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Treasury and IT Integration in Plain English

Part II

When Treasury Leads

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"Integration" is the IT buzzword of the millennium, but it is neither a simple process nor a slam-dunk solution. An alarming percentage of integration projects fail. Typically, the more ambitious the objective, the more likely its outcome will disappoint. This may result from unrealistic expectations, the wrong technology choices or flaws in implementation processes, probably a combination of all three. But disappointment is not inevitable if expectations are realistic, situation-appropriate tools are employed and projects are well managed.

IT integration is about automating and transforming information to make it more valuable. Automation replicates existing business processes, performing them more efficiently and with less manual intervention; transformation changes processes themselves. Traditional corporate mainframe and network systems, "fat" and "thin" client applications, and all the technology that connects them have roles in the integration process. Choosing the approach that fits each company's objectives is critical to success. The most sophisticated, expensive approaches may not always be best.

The right technology is necessary but insufficient for successful integration. Technology does not magically change bad data into good, and it seldom alters bad habits or outdated business processes. Given its unique history, this is particularly true when corporate treasury is the integration target. The process has a complex cultural dimension; organizations resist and subvert changes they do not understand, however unknowingly. The failure of ERPs and similar big initiatives demonstrates this. Successful integration requires more than good data and good technology. It requires good planning, good process and strong focus from the start, as senior managers learned dealing with ERP's, supply chains (SCM) and customer relationship management (CRM).

Treasury Is A Special Case

IT integration usually focuses on *corporate* initiatives, with functional areas like treasury relegated to the sidelines. Early ERP Treasury modules lacked critical functionality, and few vendors demonstrated much understanding of the department's mission. As a consequence treasurers more than other executive managers had to solve their own problems and make their own way with integration.

But making one's own way has been a tradition in treasury management. Commercial banks have provided technology and outsourcing services to treasurers for decades, reducing their dependence on corporate IT, and a robust community of non-bank vendors, software developers, information providers and consultants, evolved to support treasurers when desktop and Internet technologies came onto the scene. This has created an embarrassment of riches as treasurers work to improve the efficiency of internal operations, reduce costs and integrate themselves, on the one hand with corporate IT, and on the other with the multitude of external providers on which they depend. Their situation has only become more challenging by recent trends toward centralization of treasury, smaller treasury staffs and more sophisticated technology options.

Treasury and treasury systems are also special in that most integration projects involve "middleware," a type of software that provides connectivity between applications that cannot otherwise communicate with one another. Treasury applications often provide their own middleware functionality. They are designed to interface, for instance, between bank information systems and corporate general ledger applications or between investment houses and risk management software. Where conventional middleware operates with simple, pre-programmed rules, however, treasury systems are inseparable from human governance and other intellectual responsibilities.



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Part I of "Treasury-IT Integration in Plain English" examined the history of IT integration and discussed some of its concepts and definitions. Part II, below, examines integration challenges specific to the treasury function, especially when treasury is its sponsor, as is most often the case with workstation purchases, and corporate IT is a support resource. Part III will look at integration when sponsored by IT or others, such as when corporations implement Enterprise Resource Planning or similar applications, and treasury is one of many team participants.

Treasury Workstations and Integration

University of Chicago sociologist William Fielding Ogburn once observed that successful technologies move inexorably, if unpredictably, from the proprietary to the generic, a phenomenon he described

as "culture lag." No matter he was talking about the automobile industry and how assembly lines gradually replaced custom manufacturing; his observation touches on a contemporary problem with treasury technology just as well. Despite enormous advances over more than two decades, much of the technology treasurers use remains proprietary, provided by banks and other vendors. Because treasurers must "spread their business" with banks, they end up using multiple applications and manual processes to get work done. In an age when the "time value of information" translates directly into competitive advantage, the effect can be damaging.

Many treasury managers still spend hours every day switching between bank systems as they determine cash positions, fund disbursements, channel lockbox receipts for cash application and make investments, time that could be better spent improving departmental performance. Proprietary applications inevitably produce data that must be consolidated or reformatted before being passed to corporate systems. This usually involves manual calculations or re-keying, as well as maintaining communication links that change as banks change ownership and delivery platforms. According to some treasury managers, the introduction of "thin client" bank software actually made data consolidation more difficult, even as it has reduced the banks' software maintenance burden. Bank software has historically offered advantages, however: it has been cheaper to acquire and maintain than non-bank alternatives, and banks, arguably, have been more consistent and diligent in providing client service. Arguably.

Despite their cost and early client service inconsistencies, treasury workstations are becoming the centerpieces of IT-

treasury integration projects, supplementing or replacing proprietary applications offered by banks. Having first appeared in the early 1980's, they are becoming important to treasury professionals who appreciate the immediate value of automation and the even greater potential value of using com-

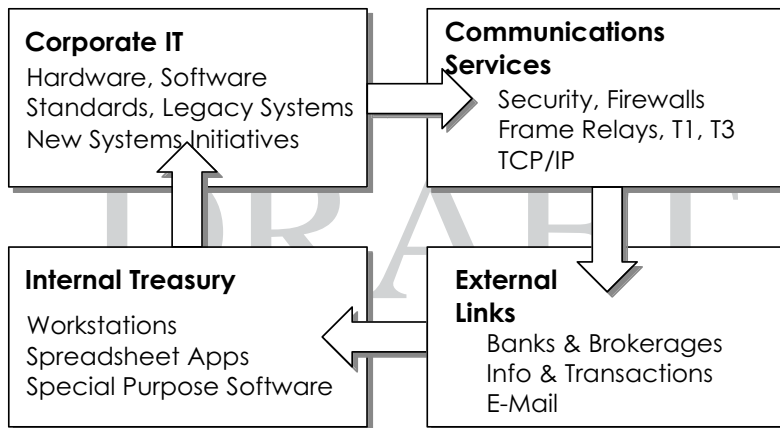


Figure 1
Many Links in Integration

puters to transform business processes.

There are more than fifty commercially available workstation products today providing an enormous breadth of functionality. The simplest are little more than single-site software packages for downloading balance and activity data from banks. The most advanced are network-based or web-enabled applications for data gathering and transaction initiation across multiple banks and multiple currencies, automatically linking treasury with general ledger and budgeting systems *inside* the corporation and with trading



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desks, information and other services *outside*. Workstations are available for purchase or lease, from outsourcing firms and over the web. Enterprise Resource Planning system vendors almost all provide treasury modules that approximate workstation functionality. And increasingly, add-on modules are available to support more esoteric aspects of treasury operations like global liquidity and risk management, debt and investment management and benchmarking. Workstations cost anywhere from \$50,000 to \$1,000,000+ depending on how they are configured; the average system requires an investment about \$200,000, plus installation and maintenance.

Every workstation, add-on and new option heightens the need for integration, making the management of treasury like fighting a three front war. At once, treasury has a growing role in the corporate agenda: there are risks and working capital to manage, metrics to be calculated, supply chains, financial and otherwise, to be optimized and "legacy" applications to be maintained or replaced. Simultaneously, external providers, banks and others, are changing their deliverables, offering new options and technologies on almost a daily basis, and pressuring treasurers to adopt the newest, new things, like "e-Business" or "web enabled" services. At the same time, CFO's are

demanding improved efficiencies with ever-lower costs and better security!

Caught in the middle, circumstances complicated by its historic autonomy from the corporate IT structure, treasury is growing in importance, but at a cost. IT departments seldom understand what treasurers need or do as well as they understand "mainstream" clients like accounting, and conversely, treasury professionals often regard IT as meddlesome interlopers standing in progress' path, particularly when conversations get technical. Such perceptions impede integration, and both sides need to do a better job of preparing themselves to meet those challenges. Treasury managers need not become IT experts or vice versa for integration to succeed, but both groups need more understanding of the others' issues, challenges and vocabularies than is generally the case. Some up-front team building and consensus-formation about team accountability can also go a long way as will early recognition that post-

project questions eventually need answers (see page 7).

And there is no excuse for ignorance in 2003. The Internet is rich with information for non-IT professionals, and inexpensive books like the *...for Dummies* series offer a wealth of jargon-free information. Half an

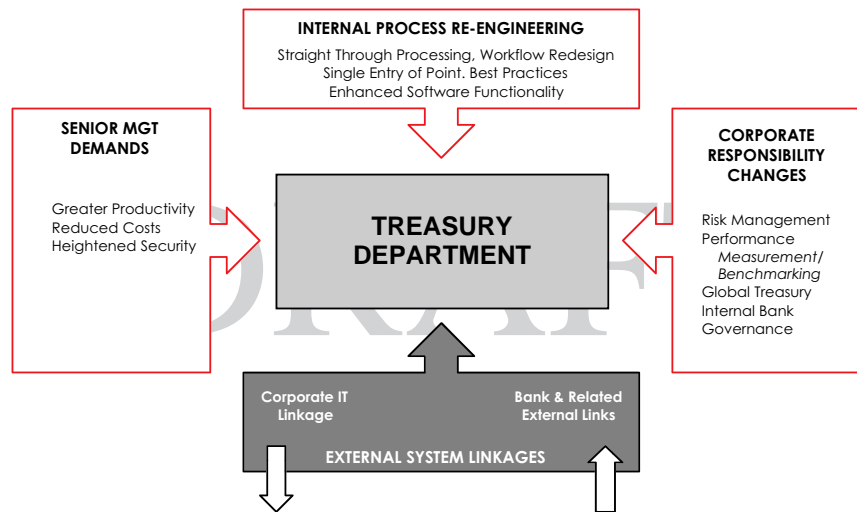


FIGURE 2
Treasury's 3 Front War

hour's surfing at www.pcwebopaedia.com or www.whatis.com would have saved a client much embarrassment recently when the term "frame relay" came up in a project meeting and she thought the IT group was talking about "one of those digital picture frame things." More to the point, greater sensitivity to IT issues can help treasury managers appreciate the consequences of "simple change requests" and software customization. Likewise, better understanding of the function can help IT understand treasury's justifiable but sometimes annoying obsession with security, the rationale behind its time-critical daily process-



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ing schedules and its reliance on external connectivity. Successful integration starts with team building and education, and the investment of a few months' time can have major downstream benefits.

Requirements Planning

A careful definition of requirements and plan specifications is the second big investment CFO's seeking successful IT-treasury integration should make. Both investments will reinforce senior management's commitment to a successful outcome (the reputed absence of which is a time-honored excuse for failure), both will reinforce the importance of producing measurable returns and both will, or at least should, reinforce the idea that change can be beneficial.

No general worth his stars sends troops into battle without first studying the battlefield and creating a plan. The great Chinese military leader, Sun-tzu, said it better in *The Art of War*:

"...the victorious army first realizes the conditions for victory, and then seeks to engage in battle. The vanquished army fights first, and then seeks victory...As for military methods: the first is termed measurement; the second, estimation [of forces]; the third, calculation [of the number of men]; the fourth, weighing [relative strength]; and the fifth, victory.

Unfortunately, we live in an age of instant answers, annual MBO's and artificial deadlines. The effect can be crippling when the task-at-hand is as complex and the costs as high as they can be with IT-treasury integration. A recent survey of senior managers reported "good planning and re-planning" were critical success elements in their companies' integration initiatives. On the other hand, 74% of CEO's and

CFO's who described their initiatives as "disappointing" acknowledged their projects began without clear ROI objectives. The world will end a lot sooner if senior management decides the integration team has wasted a million dollars than it will if defining the game plan takes sixty or ninety days longer than promised before work began.

Good plans do not begin with Internet searches of vendor websites or *listserv* conversations about software implementation experiences. Good plans begin with understanding why senior management wants the job done and challenging all the *business processes* that touch on those objectives, be they in IT, treasury, the external vendor community or elsewhere.

Good plans thoroughly define the problem before they explore solutions, and they generally define ideal solutions before searching out practical alternatives and workarounds. Good plans assume no sacred cows, no processes beyond challenge if they interfere with meeting project goals, and no things that must be done in the future just because they have been done in the past. Good plans balance between automation and transformation as objectives; they also balance between long-term and stopgap solutions, valuing both "low hanging fruit" and long-term change. Internet searches and *listserv* conversations can certainly begin before requirements are completely defined, and they can add value to the planning process, but trying to solve a problem before it is sufficiently defined is almost always a mistake.

Planning an IT-treasury integration project, especially one that may conclude with implementing a fully featured, internally and externally linked, workstation, can easily take six months, requiring the full time commitment of at least one person from treasury and another from IT. That is, six months following the team building described earlier and six months preceding procurement and implementation which may take an additional nine months or more.

RFP's and Procurement Processes

Treasury professionals accustomed to using standardized RFP's to purchase commodity-like products (lockbox, wire transfer, controlled disbursement, etc.) are often unfamiliar with the intricacies and opportunities of "solution" procurement. And deny it as they may, IT professionals are often seduced by innovation, sophisticated architecture



and "big" solutions. If there is a trick to successful IT-treasury integration, it is finding a practical middle ground between these points of view, building on the requirements definition and making the procurement process work to the integration team's advantage.

That means understanding what outcomes are really important to the project (and why), and what are merely "nice to have." It means understanding where and what returns will be. It means setting realistic, achievable goals, not "biting off more than you can chew," including trying to solve too many of tomorrow's problems today. It means not settling for "second best" unless absolutely forced to do so, it means remaining open to change, neither over-specifying nor under-specifying the solution, and not confusing research with procurement.

Procurement should never be a proxy for research, at least the "feature/function" elements of research. This frequently occurs in the treasury world where products are simpler and delivery, pricing and other service components more standardized. Procuring software and effecting integration is a more complex, individuated process. Blanket requests for proposal, common when purchasing bank services, should be avoided in favor of highly selective invitations following the requirements definition, feature/function and other research. Vendor proposals and presentations should focus on capabilities, plans, creative ideas and accomplishments, and should be more starting points for collaboration than bases for final decision making.

As requirements and solutions are matched and delivery partners selected, four common mistakes should be avoided: the first, putting form before function when matching requirements with solutions; the second, assuming all potential solutions are viable with sufficient customization; the third, that solutions have to last forever, and the fourth, that big problems demand big solutions.

Function Before Form. Within practical limits, achieving objectives is always more important than how objectives are achieved. A company having difficulty with account reconciliation, for example, may purchase new software, engage an outsourcing provider, or, if it gets the job done, simply relax its reconciliation rules and move on. It's a question of what works, and works best in any particular circumstance.

One of today's major IT-treasury integration debates is whether or not solutions lie in client-server or web-enabled computer systems. Barring an unforeseen catastrophe, the world wide web will dominate the integration market in a couple of years, but that does not mean integration teams should rush to replace their client-server software anytime soon. Or avoid selecting such a solution today if it meets functional requirements. A "couple of years" is a long time in the software world, many issues remain unresolved, and vendor hype remains a factor.

The term "web services" gets a lot of play these days, its underlying concept that the Internet can become a giant, virtual server system with facilities to link incompatible applications, eliminate organizational silos and achieve cost-effective integration. The idea is powerful, but implementation is hardly ready for prime time, especially for treasury departments with limited budgets and technical support. Developers are working with at least three different software protocols for delivering "web services" (XML, for Extensible Markup Language, J2EE, a Java based approach, and something called SOAP), and the jury remains out with respect to which if any will ultimately dominate, though Microsoft is adopting XML for future versions of MS Office. "Web services" are worth investigating, and software providers should be questioned about development plans, but committing to a vendor based on current implementations may be counterproductive even if "web services" is the new, new thing. "Web services" may even be a diversion for vendors who would rather prospects not notice deficiencies in the core functionality and support services on which procurement decisions should really be made.

One Solution Is As Good As Another, With Enough Customization. Customizing software is like teaching a pig to dance, an act that wastes your time and aggravates the pig. Not that all customization is bad or unnecessary, but more often than not when IT integration teams talk about changing the functionality of purchased software, it signals (or should signal) something is amiss. Customization



decisions should be made very cautiously, especially when changes involve core functionality.

Customization is costly; it can perpetuate rather than solve problems and it challenges an emerging “best practice” in the software and integration communities, namely that procurement processes work best when they involve only a few potential vendors who can provide really new ideas and creative problem solving. Also, when vendors propose customization or describe their willingness to address your specific needs once a contract has been signed, it almost always means “We haven’t got it yet” and *Caveat Emptor*.

Customization adds enormously to software ownership and operating costs. Custom programming must be re-applied with every new release, the end-products likely needing re-certification for vendor maintenance. High maintenance costs seriously erode returns on software investments and reduce integration benefits. But there are other, potentially more serious, implications.

It raises questions about the adequacy of requirements planning and about the acquiring organization’s openness to change. Forty years ago, we bought computers to automate processes previously performed manually. Twenty years ago we did something very similar with PC’s, our focus, almost always on using computers to replicate existing processes and perform them better, faster, cheaper. Today’s computers are transformation agents, no longer just tools to facilitate problem solving but potential components of problem solving processes themselves. Too frequently we customize new software to make it fit rather than challenge existing business models. Enterprise Resource Planning (ERP’s) applications provide a powerful example. When ERP implementation demanded more change than corporate cultures were prepared to accept in the 1990’s, expensive new software was either customized to retain the “look, feel and process” of what it had replaced, or “legacy” applications were retained,

retrofitted with just enough ERP functionality to declare implementation a success. The result in either case was disappointment.

Integration does not always precipitate major business process changes, and for corporations moving away from proprietary solutions for the first time, process automation, i.e. eliminating redundancies and re-keying operations, making processes “straighter-through” can produce enormous benefits. Still, IT-treasury integration teams would be remiss if they ignored potential process changes or assumed a need to modify software functionality without giving the matter serious scrutiny.

Solutions Have To Last Forever. Large computer systems used to “live” a decade or more. Today’s big applications, even those costing millions for licensing and implementation, seldom last more than four or five years. Operating systems and programming languages become obsolete even more rapidly, and entire development methodologies, like server-based integration, are yesterday’s news before major bugs have even been resolved. We cannot ignore the future when laying out plans for IT-treasury integration, but neither should we obsess unnecessarily about addressing problems that may be defined and solved very differently in just a few years.

Especially when automation is the objective, an acceptable solution may be a short-term workaround like a scripting routine, a file extract or a spreadsheet that links multiple programs or files and eliminates one or more manual work steps. It may even be a procedural or scheduling change. In part I of this series we described a spreadsheet bridge that linked a client’s new portfolio management software with legacy accounting applications when funds were unavailable for a permanent change. It took less than a week to develop the “fix” which let the new software provider complete its work on time and avoid a lawsuit. Such solutions do not happen every day of the week, but they can be worth looking for.

Big Problems Deserve Big Solutions. Sometimes, words like “big” and “small” are relative. That is an assumption better not made until all the facts are known. In at least one case, a quarter-million dollar investment was both “small” and highly appropriate

When the newly hired CFO at a large, decentralized firm announced his intention to implement an ERP solution, the



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company organized task forces and committees to study available options, soliciting proposals from ERP vendors and their implementation partners, the first of which outlined a three year installation process and a near \$100 Million budget, with treasury one of its final components.

Treasury, meanwhile, was dealing with a liquidity shortfall, mounting short-term debt and faulty information about the firm's cash position, receivables, payables and collections, most of which was buried in a dozen largely autonomous regional fiefdoms acquired over several years. Treasury had about six months to solve its problem, even if it came up with a "throwaway" solution. What emerged was a combination of business process re-engineering and simple automation that bought the CFO and treasurer time to consider more permanent alternatives. It cost less than 1% of what had been estimated for the ERP, including software procurement, and as far as we know, still operates today.

The solution worked like this. Rather than argue about who "owned" local bank balances and what rulesets should be applied to reporting those balances, treasury first consolidated trade and payroll disbursements into a single bank and assumed responsibility for disbursement funding across the board. It gathered cash by redirecting receipts into new accounts that treasury, not the fiefdoms, administered, with existing balances frozen pending review.

Cash application and account reconciliation remained in the fiefdoms, but treasury implemented a company-wide cash flow forecasting process and made up-to-date account reconciliation a key performance measure for regional controllers. The system was enabled with a treasury workstation that included LAN/WAN support and an interface to the company's central general ledger system. A software provider was selected based on its geographic proximity to company headquarters, its commitment to deploy experienced implementation resources, its prior experience working with the company's banks and products, and the robust character of its general ledger

interface.

LAN/WAN functionality facilitated communications with the fiefdoms; the general ledger interface allowed treasury to quickly centralize cash and function like an internal bank. It also solved a sensitive problem with interregional transfer charges, a constant source of contention between the fiefdoms and justification for withholding funds from the corporate purse. The underlying business process was changed from "argue now, pay later" to "debit/credit now, settle later and adjust if needed. The solution produced no miracle results, but it rapidly eliminated inconsistent regional practices that obscured the company's true cash position, created breathing room for other problem solving and strengthened treasury's hand in managing company assets.

Final Notes – Cautions, Contracts & Post Project Reviews

There are three common mistakes companies make when they implement major new software systems. The first is that they fail to specify a critical contractual element, that is, the names of vendor team members who will support the project. The second is that project administration and project management get confused, and the third is that little or no time is allocated to reviewing what happened after the project is completed, especially when implementation was successful.

Lawyers will undoubtedly negotiate the final agreements for whatever is contracted. That may be a good or bad thing, depending, but it will certainly be a necessary thing.

Lawyers may not consider that projects are usually more successful when vendors are partners and not adversaries. That does not mean avoiding hard questions during software evaluation or spending as much time as you need understanding how prospective vendors achieve their results and have achieved them for others. That said, vendors can make valuable contributions at every stage, and buyers should expect nothing less. Vendors should offer creative ideas and suggestions for improving treasury operations. Those things come from the same people who earned the glowing accolades from vendor references and made a positive impression during the selling process. They are as much a part of the project's success as the software and documentation, and their names should be as much as part of the vendor's specification of deliverables as the software and documentation.



The second common mistake is confusing project administration with real project management. The former usually involves PERT charts, work plans, meetings and conference calls; it can easily be confused with getting work done. The latter involves actually moving the project toward a successful conclusion.

Tools like PERT charts and MS Project™ work plans can have enormous value, especially for implementation planning, but they can also sidetrack a project by making the process as or more important than its outcome. Project management is *most effective* when it focuses on objectives, on the very same "must haves" and "nice to haves" that defined original requirements and on figuring out how to make them clearer or more valuable. That seldom happens when people sit around a conference table trying to make sense of a PERT chart or trying to synchronize their Palm Pilots to schedule the next meeting.

And finally, writers and public speakers have a mantra about doing their jobs effectively. It goes something like this: "Tell them what you plan to tell them, tell them, then tell them what you told them." Something similar applies as well to IT projects. "Tell them what you plan to tell them" describes the education, requirements definition and research that precedes successful integration. "Tell them" describes procurement and implementation, and "tell them what you told them" describes the post project review. Unfortunately, this final element is often neglected. Treasurers and CFO's have a lot on their plates, integration team members are eager to begin new projects and consultant budgets have been exhausted. These are the very reasons that make post project assessments so important.

When integration projects are complete, actually when any project involving significant amounts of time and money are complete, someone needs to ask hard questions, and there are typically ten of them:

- (1) Overall, was the project worth doing; did it achieve its objectives? Produce promised returns? If not, why not and how do we know?
- (2) Did we set realistic objectives? Did we challenge or accommodate underlying business processes?
- (3) Did we effectively manage the project's scope? Did we permit "scope creep?"
- (4) Did our decision making processes work? Where were they effective? Where not?
- (5) Did we have appropriate, meaningful measures of progress? Were our PERT charts and conference calls useful or a waste of time?
- (6) Did we have an appropriate level of support from senior management? How could we have improved that support or used it to better advantage?
- (7) Did we have an appropriate level of support from the organization as a whole? How could we have improved that support or used it to better advantage? Did treasury create barriers to success? Did IT?
- (8) Did we have an appropriate level of support from within the project team? How could we have improved that support or used it to better advantage? Could we have built a stronger team? Did we have the right resources and the right number of resources?
- (9) Did we use vendors effectively? Did we expect too much or too little of them?
- (10) Did we have knowledge gaps? Did treasury understand IT's issues? Did IT understand treasury?



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About the Author

Dick Poje formed his own firm, R. J. Poje and Company in 2000 to provide consulting services in the areas of payments strategy development technology integration. Previously, he had been a Partner and Director of Treasury Strategies, Inc. since 1985. Dick has been active as an entrepreneur and management consultant in the treasury and payment communities for 35 years. A co-founder of Phoenix-Hecht and its Chief Executive Officer for many years, Mr. Poje brings a unique, entrepreneurial perspective to client engagements. He advises senior managers of client organizations on strategic matters related to cash and treasury management and the payments system. He assists financial services firms in the formation of strategic alliances in various product areas, advises the Federal Reserve on its continuing role in the payment system and works with a number of private and public sector clients in re-engineering treasury and related operations.

Mr. Poje is a frequent contributor to industry publications and a respected commentator on developments in the payment system and Treasury Management. His article, "Avoiding the Pitfalls of Electronic Commerce," appeared in the January 1998 issue of the TMA Journal. In 1997 he co-authored "Electronic Commerce and Financial EDI: An Examination of Innovation in the Electronic Payments Arena". His article, "A Blueprint for Leadership: the Federal Reserve in the U.S. Payment System" was published in the American Banker. His most recent work, a series of essays on payments-related topics, are available at www.poje.com

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