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THE FOUR-S OUTSOURCING MODEL

How Issues of *SCALE*, *SPECIALTY*, *SALE*, and *SURRENDER*
Figure in the Banker's Decision to Outsource

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EXECUTIVE SUMMARY

Outsourcing is becoming an increasingly attractive means for firms in all industries to cut costs and increase operational efficiency. By some estimates, U.S. businesses outsource between $2 and $5 billion in work each year, and these annual expenditures are expanding so quickly that they will surpass $40 billion by 1995.[1]

Growing numbers of banks, spurred by market forces to reevaluate how they apply and manage technology, are outsourcing all or part of their own Information Technology (IT) operations. A recent article in *AMERICAN BANKER*, for instance, estimates that the number of banks contracting with outsourcers has doubled over the last five years.[2] A 1991 survey by *Bank Systems and Technology*, moreover, indicates that more than half of America's banks, large and small, are outsourcing at least some of their IT operations.[3]

The trend toward outsourcing in the banking community has been accompanied by a demonstrable expansion in the range and level of outsourced services available to financial institutions. This essay attempts to explain this evolving phenomenon by summarizing the business and operational reasons that motivate bank managers to turn over some or all of their IT operations to third-party vendors. Our intent is not to advocate or discourage outsourcing, but to explain the reasons why it might make sense to outsource and the important considerations, both pro and con, in various business contexts. We hope our model can help answer the practical question "When does it make sense for banks to outsource?"

To that end we will discuss a framework that encapsulates the diverse business motives behind the outsourcing decision. This model[4] identifies four broad categories, each summarized by a word

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[1] Gayle Gaddis, "Network Managers Turn to Outsourcing," *Telefacts*, October, 1990, p. 22; Ivy Schmerken, "Outsourcing Holds the Line On Technology Costs," *Wall Street Computer Review*, January, 1991, p. 13.

[2] Matt Barthel, "Industry Asks If Outsourcing Really Pays Off," *AMERICAN BANKER*, August 21, 1991, p. 1.

[3] "Is Outsourcing About to Make the Big Time?" September, 1991, p. 49.

[4] The Four-S Outsourcing Model developed by co-author Michael Zucchini.

beginning with the letter *S*, under which virtually all outsourcing decisions by bankers can be placed in context and explained.

The four categories in the Four-S Outsourcing Model are *Scale*, *Specialty*, *Sale*, and *Surrender*. Although these categories may overlap in some specifics, they provide a simple and useful framework for understanding this complex development in our industry.

- **Scale** refers to the economies of scale achieved by outsourcers running high-volume operations—which, for banks with less extensive IT operations, translates into lower costs than they could achieve on their own.

- **Specialty** accommodates the growing number of bank outsourcers that focus on narrow disciplines of IT or operational expertise and therefore provide high levels of service in specialized areas at attractive rates.

- **Sale** refers to the short-term earnings or short-term balance sheet advantages when a bank jettisons internal IT operations in favor of outsourced services.

- **Surrender** refers to a bank's decision to give up control of IT operations in the face of insurmountable difficulties associated with meeting day-to-day demands in servicing the needs of a full-scale financial institution.

It might be helpful to view the first two categories as positive or "functional" motives for outsourcing, and the last two as "dysfunctional," at least in most contexts. Similarly, Scale and Sale can be regarded as motivations based on economics, while Specialty and Surrender can be interpreted as expertise-oriented motives. Exhibit 1 illustrates the interplay among the four categories in the model.

	Economics	Expertise
Functional	**Scale**	**Specialty**
Dysfunctional	**Sale**	**Surrender**

EXHIBIT 1: The Four-S Outsourcing Model

OUTSOURCING'S EXPANDING ROLE: WHAT IT MEANS FOR BANKERS

There can be little doubt, judging from the sheer volume of articles in banking trade journals and periodicals, that outsourcing is "hot." Yet outsourcers have been part of the banking picture since the late 1950s, when data processing technologies first began to influence the financial services industry. Electronic Data Systems (EDS) and Systematics, for example, have provided facilities management services for decades. Larger banks themselves have long provided outsourcing services to smaller banks and some continue to do so. Outsourcing is really a well-established practice under a new name. Over the last few years, however, outsourcing has begun to assume a far wider role in the banking business.

For the typical bank, outsourcing implies something of a trade-off: the bank gives up control of certain information technology or operations resources in return for cost advantages and/or operational efficiencies. Strategic or competitive advantages associated with the outsourced IT functions are sacrificed in the transfer of control. For that reason, until recently, most outsourcing has centered on *scale* or *specialty* DP functions, such as payroll and a few other non-strategic support operations (e.g., lockbox and legal services). Historically, regional and smaller banks, i.e, those limited in resources and less able to use leading edge technologies for strategic advantage, have been the most likely to outsource the lion's share of all IT operations.

This picture is changing rapidly. The surge in outsourcing must be considered in the context of the current business climate, where several factors—a recessionary economy, strong competitive pressures from inside and outside the industry, and a consolidating industry—have worked together to make cost reduction a vital management goal. MIS has always been a costly element in bank administration. Questions of strategic advantage aside, outsourcing is an increasingly attractive way for some banks, large and small, to lower costs.

A case in point: American Savings Bank, a Stockton, CA, institution with $17 billion in assets, was so satisfied with its limited outsourcing arrangement for retail and lending transaction processing that it awarded the vendor, FIServ, Inc., a new and greatly expanded contract. FIServ now handles all back-office processing for the bank, which expects first year savings of more than $5 million, and projects $10 million in savings each year after four years of operation.[5]

The increasing frequency of mergers and acquisitions has also influenced the outsourcing trend. An outsourcer often represents the best solution, from both financial and operational standpoints, to consolidating the independent IT functions of banks as they join forces.

The recent merger of Chemical Banking Corporation and Manufacturers' Hanover Corporation provides a good example. Management at the newly combined institutions is reportedly considering outsourcing a substantial portion of IT operations. As of this writing, both EDS and Systematics, two of the dominant outsourcers in the financial services sector[6], are competing for a comprehensive contract to run the core back-office operations of the consolidated banks. The bank expects to save $650 million in expenses annually as part of the merger. Nearly a third of these savings would come from eliminating redundant systems and operations. If consummated, this arrangement will be the largest outsourcing agreement (in total dollar terms) in the banking industry.[7] An outsourcing strategy in this case would be tied to achieving these economics faster and with certainty.

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[5] Alan Radding, "The Outsourcing Experience," *Bank Management*, September, 1991, p.31.

[6] Perot Systems, Inc., has also become a key player relatively quickly. IBM is another growing force in the outsourcing business, and Computer Sciences Corporation (CSC) has also entered the fray.

[7] Richard Layne, "Chemical, Hanover Farming Out Data Systems," *American Banker*, August 5, 1991, p. 1.

AMERICAN BANKER reports that such arrangements represent a continuing trend in the industry, and predicts that most banks will have to adopt some form of outsourcing just to "survive the accelerating pace of industry consolidation."[8] It is clear that outsourcing does have an important role to play in the banking business as it evolves. The Four-S Outsourcing Model represents a useful framework for considering the relative advantage of outsourcing under given conditions.

THE OUTSOURCING MODEL

Scale. Economies of scale translate directly into business advantages. For banks and other financial institutions, MIS operations are expensive, and many of their MIS costs are fixed, no matter how many customer accounts they support. Yet as account volumes increase, per-unit costs decline, creating a more efficient organization.

Some banks are big enough to achieve meaningful economies of scale on their own. According to a 1990 study of credit card issuers conducted by Strategic Planning Associates, large issuers realize a $15-$20 operating cost advantage **per-account** over mid-size issuers. These per-account costs were about 40% less than those of the smaller banks, and were consistent through all credit card support functions (e.g., system development, statement rendering, payment processing, customer service, and collections).[9]

A handful of other financial institutions are large enough to develop dedicated, full-service IT operations that can take full advantage of scale economies. American Express Information Services Group (ISC) is one of them. ISC recently completed a new data center in Medford, Massachusetts, to handle all IT functions (at an annual budget of $60 million) for two key units of American Express. The facility will eventually house as many as 20 mainframes and offer a processing capacity of 3,000 MIPS. What's more, ISC intends to make its excess capacity (i.e., any processing capabilities available after it serves internal needs) available to outside clients, in effect becoming an outsourcing vendor in its own right.[10]

But the great majority of banks do not handle the processing volumes that would allow them to leverage economies of scale even remotely comparable to those of American Express or, say, Citibank and Bank of America. So, for all but the very largest players in the industry, outsourcing to an outside vendor that can achieve significant economies of scale **may** make sense.

Because an outsourcer typically serves several clients (often from a single facility) and deals in relatively high volumes, its per-unit costs for computing and communications resources, including labor, are relatively low. Those savings, after factoring in a reasonable profit for the outsourcer, can be passed on to the outsourcing bank. The financial benefits may be enough in themselves to

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[8] Lawrence A. Willis, "Outsourcing Can Mean Big Savings," *AMERICAN BANKER*, May 24, 1991, p.4.

[9] Mark A. Argosh and Paul J. Cusenza, *Credit Card Shakeout*, Strategic Planning Associates, May 1990.

[10] Bruce Caldwell, "AMEX Turns Inside Out," *INFORMATIONWEEK*, May 20, 1991, p. 22.

convince a bank to sign on. In this regard, a recent article in *American Banker* suggests that outsourcing typically reduces operating costs between 15% and 40%.[11]

New York's Bankers Trust reports dramatic savings during its six years of experience with outsourcing. Since 1985 the bank has successively outsourced some 15 operations and administrative areas, including reprographics, payroll, and personnel records. That approach has saved Bankers Trust over $4 million a year and has allowed it to reduce its staff by 500 positions.[12] The bank can now adjust its expenses more flexibly to meet changing business circumstances and can concentrate its resources on strategic IT areas.

On the other hand, a bank should carefully consider the longer-term strategic implications of a decision to outsource. It would be ill-advised, for example, to outsource the core IT functions that support or guarantee a bank's competitive advantages in its market. By the same token, it is not realistic to expect to secure a lasting competitive advantage just because the outsourcer offers more advanced technologies than the bank has in place. By its very definition, outsourcing is not a means for achieving exclusive access to a new technology—at least not for very long.

In addition, since outsourcing inevitably means a loss of direct control over IT operations, a bank should realize that it loses the ability to ensure its own quality and service levels. In most cases, once a contract has been executed, a bank's only leverage with the outsourcer is whether or not it will renew the contract, and that decision is initially a long way off. The point is that doing things differently than the contract stipulates will be an expensive undertaking. During the early years of a contract, the need to upgrade a technology or approach might not arise, because of the bank's ability to predict changing conditions over the near term and provide for them in the contract. In the out-years of a contract, however, it may be very expensive or even impossible for a bank to take creative and timely advantage of new information technologies it could not possibly have foreseen when it entered into the agreement.

Finally, even in the most unremarkable outsourcing arrangements there are new management costs beyond the contractually stipulated outlay for the outsourcer's services. Simply managing the relationship with the vendor entails incremental transaction costs, and these should be factored in when a bank evaluates the business case of an outsourcing venture motivated by the drive to achieve scale economies.

Essentially, the advantages to a bank represented by favorable economies of scale in a vendor's operations cluster in the near-term. In making an outsourcing decision based on favorable scale factors, a bank gains cost savings—substantial and predictable in the short-run, less so as time passes—at the expense of management and technological control over the outsourced operations.

Specialty. The rapid growth of the outsourcing business has been accompanied by market segmentation and increasing specialization within target industries. The result: firms that offer narrowly focused or expert services have come to play a key role. Bankers can turn to specialist providers—for example, SEI in trust management services—to shore up organizational weaknesses and/or free resources to concentrate on more strategically advantageous areas.

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[11] Willis, p.4.

[12] Sheila O'Heney, "Outsourcing Solutions to the DP Puzzle," *Bankers Monthly*, July, 1991, p. 27.

First Data Resources, Inc. (FDR) is a prominent example of a specialty outsourcer. FDR processes 45 million debit and credit card accounts, including Mastercard and Visa. Both Manufacturers' Hanover and Chemical Bank, to cite two banks among many, outsource the automated support for their credit card operations to FDR.

By outsourcing to a specialty provider, a bank achieves instant access to proven, and very often advanced, technology and capability. The specialty itself provides a high incentive for the outsourcer to innovate, as its growth depends heavily on its reputation for marshalling state-of-the-art skills in its area of expertise. The bank realizes these benefits without assuming the full costs or risks associated with development, or the burdens associated with training and a learning curve. All these advantages, moreover, come relatively inexpensively, in view of the bank's likely costs to achieve them independently (a scale advantage in its own right).

A side benefit of successful specialty sourcing is that it allows the bank to focus on IT areas where its own expertise and, ideally, its own competitive advantages are strongest. A potential disadvantage of specialty sourcing, on the other hand, is implied in the obverse of this benefit. The bank's own IT staff is cut off from developments in the outsourced specialty. Internal skills do not develop and, in effect, the bank entrusts its future in the specialty area to the outsourcer.

The ramifications of this point are not always negative, but there have been instances where specialty providers have not proven expert enough for the needs of key clients. Soon after Bank of America turned over its securities settlement operations to an outsourcing vendor, for example, it became evident to the bank's management that its own expertise in that area exceeded that of the vendor. Bank of America brought the operations back in-house at the end of the contract.[13]

Large organizations can secure specialty capabilities on their own that are even more advanced than those provided by outsourcers. This is possible because the resources in which they invest are unencumbered by the need to suit their solution to the more general needs of a broad clientele. While the specialty provider's offering may seem more advanced to the broader market, the most advanced capabilities are more likely to evolve first in the largest and most sophisticated organizations in the industry.

Sale. From an accounting standpoint, a bank's internal IT operations are non-earning assets. By outsourcing IT functions, a bank with a desire to improve its financial profile can, in effect, make IT costs disappear from its balance sheet. This approach can yield a short-term, one-time advantage with respect to the bank's ability to attract investors or even an acquirer.

Clearly the benefits that emerge from outsourcing for motives under this category are almost exclusively financial, with some more cosmetic than others. Enhancing an institution's cost structure and financial profile in this way is in effect a one-time, nonrecurring improvement. Consider this hypothetical (and simplified) example. An outsourcer offers to take over, at $40 million a year, the IT functions of a bank whose annual budget for these operations is $50 million. The outsourcer expects the arrangement to be profitable, as it can run the operation for the bank far more efficiently than the bank itself. The outsourcer projects its annual operating costs at $30 million, after initial conversion costs of $10 million.

The bank, on the other hand, realizes an immediate annual pre-tax earnings increase of $10 million because the operational savings drop right to the bottom line, as shown in Exhibit 2. The

[13] "Bank of America Brings Outsourcing In," *Banking Software Review*, Summer 1991, p. 14.

outsourcer, because of its investment in converting existing systems, defers its gains for the time it takes to replace its "inherited" systems, continuing to incur the costs of operating the old systems. At that point its annual revenues from the agreement begin to exceed its operating costs by $9 million. As Exhibit 3 illustrates, the cross-over to profitability for the outsourcer occurs after year two, and breaks even in year six.

Impact on Cash Flow from Bank's Perspective
($M)

Original Operating Costs	(50)
Current Operating Costs	(40)
Net Earnings Increase	10

EXHIBIT 2

Cash Flow from Outsourcer's Perspective
($M)

	Year										
	1	2	3	4	5	6	7	8	9	10	Total
Investment:											
Operations	(50)	(50)	(30)	(30)	(30)	(30)	(30)	(30)	(30)	(30)	(340)
Conversion*	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(10)
Income	40	40	40	40	40	40	40	40	40	40	400
Net Cash Flow	(11)	(11)	9	9	9	9	9	9	9	9	50
Present Value (at 10%)	(11)	(10)	7	7	6	6	5	5	4	4	23
Cumulative Present Value	(11)	(21)	(14)	(7)	(1)	5	10	15	19	23	

* amortized over ten years

EXHIBIT 3

In this example both parties appear to win. The bank enjoys an immediate and substantial financial gain. The outsourcer profits later, after the converted systems are operational. In effect, the outsourcer is lending the bank earnings—financing the bank's immediate earnings growth in return for substantial profits in the outyears of the contract.

Given these realities, it is not difficult to see how outsourcing can be a quick fix for a bank, even a very large bank, that has to improve its financial profile, or is close to the margin in meeting its capital requirements, or simply needs cash for other reasons. At the same time, it is a step that is extraordinarily difficult to reverse, given the outsourcer's earnings structure as the contract period proceeds. A bank is not likely to bring the outsourced operations back in house during the contract period without a substantial buy-out to compensate the outsourcer for lost earnings in the out-years of the agreement.

In a variation on this case, a bank can transform its investment in IT resources into immediate cash if its IT facilities and resources have a high value to the outsourcer in their own right. It is widely thought, for instance, that Perot Systems was motivated to offer a premium in its outsourcing terms with First American Bank in Virginia because of the bank's modern information center, which reverted to Perot as part of the outsourcing agreement.

The *sale* category also applies (although the *surrender* motive is also relevant in this context) in cases of merger or acquisition, where the rapid consolidation of independent IT operations is a key goal. Outsourcing is often the most expeditious means to full IT consolidation for newly merged institutions. We have already cited the Manufacturers Hanover-Chemical Bank merger as a case where a third-party outsourcer is likely to generate substantial cost savings in the consolidation of separate data centers. One commentator states that the outsourcing of data center operations through a third party provider can save six months in consolidating the information systems and operations of merged banks.[14] At savings that can approach $15 million a month, that can make a big difference.

Surrender. When a bank simply finds it too difficult or (for reasons it may not be able to explain) too expensive to manage its own information technology operations, an outsourcer is often considered. The bank may be paying for IT capacity far beyond its needs, or have problems tracking resource utilization, or even find its inability to predict future IT costs an impediment to its success. The surrender decision is a real consideration for banks that are struggling to use IT effectively in their businesses. It is often more than a matter of cost; it is a matter of ability. Sometimes management finds itself unable to integrate IT effectively with the culture and people of its organization. Actualizing the potential utility of information technology by assimilating it as an integral part of the business vision is still an uncommon (or elusive) agenda for most companies. In the absence of a vision that integrates business imperatives and information technology, inevitable conflicts of purpose and culture arise.

The day-to-day complexities of operating an IT infrastructure — and turning it into **strategic advantage** — are enormous. Organizations that find themselves with other priorities on which to spend their scarce resources and time might want to leave the IT driving to others.

There is another business motive for outsourcing that can be viewed under the *surrender* category, but for different reasons. Defense contractor General Dynamics recently outsourced its IT operations to Computer Sciences Corporation (CSC) in a contract estimated at $3 billion over ten years.[15] General Dynamics, with an annual IT budget (pre-outsourcing) reputed to exceed $500 million, clearly had the potential to leverage massive economies of scale in information technology for its own advantage; yet it turned over those functions to CSC in return for a cost savings approaching 50%.

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[14] Layne, p. 3.

[15] Peter Krass, "General Dynamics Outsources," *Information Week*, September 30, 1991, p. 14.

By inference, this case would appear to constitute a surrender of another sort, in that it could evidence General Dynamics's unwillingness to make the tough management decisions necessary to reorganize its IT operations for maximal efficiency. It is not difficult to conceive, in this instance and others, of the outsourcer playing the "bad guy," undertaking politically unpopular actions such as terminating and consolidating staff resources, and enforcing high performance standards and sound operating practices that the "host" company was unwilling to implement. It may shed some light as well on the dramatic cost and time savings that are attributed to outsourcers in bank consolidations, which may result as much from the management will of the outsourcer as from its efficient operations.

PRACTICAL CONCLUSIONS

By concisely summarizing the range of business motivations for outsourcing, the Four-S Outsourcing Model permits a few general conclusions that can serve as guidelines for institutions considering entering into outsourcing agreements.

While the financial advantages of an outsourcing arrangement can be compelling, they apply most forcefully in the early stages of a contract. The primary tradeoffs to consider are service, quality, and the flexibility to take advantage of new ideas and technologies as they emerge downstream. There are also obligations associated with managing an outsourcer—specifically the responsibility for monitoring quality, technical direction, and performance, not merely day-to-day, but year-to-year as well.

Also, bringing previously outsourced operations back in house is not a simple step, even when a contract has run out. At contract's end, managers need to identify and compensate for sunk costs, technical and business opportunities forgone, and the degree of degradation in the organization's internal IT skills base during the outsourcing period. In short, it may be necessary to continue the relationship with the outsourcer for a time, even though the contract has expired. That can even mean a period of parallel operations until the bank is able to run the IT function effectively on its own.

Perhaps the bottom line in this discussion is that a business should retain responsibility for areas that it can support efficiently and economically or that are responsible for its strategic or competitive advantages. The rest can be outsourced to advantage.

CEOs who consider outsourcing in light of the Four-S Model will be motivated to confront the reasons behind their attraction to this course of action. With any luck, this will mean they will better manage expectations and set a direction with increased clarity of purpose and vision.