signed note is the only physical document required; it can be transferred by overnight courier. The money and all of the other information can be sent by fax, on the Internet, and by wire transfer.
- A deposit and investment account can be set up and transactions conducted by fax, Internet, and wire transfer.
- Life insurance application and payment can also be done by fax, Internet, and wire transfer. Only the medical examination resists automation as of this writing. The results, though, can be transmitted by fax to the insurance company. A nurse can visit the applicant at home to administer a blood test, take blood pressure and pulse, and so on.

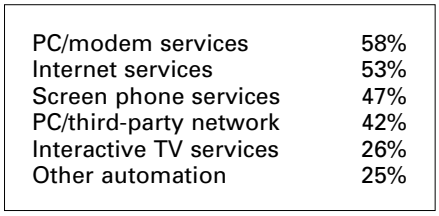

FIGURE 33.8 U.S. banks' service plans for 1998.

As electronic capability increases, the accompanying reduction in costs, cycle time, defects, and errors increases profit.

In the 1980s home banking ventures were a failure. Today, over 40 percent of American homes have personal computers; an even higher percentage of businesses have them. This equipment base creates a far more fertile climate for electronic financial services than existed just 10 years ago. Figure 33.8 shows what U.S. bankers planned for 1998, according to the American Bankers Association.

An electronic innovation of great potential for change in financial services is the "smart" card. The smart card resembles the credit card in appearance, but differs radically in that it contains electronic circuitry that enables it to be electronically loaded with monetary value and be relatively independent, except for a simple device to electronically read and transfer value from it. A person can receive salary or incentive payment on the card, make payments and transfers, pay for services, and get cash. This expansion of services is potentially very attractive to customers. Additionally, the card promises services that are faster, more reliable, more accurate, in a wider variety, and at lower cost.

Dozens of smart card trials are being carried out around the globe. Smart cards are being tested in France and Spain and were also tested in Atlanta at the 1996 Summer Olympics. Dutch banks, including ING Bank, are issuing the cards now and expect them to be distributed nationwide by the end of 1998. American Express pays bonus incentives to its employees with smart cards it developed.

The smart card and other elements of the electronic revolution portend great change in financial services. Improved services for customers will be accompanied by a great change in the nature and number of jobs in financial services. There will, no doubt, be more jobs requiring higher skill levels, such as customer service, programming, computer operation, and so on. In proportion, there will be fewer clerical jobs.

Companies in the financial services sector will find that the tools of quality management will provide welcome help in mastering this rush of innovation and change, and may prove to be the competitive edge.

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