James Sagner, *Cashflow Reengineering*, AMACOM, 1997

Chapter 11: The OPQR Paradigm

IT IS BETTER TO KNOW SOME OF THE **QUESTIONS** THAN ALL OF THE **ANSWERS**.

James Thurber (1894 - 1961)

YOU'RE EITHER PART OF THE **SOLUTION** OR PART OF THE **PROBLEM**.

Eldridge Cleaver (1935 -

Various cashflow reengineering outcomes have been discussed throughout this book. The principles underlying these outcomes are summarized in Table 11-1.

Table 11-1

Cashflow Reengineering Principles

No.	**Statement of Principle**	**Example of Principle**
I	*Managers focus on objectives sub-optimal to their organizations due to various factors convenient to the*	Issuance of invoices at Systems convenience; the "clean desk"

	requirements of their management roles.	syndrome in Payables
II	*Managers may focus on objectives sub-optimal to their organizations due to various factors supportive of their personal objectives.*	Sales below cost due to compensation plans based on sales volume
III	*Managers cannot manage from objectives appropriate to the enterprise but which are indivisible to the level of the business or functional unit.*	Use of "profits" to evaluate business unit or manager performance
IV	*A quantitative system to measure the performance of managers does not necessary induce behavior in the interest of either the enterprise or the manager.*	MBOs as a measure of quantity (with no accompanying measure of quality)
V	*The quantitative comparison of processes across organizations may oversimplify the responsibilities specific to each manager, encourage haste in the workplace in order to meet the standard, and affect the quality of the product or service produced.*	Use of benchmarking without regard to standards of business performance

VI	*Managers should be evaluated on their plans for reengineering both within and outside of the boundaries of usual functional responsibilities. This involves specific statements regarding problem areas, the methods to be used for analysis, and the functional areas and/or managers with whom cooperation and coordination will be required.*	Development of an analysis of internal improvements to or the outsourcing of disbursement activity
VII	*Due to the myopia of traditional functional management, managers focus on elements of a business problem but do not visualize the entire problem, the various ramifications of the problem, and all of its possible solutions.*	Re-design of systems generating payables without consideration for the cost of that re-design vs. outsourcing
VIII	*All cashflow reengineering efforts are derived from combinations of improvements to current systems <u>and</u> outsourcing throughout a collection, concentration or disbursement process.*	Upon reexamination, outsourcing payables supplemented by internal improvements through redesign of the system of matching purchase orders,

		receiving reports and invoices
IX	*Managers who focus on the quantitative measurement of alternative courses of action often underreport and/or fail to understand the qualitative factors essential to the accomplishment of their jobs.*	Qualitative factors not included in business decision-making
X	*The essence of management is the continual exploration of opportunities to improve the performance of the organization. The manager must constantly review activities by competitors and product/service offerings by banks and vendors, and be prepared to consider changing his/her business procedures to accommodate new technology and new methods.*	

The reengineering revolution goes beyond these principles to focus on the more thoughful use of quantitative skills in evaluating managerial performance. Organizations are fixated today on counting things (*e.g.*, the number of sales calls or checks disbursed, the dollars of cost), even though this obsession oversimplifies the role of the manager. Managers fail to continuously analyze their areas of responsibility and those of outside of their functional boundaries.

There are four overriding conclusions regarding the management of organizations in today's business climate:

ORGANIZATIONS REWARD THE PERFORMANCE OF THE SBU OR THE MANAGER RATHER THAN HIS OR HER CONTRIBUTION TO THE PERFORMANCE OF THE ORGANIZATION. THIS IS THE ORGANIZATIONAL PERFORMANCE OR "O" PROBLEM. We have noted this problem in the discussion of the manager's focus on objectives convenient to the accomplishment of his/her function or personnel needs, and because of the difficulty of developing useful individual or SBU objectives based on the objectives of the organization. In other words, while everyone ostensibly cares about the success of the organization, the real desire for most of us is to be personally survive and be professionally successful.

This phenomenon is illustrated by the attitudes of the citizens of a country toward the security of that country. While lip service may be given toward improvement of conditions within the nation, individuals and groups promote their own interests before that of their fellow citizens. When survival is threatened, as in wartime, those individual/group causes are necessarily subordinated to that of the nation.

ORGANIZATIONS DO NOT EMPHASIZE A RIGOROUS METHODOLOGICAL OR ANALYTICAL PROCESS IN THE IMPROVEMENT OF ORGANIZATIONAL PERFORMANCE. This is the process or "P" problem. The pursuit of advanced education and certification has become universal in our culture, with MBAs, CLUs (for insurance), CCMs (for treasury management), CFAs (for investment analysis) and other qualifications commonly attached to managers' names. These programs are academically demanding, and we are now a universe of highly trained managers. However, when considering a business problem, we frequently choose the least difficult analysis. We draw the narrowest possible boundaries around the issues to be considered, and use the most simplistic analytical methods to approach any problem. A good example is the Chapter 7 discussion of cash forecasting. Do we thoughtfully analyze inflows and outflows to determine patterns of cash activity, perhaps utilizing statistical techniques, or do we determine each day's net position and invest or repay debt overnight? Most financial managers do the latter.

Furthermore, we do not concern ourselves with how a change in our function or job will effect other elements in the organization, despite the fact that such functions are closely intertwined with nearly every other organizational activity. For example, if the marketing manager decides to reduce prices in a product line, cashflow will decline, inventory requirements may rise, production may have to be rescheduled, and workers may be moved from their current jobs to a different production line. Were all these functional areas informed about the price change? In our experience, not likely.

ORGANIZATIONS OVERSIMPLIFY THE EVALUATION OF MANAGERIAL PERFORMANCE THROUGH SCHEMES USING QUANTIFICATION. THIS IS THE <u>QUANTIFICATION</u> OR "Q" PROBLEM. The manager's job involves a highly complex interplay of personnel, equipment, overhead, materials, customer requirements, financial results, information systems, and a host of other factors. Yet when we establish goals for ourselves and our work groups, we focus on the most simplistic possible quantitative measure without regard for the quality of the effort. Thus, a set of managerial objectives might include the number of sales calls, the dollars of expense or the failure rate of a production process, or even more simply, the number of hours or days worked.

The nature of the manager's job makes more complex evaluation difficult and subject to concern for objectivity. A good manager is involved in so many activities within his/her organization, with so many interfaces to so many elements, that a simplistic count of "successes" against a goal would be laughable, if it were not such an insult.

FINANCIAL REENGINEERING INVOLVES A SERIES OF PROCEDURES TO ANALYZE AND IMPROVE ORGANIZATIONAL PERFORMANCE IN MANAGING EVENTS ALONG THE CASHFLOW TIMELINE. THIS IS THE REENGINEERING OR "R" SOLUTION. The effort necessary to re-design business processes to save costs and time, and to improve service, forces the manager to go beyond the limitations inherent in the O, P and Q problems, and to attempt to find approaches supportive of the organizational mission.
The O, P and Q problems and the R solution are illustrated in the following cases drawn from our consulting work.

Case 1: Telecommunications Company

A telecommunications company was comprised largely of independent, non-integrated businesses, functioning as if they were stand-alone operations. At no time during the consulting engagement was there any concept expressed of the Case 1 company as a billion dollar enterprise; rather, responses were driven by the perceived needs of the individual business units. (THE O PROBLEM)

Each business unit retained its own sales force, its own order entry clerks, its own invoicing activity, its own lockbox and office collection procedures, and its own cash application function. While there was movement toward a company-wide information system, the prevailing attitude was displeasure at this development and an intention to maintain supplementary business unit-specific systems. (THE O PROBLEM)

The initial request by the company of the consultants was for a more efficient lockbox system, in that each major business unit maintained its own collection system. In justifying the study, the Treasury Department assumed that about $50,000 in banking fees and float could be saved. However, no thought was given to reviewing the various activities along the cashflow timeline to determine if an integrated plan of internal improvement and/or outsourcing would provide superior efficiencies. (THE P PROBLEM)

Discussions with all business units indicated that sales representatives are compensated by booked sales statistics without regard to the amount of the cash downpayment or the timing of subsequent remittances. The marketing of product was unrelated to the profitability of each sales activity, and sales concessions were often made to accomplish the sale without regard to the impact on the ROE of the organization. For example, the requirement for down payments with orders was commonly waived, and payments were received long after the normal net 30 day without penalty. (It was recommended that the entire sales compensation system be reviewed, perhaps with a view toward incenting sales activity to compel earlier and larger cash payments.) (THE Q PROBLEM)

The information system issues invoices which provide information as to the company office and lockbox ("remit to") addresses, as well as the buyer's shipping and billing addresses. It was recommended that, in the initial phase of reengineering, that invoicing be by the individual business units, as at present, with lockboxing and cash application centrally managed by one collections unit. The objectives of centralizing collections would be to optimize collection float, reduce the total number of lockboxes and their cost, reduce the number of personnel assigned to the cash application process, and more aggressively manage credit and collections. The annual benefit was expected to exceed $325,000 annually, calculated as:

Float:	Some 1/3 - 1/4th day, assuming $2 million/business day at a 10% cost of capital, saving $60,000.
Banking Costs:	85,000 items processed at about $1.00 all-in, saving $100,000.
Personnel Costs:	Assuming one-third of the cash application personnel in 15 business units at $25,000/year (salary and benefits), saving $125,000.
Credit and Collections:	Savings to be determined, but certainly to be in excess of

	$25,000/year.
Balances in Payment of Bank Services:	At two banks, saving $17,500/year.

In the second phase of reengineering, the centralization of all invoicing activities would occur, with outsourcing of the cash collection process (through lockboxing) as well as cash application against an open receivables file transmitted daily by the company. Credit and collection problems from late payers would also be managed on an outsource basis, to make the process more efficient and professional and to remove the company from the direct role of collection "enforcer".

The annual benefit of these actions was expected to be an additional $175,000 annually, calculated as:

Centralization of Invoicing:	Elimination of multiple billing systems and various accompanying efficiencies saved $75,000/year
Outsourcing of Cash Application:	Cost of bank service versus the maintenance of internal systems and receivables personnel saved $50,000/year
Outsourcing of Credit and Collections:	Cost of credit and collection activities, lost opportunities (including float), and goodwill saved $50,000/year

Thus, the total savings were $500,000/year.

(THE R SOLUTION)

Case 2: Public Utility

A public utility providing gas and electric energy services to consumers and corporate customers published goal statements professing the importance of a corporate focus on customer satisfaction. Unlike the Case 1 company, nearly every manager interviewed described this focus as a primary importance.

The investigation of the various functions with cashflow impacts brought the consultants to several business areas which were conducting their affairs without regard to generally accepted financial practice. For example, this company retained its own shareholder/bondholder services unit, despite the fact that the banks offer such services at considerably less expense and with far greater expertise and technology than any company could provide.

When this was discussed with the unit's manager, there was hostility and an immediate rejection of an alternative approach. Based on interview data and other investigations, we concluded that the manager was perpetuating his job and those of his subordinates despite the suboptimal impact on the organization. (THE O PROBLEM)

Payments from consumers are received by mail at a central processing office and walked-in to paystation agents, which are businesses in each town designated to receive bill payments, issue receipts and make bank deposits. Although many of the checks received are drawn on a relatively small number of banks from within the company's geographic area of operation, no analysis had been made to open accounts in those banks for depositing that day, thereby improving funds availability. In fact, checks and currency received at both the central office and the pay-stations were held for courier pick-up until late in the afternoon each business day, well after the time for same-day crediting to the bank. Furthermore, no data was conveyed from these sites to the company to enhance the determination of the cash position and improve cash forecasting. (THE P PROBLEM)

A public utility is subject to the rules and oversight of a state regulatory agency, often called a "public service commission". The utility must present a request for any change in its rate structure to that body for approve. (Insurance companies, securities firms and certain other businesses face similar restrictions. This oversight is usually a function of either the company having a monopoly in the market served or being the custodian of the funds of the customer, that is, serving in a fiduciary or trust capacity.)

In reviewing the various activities of the utility, it became obvious that more efficient processes were available for many procedures, yet there was little interest in pursuing such improvements. When questioned as to this behavior, the managers often referred to the lack of a strong profit motive and the fact that any costs would be added to the rate base and inevitably approved for rate increases to the customer. (THE Q PROBLEM)

The utility had not reviewed the cost of its check disbursement business for many years, and was paying its banks in excess of 10¢ for about 500,000 annual controlled disbursement items. This was such high volume that the price should have been closer to 5¢ or less, for a potential savings by merely changing disbursement banks of some $25,000/year in bank service charges. There was no use of the technology of larger banks, including full reconciliation, Positive Pay, etc., and there was no float benefit from the disbursement bank used, even though over half of the vendors were from other states and could not complain about adverse treatment. It was recommended that disbursements be considered for both complete outsourcing, with all checks and electronic payments handled by a bank/vendor, or that the check disbursement portion be bid by banks.

The following were the key decision points in the decision process.

- *Vendor Pricing vs. Internal Costs.* The internal costs of disbursing, including all equipment, personnel, systems, postage and banking costs, were approximately $1.30, which is consistent with the costs incurred by other organizations with equivalent disbursement volume. The various bids from banks and vendors were significantly lower than that figure, some by half. Furthermore, the services bid would include important services not currently received by the utility, including full account reconciliation. If the outsourcing strategy were implemented, three positions would be eliminated.

- *Timing of Check Release.* Checks would be mailed the following day for payment files received by mid-day, assuring that all items will be received by vendors within three days of the transmission of the file.

- *Special Handling.* The vendor could provide special handling, such as items to be returned for attachments or delivery to vendors; checks written in branch locations and added to the issued file (for reconciliation purposes); checks being escheated (*e.g.*, for rate refunds) and checks in currencies other than U.S. dollars.

- *EDI.* The vendor offered assistance in migrating to an EDI environment for payments now made by check. In addition to significant EDI experience with customer applications in either production or implementation, they offer programs for vendor enrollment and implementation.

The annual benefit of these actions was expected to be $250,000 annually, calculated as:

Outsourcing of Disbursements:	Cost of bank service versus internal systems saved $250,000/year and enhanced disburesement service
Other:	Unspecified investment saved in EDI technology

(THE R SOLUTION)

Downsizing

The telecommunications company and the public utility each realized savings from a single idea in the hundreds of thousands of dollars per year. Typical experience with "Fortune 2000" organizations is that comprehensive cashflow reengineering efforts result in annual savings in the millions of dollars, and in fifteen instances annual savings have been ten times that amount or more. The total downsizing impact was significantly less onerous than has been reported in the press in recent years; each company in these examples eliminated four positions (on a full time equivalent basis) for each idea discussed. MORE

Prospects for Internal Improvements

A reengineered system should utilize technology to eliminate manual and mechanical processing, which are inevitably more costly than automated procedures. In addition, automation permits accessibility of data for analysis and decision-making on a real-time basis. The impact of the cash position can be measured at all times to schedule payments and settlements and to optimize organizational cashflow.

Internal improvement opportunities will be highly technology dependent, particularly as many organizations are operating systems installed in the 1970s and 1980s in languages no longer supported by their developers (*e.g.*, COBOL). Documentation is often inadequate due to the many fixes and changes which have been made by programmers and analysts who have long since departed. This will be a particular problem as the century dating issue becomes more apparent with the approach of the Year 2000, in that many systems which compare or use dates in computations cannot comprehend a date in the 21st Century.

However, there are many possible improvements which do not involve technology. Some of these are noted below:

- Consolidate collection/disbursement processing at sites with the most expensive processing costs into the least expensive sites. Specific savings could develop from reduced rquirement for equipment and labor, and reduced overhead and banking costs.
- Pickup mail as soon as available in the morning from the post office to extend the time for office processing, to allow daily deposits of cash received before the bank close of business (and before the ledger credit deadline).
- Renegotiate bank fees given the current overcapacity of many banks and the movement of smaller banks into cash management services.
- Charge clients for returns/redeposits to recoup related bank fees incurred on NSF items ("not sufficient funds").
- Liberalize instructions to your lockboxes to expedite the processing of exceptions, as high exception rates add significantly to bank charges
- Verify with Systems that your ACHs are completed one day after the date of the file transmission to your ACH bank. Banks may not initiate transactions on the date received,

but warehouse the ACH items until a future date, causing the loss of perhaps days of float.

- Have Mailroom staff review post office procedures, particularly if P.O. boxes are used. As P.O. boxes may require up to 3 sorts, mail may be heldover 1-2 days in busy post offices. Consider barcoding on pre-printed return envelopes and the use of lockboxes.
- Ask Internal Audit and Senior Management to insist that checks be mailed immediately after printing, with the stuffing of remittance documents by only a limited number of designated personnel. Organizations may protect a portion of the receipt and disbursement cycle but not other portions. An example would be the use of safety paper for the laser printing of checks, including the MICR-line, and then allowing those checks to be returned to the business units prior to mailing.
- Use the ACH to drawdown lines of credit or other credit facilities from your banks and for repayments, rather than using wire transfers or checks.

Prospects for Outsourcing

The recent trend to outsourcing has been driven by the proliferation of bank/vendor offerings priced at marginal cost (versus fully loaded cost) to support large sunk investments in the personnel and equipment necessary to provide appropriate services. The current era of overcapacity and discount pricing will end. Available data[i] shows that list price increases have been falling every year since 1991, with 20% of all list prices discounted to corporates.

However, banks and vendors cannot indefinitely price at or near marginal cost merely to buy business. New commitments to major investments in technology will be very carefully examined in the context of declining returns-on-equity on corporate cash management services, and while some banks and vendors will throw money at new plant and equipment, others will conclude that privately-labelled products from large banks with excess capacity or from third-party vendors is a more cost effective strategy. Eventually, pricing will reflect a more rational calculation of required returns than at present.

It is likely that outsourcing opportunities will radiate from traditional banking activities, which focus on the central portion of the cashflow timeline, *e.g.*, the depositing, concentrating, investing and disbursing of cash. As we have previously noted, banks and vendors offer various "comprehensive" collection and disbursing services, including the application of cash to open receivables, the generation of the disbursement payment including accompanying remittance detail, and payroll outsourcing, including check issuance and direct deposit and tax filings.

For companies in the Fortune 25 (or their non-profit equivalents), it is usually economic to attempt to pursue the type of internal improvements discussed throughout this book, although outsourcing collections through lockboxing is highly recommended. For organizations below that gigantic size ($XXX in revenues), outsourcing can usually be justified for all of the cash activities we have discussed. The major banks have not widely marketed their services to smaller companies, perhaps believing that the potential profitability is limited with small transaction volumes and sometimes less than investment grade credit. However, smaller companies do not "shop" cash services, and pay list price. Community banks are beginning to aggressively pursue these customers, either through their own or through private labelled services.[1]

Future offerings will likely include events even further removed from the center of the timeline., including:

- Sales data integration and review, and credit approval, based on transmissions from field offices or sales personnel
- Issuance of customer invoices based on a daily file transmission from the company reflecting shipped orders or services provided
- Credit and collection activities to slow/no payers based on data on funds received and applied
- Analysis of marketing activities, including sales, adverstising and promotional activities, based on analyses of company and industry data
- Receivables financing ("factoring") based on orders received and approved, and the collection of funds as invoices are paid
- Inventory financing as matched against orders received and approved

[1] A "private label" cash management service is provided by an established provider, usually a

- Management of purchasing cycle data, based on a daily file transmission from the company, including issuance of purchase orders, and matching against receiving reports and vendor invoices, and payment of those invoices (Cite Phoenix-Hecht)
- Purchasing decisions, including the selection of vendors and the solicitation of bids, based on specifications and other data as established by the company

These solutions cross functional lines, and require skills from nearly every functional discipline in the corporation. The financial manager's job is to ask the right questions, suggest possible avenues of investigation, and provide analytical skills in developing answers.

Prospects for the Organization

The successful implementation of cashflow reengineering requires an organizational environment that is simple and that responds to the demands of the market. We have tried various managerial formulations and goals, as described in Chapter 2. Organizations tend to work best when simple, that is, with the fewest possible groupings and managers, with customer responsiveness without numerous bureaucratic approvals or reviews, and where the least encumbrances or limitations are placed on decision-making. For many businesses, this will mean some form of functional structure,

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major bank or vendor, but sold to a customer under the smaller bank's label or name.

the kind used in corporations as long ago as early in the 20th Century and never really improved on.

The major difference today is that the classic "line" positions, sales and production, must be equal partners with the "staff" position historically called *finance* but really cash. In addition, there must be an equal partnership for information, a situation which has developed in many organizations. We can continue to call it finance, but the position must be accorded responsibilities for all of the cash activities described in this book, especially those now assigned to line management. Without this change in mindset and in responsibilities, cashflow reengineering may not succeed.

Is There Still Time for Heroes?

Cashflow reengineering has been successfully implemented in many businesses over the past several years. Viewing the broad perspective of global organizations, success has been highest in certain situations and less so in others. In evaluating markers of support for cashflow reengineering, we include the customary treasury functions, such as bank relationship management, as well as those functions integral to operational areas where a cash event may be triggered, *e.g.*, billing and cash application.

1. Companies in those industries subject to federal or state **regulation** tend to be less efficient than companies in industries without regulation. Thus, securities firms, public utilities and commercial banks are less expert than manufacturers, retailers and non-regulated service companies. The apparent rationale is a regulated company/industry attitude that managerial error will be corrected by action of regulators (*e.g.*, granting of price increases) or customers (*e.g.*, acceptance of price increases), whereas non-regulated companies do not have access to such relief.

2. There is a bias of **geography** in treasury performance, in that companies and non-profits in smaller towns and in locations outside of the U.S. tend to be less efficient than those in larger U.S. cities. The competitive spirit among treasury and other managers appears to be more intense where there are numerous treasury organizations, and where there are more convenient opportunities for education, than in less urban sites and in non-U.S. locations.

3. **Centralization and focus** in organization and product/service offerings lead to more efficiency in

treasury management than is experienced by decentralized, multi-product businesses and non-profits. Decentralized, multi-product line organizations tend to assign responsibility for bank relationship management and concentration activities, the traditional focus of our discipline, to managers with such titles as Assistant Treasurer, Director of Treasury Management/Operations, etc. These individuals operate within a fairly well defined discipline, with access to the expertise of commercial banks, industry groups and peers.
In decentralized, multi-product companies, the management of activities prior to and subsequent to the central area of the "cashflow timeline" does not usually fall within the responsibility of managers with adequate knowledge of cash management, and who tend to focus on other objectives or goals in the conduct of their businesses. For example, billing procedures may be driven by operations, systems or marketing concerns, and almost never by cash management factors.

Our experience, then, is that treasury management is weakest in regulated, decentralized/multi-product industries located in smaller cities or outside of the U.S. It is strongest where competitive conditions dictate survival, in major U.S. cities and where management is largely centralized. An example of the former situation would be the insurance industry, and of the latter situation would be heavy equipment manufacturing (with big city corporate offices).

For example, a sample of consulting engagements for 12 life and health insurance companies performed from 1986 to 1993 demonstrated annual savings of over $100 million. The companies included in the sample range from among the largest in the industry to those with assets of some $5 billion.

The principal areas of benefit were in the portions of the timeline of activity which fall outside of traditional cash management. In collections, invoice issuance and cash application activities accounted for three-fourths of the $40 million in benefits, or about $30 million. In disbursements, invoice and claim review and clearing/funding activities accounted for an equivalent percentage of savings, or some $45 million of a total of $60 million.

Consider that we are talking about $100 million in annual savings for a dozen companies! Consider further that there are some 4,000 insurance companies in the U.S. If the entire industry were similarly inefficient, the potential savings would be a billion dollars (calculated from the asset base of the 12 companies in our sample as against the asset base of the industry).

The good news is that there has been considerable recent interest in the improvement of treasury practice in certain regulated, decentralized/multi-product, smaller city companies and non-profits. Fearful for their survival, such organizations as public utilities, large- and medium-sized banks, and others, traditionally resistant to the development of modern treasury practice, are requesting assistance. Long-term banking relationships are being re-examined, expectations for employee skills and performance are being raised, and inefficient practices are ending with regard to every phase of treasury management.

Undoubtedly, there are very significant opportunities for further efficiencies and improvements. Almost any organization regardless of size can benefit from cashflow reengineering. Whether the change is in the structure of the balance sheet or in the components of cashflow, the potential opportunity is huge. Admittedly, it is difficult for most managers to dedicate the necessary time and resources in this era of re-engineering, outsourcing, TQM and benchmarking. However, some of your competitors are probably making the effort, and if they become more efficient, their competitive advantage becomes undeniable. This period will not tolerate inefficiency or sloth .... personal or company survival may depend on you and your colleagues being heroes.