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ORIGINAL ESSENTIAL UNBIASED INFORMATION

Global Treasury Structure and Bank Relationship Management

"Design, Bank Selection and Implementation at Vale"

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Vale SA

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Treasury Alliance Group LLC

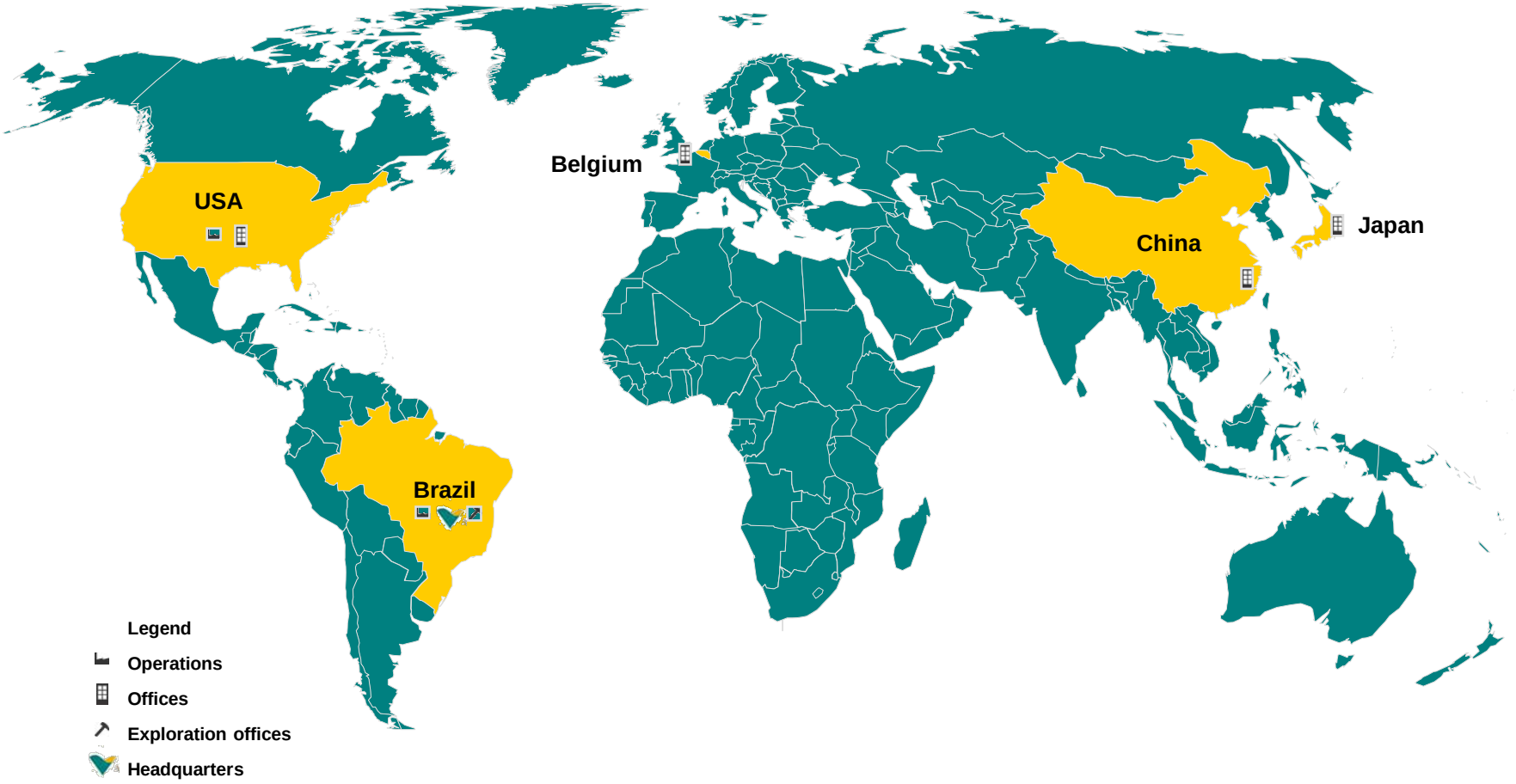
October, 2012
Miami, FL

Vale at a Glance

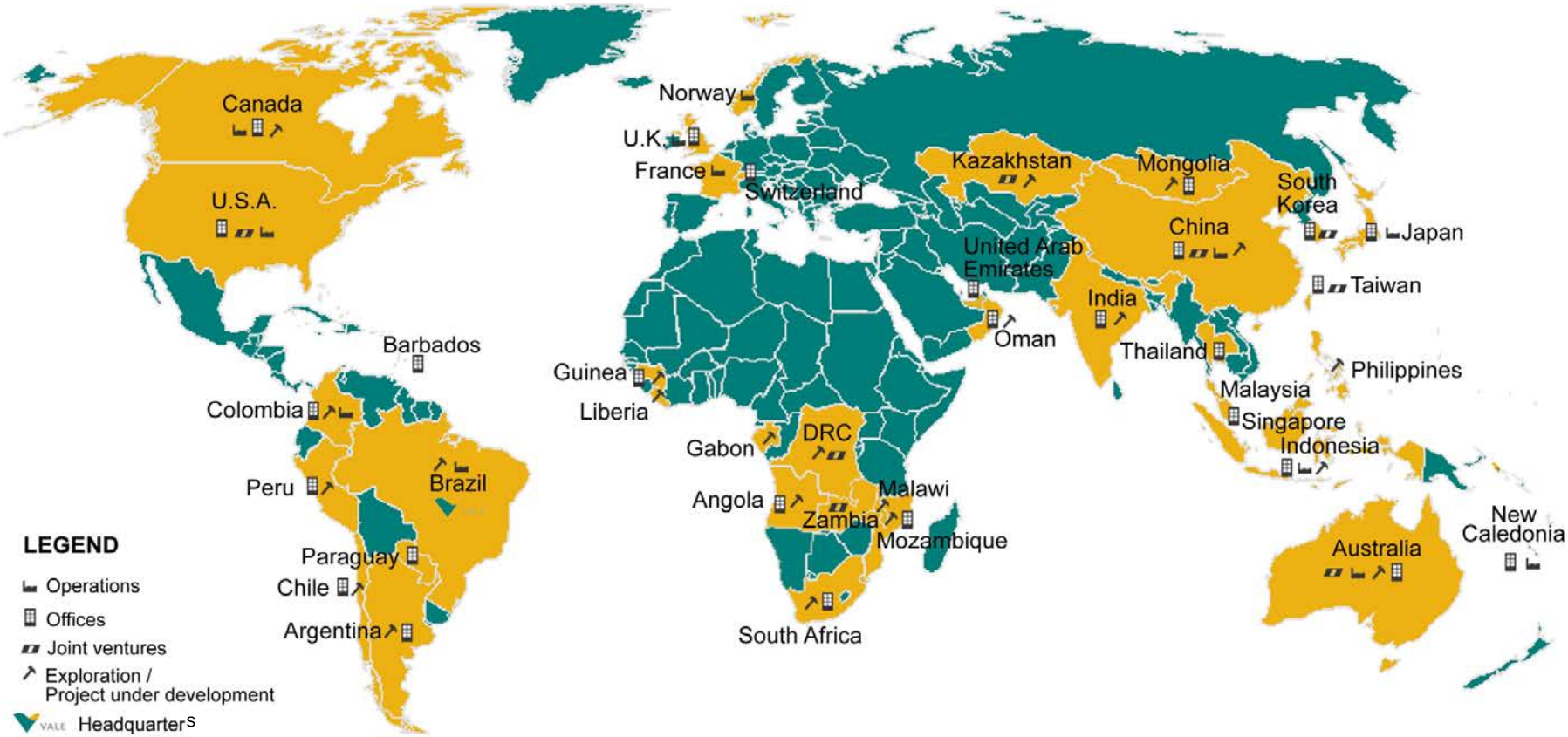


- **Second largest mining company in the world, largest private company in Latin America**
- **Market capitalization of approximately US$ 100 billion**
- **Global workforce of more than 138,000 people, including employees and contractors**
- **Mining operations, research facilities, projects and offices across 38 countries**
- **2011 Financials (US$ billions):**
  - » Operating revenue = $60.4
  - » Adjusted EBITDA = $33.7
  - » Capital expenditures = $ 18.0
  - » Net income = $22.9

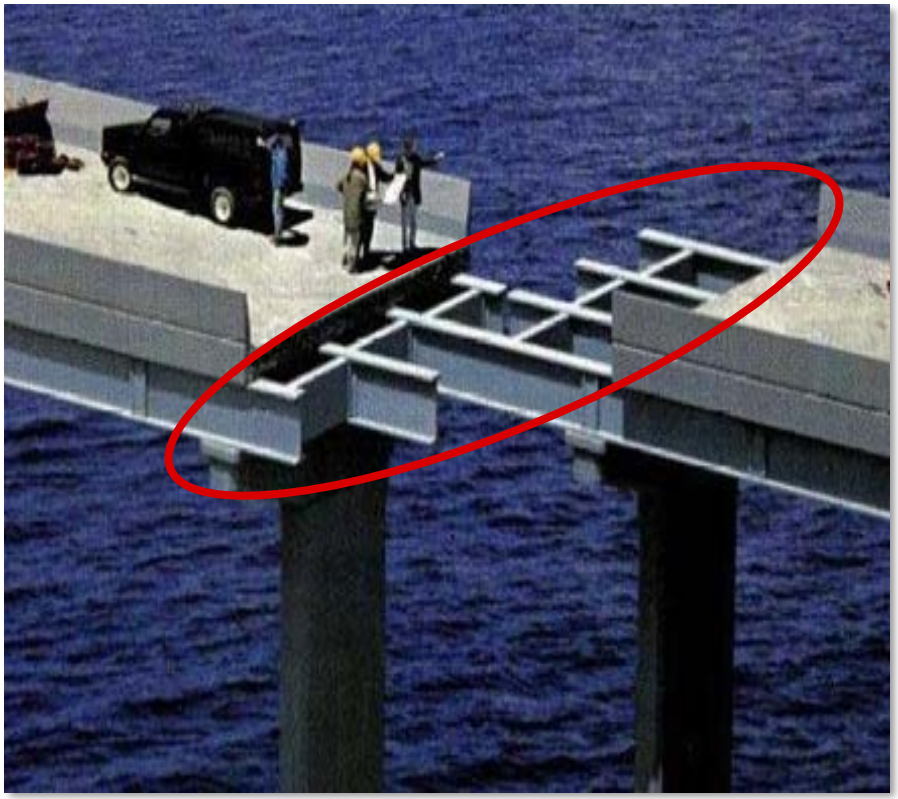
Vale in 1997


USA
Belgium
China
Japan
Brazil
Legend
Operations
Offices
Exploration offices
Headquarters

Vale in 2011


Canada
U.S.A.
Barbados
Colombia
Peru
Brazil
Paraguay
Chile
Argentina
Norway
U.K.
France
Switzerland
Guinea
Liberia
Gabon
DRC
Angola
Zambia
Malawi
Mozambique
South Africa
Kazakhstan
Mongolia
South Korea
Japan
China
United Arab Emirates
Oman
India
Taiwan
Thailand
Philippines
Malaysia
Singapore
Indonesia
Australia
New Caledonia
LEGEND
Operations
Offices
Joint ventures
Exploration / Project under development
VALE Headquarters

The Situation



- **Liquidity**
  - High levels of idle cash across global operations
- **Banking**
  - Decentralized bank selection
  - 525 bank accounts in 34 currencies with 69 banks
- **Treasury operations**
  - Lack of accurate and timely information on treasury operations
  - Many manual processes
  - Multiple systems with low level of integration
  - Poor cash forecasting

The Plan

1 - Map and design

- Develop global banking model
- Develop technology requirements and architecture

2 – Develop foundation

- Rationalize current structure and costs
- Select network of banking and technology partners
- Implement new structure globally.

3 – Integrate

- Global treasury integration through a TMS
- Change business processes for efficiency gains

4 – Optimize

- Leverage banking structure to improve working capital
- Implement cash pooling and other liquidity structures
- Increase yield on invested cash

The Result

- **Included 324 business operations in 43 countries on all continents**
- **Simultaneously developed**
  - The banking strategy to meet operational requirements, optimize relationships and streamline banking network
  - The technology strategy to provide efficient execution of treasury activities and integration with current and future corporate initiatives
- **Managed 3 RFPs**
  - Global RFP with 48 banks, 18 presentations and final selection
  - Technology RFP with 9 potential partners, demonstrations and final selection
  - Canadian RFP with 4 banks, 4 presentations and final selection
- **Created**
  - Fully automated USD pool encompassing 42 accounts, 26 entities with an average of 765 transactions daily and investable balance of $3.5 billion
- **Transformed**
  - Banking network from 324 bank accounts with 48 banks to 284 bank accounts with 24 banks
  - Treasury processes and procedures to improve control and reduce cost

Presentation Outline

- **Project methodology**
  - How we did it
- **Project results**
  - What it looks like
- **Best practices**
  - What we learned
- **The future**
  - What comes next
- **Summary**

Project Methodology

Major Steps

- Project approval
- Team formation
- Data review and validation
- Evaluation and design
- RFP development
- Partner selection
- Implementation

Project Approval

Issues

- Widely dispersed operations
- Decentralized financial activities
- Incomplete IT integration
- Uneven deployment of financial resources
- Inefficient communication within the treasury team
- Diverse ethnic and corporate cultures

Opportunities

- Implement world class treasury practices
- Develop single treasury model for group
- Improve financial controls
- Centralize bank management
- Improve liquidity management
- Better access to treasury information
- Automation of treasury activities

Project NPV = US$ 13.7 million

Data Review and Validation

- **Developed complete view of current state**
- **Leveraged existing data and then filled the gap**
- **List at right shows broad categories**

- **Organization**
  - Legal entity and organization charts
  - Locations of primary business operations including name and tax status
- **Banking**
  - Credit facility participants, commitment level and usage
  - List of bank accounts including bank name, bank account number, controlling subsidiary, currency and reason for the account
  - Summary of bank fees, by bank
- **Liquidity Management**
  - Sample of cash position sheets, cash forecasts/cash planning sheets
  - Copies of all treasury policies including those covering investments, risk management, borrowing and bank account management
- **Cash Flow**
  - Primary customer list and average revenues by region/currency
  - Primary vendor list and average payments by region/currency
  - Annualized summary of intercompany transactions
  - Intercompany loan agreements
- **Systems**
  - Overview of modules/functionality used in ERP
  - List of any internally developed systems and spreadsheets
  - List and example of current reports used by Treasury or prepared for others by Treasury
  - List of all bank web platforms used

Evaluation and Design

- Summarized transaction details and confirm with project team
- Reviewed bank services and account requirements by region
- Assessed pooling alternatives and liquidity structures
- Evaluated country tax issues
- Identified IT integration and treasury systems requirements
- Discussed with business operations

Global RFP

- Prepared bank list and advised banks of RFP schedule
- Designed RFP and developed questions and scoring methodology
- Launched RFP and managed the response process
- Summarized proposals and determined finalists
- Finalist presentations
- Scoring and development of business allocation scenarios
- Submission for board approval and announcement

Canadian RFP

- **Domestic Canadian business was treated separately from the global RFP**
  - Vale Canada is a large company in its own right
  - Scale of business ruled out non-indigenous banks
- **Proposals and presentations by four Canadian banks**
- **Large degree of local involvement in selection**

TMS Selection

- **Simple scope; forecasting, information and payments**
- **Vendor universe**
  - Bank systems
  - SaaS systems
  - Installed systems
- **Vendor presentations and high-level demonstrations**
- **Extended discussions with single vendor**
- **Multiple detailed presentations**
- **Extensive due diligence including reference visits**
- **Final negotiations and agreement**

Project Results

Banking Allocation

- **Seven banks were selected for global coverage**
- **Regional assignments**
  - Canada
  - Latin American and Africa
  - Europe and Asia Pacific
  - Middle East
  - Africa and Oceania
  - Australia
  - USD pooling
- **Other banks used for niche roles or geography**

Pooling

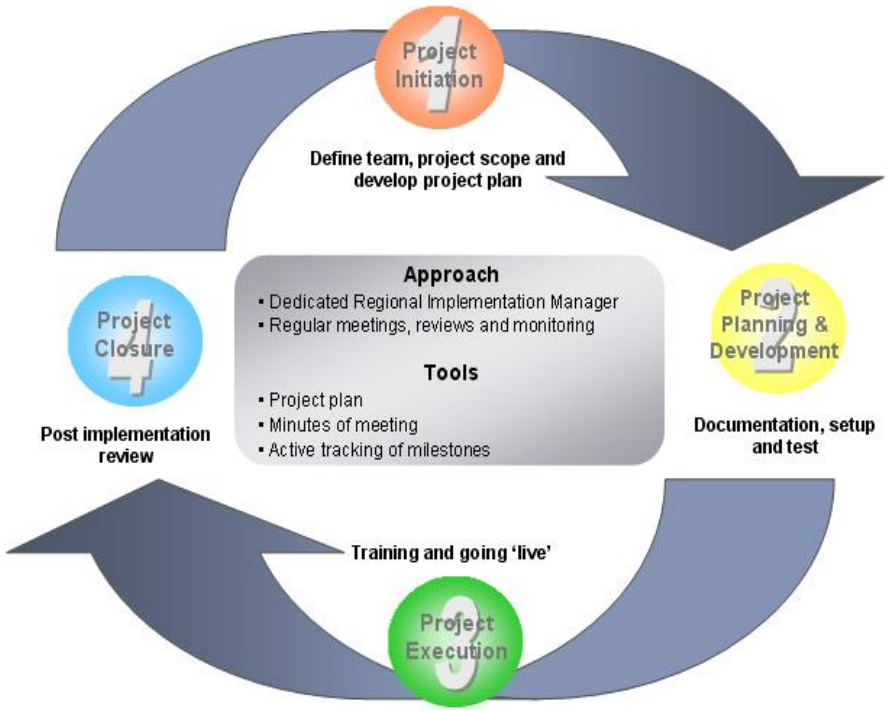
- **Tax and legal assessment**
  - Analysis done by tax, legal and planning groups
  - Reviewed countries where pooling is permitted, participating entities and company to be pool header
  - Single bank to hold Vale's USD liquidity using USD accounts in NY

Technology Model

- **System must support all in-scope Vale entities in 38 countries**
- **SAP is future state but need to accommodate Oracle and other legacy systems for 36 months**
- **Key system requirements:**
  - System cannot bind Vale into the architecture of a single bank
  - Preferred SaaS architecture
  - Bank agnostic, all banks on same footing
  - Fully scalable to support Vale´s future needs and growth

Implementation

- Partnership approach
- Commitment and availability of resources
- Rigorous project and resource planning
- Change management – minimal disruption
- Phased implementation



Best Practices

What Went Well...

- **Realistic**
  - Objectives were challenging but achievable
- **Communications**
  - Stakeholders understood project objectives and their role in the project
- **Project management**
  - Excel-based plan and web-based collaboration maintained discipline
- **Executive sponsorship**
  - Ensured resource availability and support
- **RFPs**
  - Well-defined process and criteria

...And What Did Not

- **Too much reliance on ERP data**
  - Deploy custom surveys earlier in the process
- **IT engagement**
  - Ensure engagement and commitment of IT from project inception to project completion

Best Practices

- **Adequate resources**
  - Get the people and management support to do the job
- **Open communication**
  - With internal and external partners
  - Use collaborative technology
- **Understand the landscape**
  - Commercial practices where you operate
  - Options available on the market
- **Project discipline**
  - Clear objectives
  - Firm project management practices

Summary

Build the Business Case

- **Collect data relevant to your strategy and structure**
- **Understand the possibilities**
- **Calculate the benefits and estimate the costs**
- **Don’t lose sight of your objectives**

Adjust to Realities

- **Priority of project to the organization**
- **Organizational challenges**
- **Resource availability**
- **Regulatory constraints**
- **Time**

Conclusions

- **Clear goals and objectives**
- **Disciplined project management**
- **Management and stakeholder support**
- **Accountability**

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THE REQUEST FOR PROPOSAL PROCESS



A TREASURER'S GUIDE

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INTRODUCTION

Today's treasury selects products and services provided by banks, third-party processors and technology companies from around the world. In some cases the selection decision rests solely with the treasury team while in others accounting, operations, legal, procurement and technology have a voice. In all cases, market pressure means getting the right products and services at the right price has never been more important

Purchasing decisions can be driven by basic requests to open accounts for newly formed subsidiaries, IT-driven migration to an electronic payment platform or more far-reaching relationship criteria such as a bank's participation in the company's credit facility. Over time an ad hoc approach to selection can lead to an unwieldy network of products and services that is inefficient and costly to maintain, particularly if business is spread across the globe.

In addition to good strategic thinking and design, the Request for Proposal (RFP) process is an effective tool for acquiring new products and services. Well-designed RFPs help select the best products and services at fair prices and ensure long-term, mutually rewarding supplier relationships.

This paper outlines the RFP process, its essential elements and the project administration requirements. The objective is to provide the corporate treasury professional with a guide to successfully initiate, manage and complete an RFP. Our approach contains the broad concepts suitable for bank, third party processing and technology selection with some specific sections appropriate for each of these distinct segments.

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GETTING STARTED

Is an RFP Required?

RFPs require a lot of work by both the company and the respondents, so it can be tempting to bypass the process altogether. Some organizations invite a group of providers to discuss their requirements and recommend solutions. Another approach is the Request for Information, or RFI, where the company provides a more formal description of their needs and asks selected vendors to provide general information as to how they could meet the company's needs. In some cases the organization adapts a pre-packaged RFP and distributes this to prospective providers. This last example often generates pre-packaged responses that do not address the unique elements of the company's requirements. All of these approaches are more structured than asking a few other companies what they do and going along with the majority view.

A well-designed RFP will ensure that you have included the proper set of vendors and given them the information they require to recommend the appropriate products and services. The benefit of the RFP process goes even further by ensuring that these products and services are offered at the best price and that the relationships with all respondents are managed well.

There are circumstances where each of the four approaches may be appropriate, but, when selection involves a product or service that is essential to what you do or how you do it, the formal RFP process is worth the time and effort. A well-designed RFP will ensure that you have included the proper set of vendors and given them the information they require to recommend the appropriate products and services. The benefit of the RFP process goes even further by ensuring that these products and services are offered at the best price and that the relationships with all respondents are managed well.

The First Step

The first step in an RFP project does not involve prospective vendors. The company needs to develop and articulate a clear understanding of what is driving its decision to update or acquire new products or services. These drivers are not mutually exclusive and fall into a number of categories:

✔ Strategic:

- The company may need to achieve greater vendor diversity reflecting a broadening global footprint, or other requirement.
- Acquisitions, mergers or the creation of new branches or subsidiaries in one or more countries that can change the scope of a company's business.

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- Structural adjustments or realignment, such as the establishment of new holding companies in response to tax or legal initiatives, may drive the need for treasury centers and special liquidity services such as pooling.

✔ Operational:

- The need for new accounts or upgraded services at regional or local levels to accommodate internal process improvements or customer and vendor requirements.
- Administrative actions including consolidation of accounting services in a Shared Service Center or upgrading an ERP system that can lead to process changes justifying banking platform improvements such as host-to-host payment processing or SWIFT.
- Geographic expansion of existing businesses and product lines may require banks with branch or partner networks capable of servicing more than the needs of a simple sales office.

✔ Treasury:

- The need to increase oversight and control over bank accounts globally in response to SOX, FCPA or other audit requirements.
- External pressure may demand improved liquidity management through access to internal cash and expanded bank credit facilities.
- The opportunity to reduce the cost of banking services by changing the mix of services purchased and leveraging the scale of the enterprise.

Understanding the specific drivers and identifying key objectives allows the company to allocate the internal resources needed in the selection process, involve the necessary stakeholders and determine the business information requirements.

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BUSINESS REQUIREMENTS AND PROJECT PLAN

Determining a meaningful set of business requirements and a plan to meet them is essential because the entire RFP process can require substantial internal resources and take months to complete. The business requirements function as a set of objectives and the plan as the roadmap to achievement of the objectives. Clarity in both will help, as it is easy to miss deadlines or stray from your objective. Further, when companies underestimate the amount of time required they frustrate themselves as the process appears to drag on and lose credibility with vendors who are unsure of how to proceed.

Determining a meaningful set of business requirements and a plan to meet them is essential because the entire RFP process can require substantial internal resources and take months to complete. The business requirements function as a set of objectives and the plan as the roadmap to achievement of the objectives.

Business Requirements

Business requirements spell out what the organization is trying to do, i.e., acquire a system to help manage treasury operations, find a SWIFT service bureau or revise the global banking network. They also include the needs of the various stakeholders. In the case of a Treasury Management System, or TMS, IT might require that the system be installed on company servers. Treasury might insist that it accommodate a certain number of users globally and Legal might demand that only domestic providers be considered for security reasons.

Business requirements are sometimes categorized as must have, nice to have and neutral. Categorized or not, they provide the chance for all stakeholders to have their say—at the beginning when the project planning takes place. Requirements can change in the middle of the project, but project managers are less at the whim of stakeholders when there is a formal document in place.

Following are some representative business requirements for TMS, banking and services RFPs.

✔ TMS

- Enable visibility over company's global cash
- Provide platform for global cash forecasting
- Facilitate bank account management
- Support multiple users in multiple geographies
- Operate within a SaaS model

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✔ Banking

- Provide in-country accounts with direct links to high and low value payment systems
- Match company account needs with the bank's branch structure
- Support the account structure with necessary overdraft and FX facilities

✔ Third Party Services

- Integrate with current banking partners
- Protect confidential employee data
- Licensed to operate in all relevant locations

Issues and Opportunities

This is also a good opportunity to identify areas for process improvement such as eliminating the use of checks. More and more countries use predominantly electronic methods for both collections and payments—with notable exceptions being the US and Canada—and the RFP is a good time to capitalize on this trend. It is important to highlight this within the RFP document itself, for example—"Checks are currently used in the UK, but we intend to switch to BACS in our future banking arrangements." Take the extra time to make sure that local operations are on board with your plans—it is cheaper and easier to make internal changes before you make external ones.

The RFP represents an opportunity go beyond basic requirements and implement a banking structure that introduces improved treasury management techniques.

Another area to consider is leveraging the corporate ERP by centralizing payments through a global or regional hub. Host-to-host file transfer is an excellent way to take advantage of bank capabilities for straight through processing (STP).

The RFP represents an opportunity go beyond basic requirements and implement a banking structure that introduces improved treasury management techniques. Examples include:

- **Europe**—within Europe, it is possible to leverage SEPA (Single European Payment Area) and have a single pan-European bank to handle both in-country transactional banking and a liquidity management overlay, such as pooling. This is a key decision point, both from an internal perspective and in terms of bank selection. Internally, this will require tax input and evaluation and

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buy in from European financial management—long before the RFP is developed. You should also be prepared for compliance requirements for SEPA, which impacts details in your payment files and the data required from existing providers and will have further financial consequences as it moves towards full implementation.

- **Asia Pacific**—is wider in geography and encompasses more regulatory regimes and currencies making it more difficult to centralize than a European arrangement. It is still possible to use a global bank with a combination of local presence and strategic partnerships as the primary banking provider for the region. Having a single bank platform for visibility is an appealing proposition for many companies for risk and relationship management purposes.
- **Latin America**—is more problematic from a regional banking perspective. Given the strength and coverage of large local banks in countries such as Argentina, Brazil, Chile, Mexico and Peru as well as the limited presence of global banks, the decision needs to be made as to the continued use of existing local banks or a switch to a global provider. Although you can include Latin American countries as part of the RFP, keep your expectations modest in comparison to Europe and Asia. Another point to take into account is that most Latin countries cannot participate in an intercompany overlay or pooling arrangement and there are significant withholding tax implications with intercompany lending.
- **North America**—most companies already have a centralized banking structure in place in the US and in Canada. So the "if it ain't broke, don't fix it" model can be a sensible approach. North America does have a number of national and regional banks with excellent capabilities in the US and Canada, but with limited reach or services elsewhere. This provides an opportunity to balance relationship management criteria—such as credit facility participation—with the RFP. Often companies decide that a separate RFP should be issued for the US and Canada. Whether this can be done in parallel with a global RFP or separately will depend on the available resources for the bank selection process and the subsequent implementation.



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Plan Elements

The next step is to develop a project plan. Project plans identify the large and small tasks that make up the project and define completion dates, assigned resources and task dependencies. In some cases the plan is contained in a simple spreadsheet while in others sophisticated software is used to plan and manage the project. In determining which approach is right for your project look around the company and see how others handle projects of similar complexity. Good project management requires sensitivity to the company culture so borrowing a plan from a colleague at another company may not make sense.

The following table provides a general set of the major steps with timing appropriate to a global banking RFP, one of the more complex types of RFP.

Element	Time Required
Define objectives and develop project plan	1 week
Assemble project team	2 weeks
Develop business requirements	2 weeks
Obtain relevant transaction/use data	4 weeks
Develop account/systems architecture	2 weeks
Perform vendor scan	2 weeks
Create vendor longlist	1 week
Determine RFP format	1 week
Develop RFP questions	1 week
RFP issuance and administration	4-6 weeks
Proposal review and scoring	2 weeks
Vendor presentations	1 week
Vendor selection	1 week
Implementation	3-12 months

Keep in mind that the larger the scope of the project, the more time you will need to allow for the vendors to respond. Senior executives can be impatient with the process, but shortcuts are not recommended. Global RFPs require that the respondents assemble teams from several regions and business functions and invest a considerable amount of time developing a thoughtful solution. Given that you will be living with the bank or vendor selected for many years it is only sensible to give them the time necessary to get it right at the front end. If the organiza-

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tion is not able to invest the time and manage expectations for this type of timeline, then consider employing external resources or reducing the scale of the project.

Stakeholders

Banking RFPs are often initiated by the corporate treasury, which then acts as the project manager for the RFP. This may not be the case for a payroll processor, a Treasury Management System (TMS) project or the selection of a SWIFT service bureau.

Banking RFPs are often initiated by the corporate treasury, which acts as the project manager for the RFP. This may not be the case for a payroll processor, a Treasury Management System (TMS) project or the selection of a SWIFT service bureau. It is important to involve all stakeholders—particularly for complex global projects—so that their expertise and buy-in can be obtained. Major stakeholders may include:

- **Business operations**—Local or regional business managers from sales, operations or finance who will be using the services being solicited have the first line contact with customers and vendors. It is up to them to assist in defining the types of receivable and payable services and account locations needed. They can also provide valuable feedback on how banks and other vendors perform and are perceived in various localities around the world.
- **Tax and Legal**—When the RFP is international and involves the movement of funds across borders and between entities, these areas are of crucial importance. They will play an essential role in the initial development of the structure and should be involved in the review of bank proposals. Documentation is a mandatory part of setting up new accounts and services and the Legal Department needs to participate in this process.
- **Accounting**—Bank accounts and business processes must be integrated with the company's ERP and all banking transactions will ultimately be reflected in the company books. So it is important that Accounting be involved with the project. Reconcilement, cash application and payment processing are some of the key areas where bank or third party service selection impacts accounting.
- **Systems**—IT professionals control the ERP and govern the types of technology within the company such as SaaS and client/server. They will be a critical player in setting up file connectivity with the treasury's partners such as SWIFT or host to host. IT is also an excellent resource in helping with an assessment of the bank's systems and technology. Since IT resources can

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be quite scarce, it is a good idea to get them involved with the project early so they commit the necessary resources to support treasury.

- **Supply Chain / Procurement**—This area within the organization plays a growing role in treasury projects performing due diligence on vendor stability and negotiating contracts. There is the perception that involving Supply Chain will slow the project and not add value because of the specialized nature of treasury products and services, but adopting a collaborative approach ensures that this need not be the case.

Involving the stakeholders early helps determine if the necessary resources are available within the company to handle the project internally or if outside resources in areas such as treasury, systems, legal or tax may be required.



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RFP DESIGN

There are two basic elements in any RFP: the substance of the required services and the form in which the RFP is delivered to respondents. The substance of the information required is fairly consistent among all types of RFPs and it is important to remember that the more complete and accurate the information provided to bidders, the better the options will be for the purchaser.

There are two basic elements in any RFP: the substance of the required services and the form in which the RFP is delivered to respondents.

Components

Substance of can be divided into a number of general components such as:

- **Company Description**—This general section at the beginning of the RFP is designed to give all participants a common level of background about the company's products, services and operating structure. Even if bidder organizations know the company well and much information can be obtained on the web, the background description is important, as the RFP will be distributed to many product areas and geographic regions within the bidder organization where the level of familiarity may not be as high. Further, it is important to ensure that each organization is working from the same information and background.
- **RFP Objectives**—The company's specific objectives need to be clearly spelled out. Examples include: centralize liquidity in Europe, reduce total number of bank accounts in Asia Pacific, manage intercompany lending, or provide netting services for a company's worldwide operations.
- **Activity Information**—Provide respondents with the transaction information they will need to recommend a solution and provide realistic price quotes. If your company will make 10,000 EUR credits in a given month in Italy, make this clear. For TMS vendors indicate the volume of activity and the number of users. This allows the bank or TMS vendor to provide a good price but also to suggest the best system and connectivity model given the activity. Additional discussion of activity information specific to banking RFPs is contained in Appendix 1.
- **Banking Arrangements**—For bank RFPs, the required account structure should be described, diagrammed and consistent with the activity information provided to the banks. For example, if a global

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structure for USD liquidity is required, show the participants by region and include information on their legal status. For TMS RFPs provide a similar structure including the names of the banks for which connectivity will be required.

- **Specific Questions**—Business requirements dictate whether the RFP is divided into sections based on geography, e.g., EMEA, Asia/Pacific; function, e.g. technology, customer service; or both. Regardless of how the RFP is sectioned there should be a short series of questions within each section that fulfill two objectives:
  1. To help differentiate one bidder from another. Asking for a bank's view on a regulatory matter generally will not distinguish one bank from another. Asking if a solution will rely primarily on a bank's network or branches or the use of strategic banking partners will.
  2. The framing of the question requires a precise response from the respondent rather than a generic statement. For example, a request to provide specific information on technology initiatives relating to payment products is more useful than a general question on a bank's approach to technology. Similarly asking if a bank can handle specific transactions such as tax payments or direct debits in a country is preferable to asking whether they have a branch or strategic partner located in that country.
     - An expanded discussion of specific RFP questions is contained in Appendix 2.
- **Administrative Requirements**—Provide clear instructions on the required format and timing of the responses. Describe the expected decision making process and selection criteria that will be employed and offer the opportunity for respondents to ask questions regarding the RFP. If technology and the scope of the RFP permit, set up an email address for bidder questions and share all questions—and answers—with the other bidders. It is also important to establish firm guidelines surrounding the supplementary information that can be incorporated in a response. The company wants materials relating to its situation and these are not generally provided in annual reports, product brochures or videos. Ideally, this information should be limited to three to four pages of PowerPoint or Visio diagrams.

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Form

How the sections and questions discussed above are presented to the bidder group is the form of the RFP. Form has importance because it determines how the RFPs will be received by the bidders and how responses will be compared by the company issuing the RFP. It is relatively easy to prepare a document using a word processing program and deliver an emailed or printed version to respondents. Without more detailed instructions, bidders may respond with a large, bound color proposal document multiple copies of which are provided to the company by respondents. These can be quite beautiful to look at but extremely difficult to analyze and compare.



There are a number of options when it comes to form. For simple RFPs a word processing document inviting a structured response by email may well make sense. As the scale and complexity of the RFP increases the following possibilities may make more sense:

- Create the RFP as a workbook with separate spreadsheets for the instructions and various question sections. This approach can be very effective because all bidders have access to a spreadsheet program and because you can both limit the size of their response and easily compare it with another bidder. It also has the advantage of keeping most of the RFP in a single file.
- A step up in sophistication would be preparing the RFP as an Adobe Acrobat form (similar to many of the tax forms available from the US Internal Revenue Service). This provides respondents with a familiar format and an RFP document that can easily be shared with colleagues around the world. The more recent versions of Acrobat enable RFP authors to receive a string of xml as the response to facilitate comparison of bidder submissions. A similar result can be achieved using Google Applications Forms.
- At the top end, a company can host the RFP on a secure web site maintained by the company or a third party. Respondents are directed to a specific URL where the complete RFP is housed and answer all questions relating to the RFP within forms on the site. This approach reduces the amount of paper, facilitates the ability to compare bank responses and is in some cases simpler for the RFP respondents themselves.

Whichever approach is taken the design objective should be simplicity and understandability for the respondent and clear and comparable responses for analysis by the issuer.

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ADMINISTRATION

RFP administration is divided into five sections with activity occurring at various points throughout the process:

1. Development of vendor longlist
2. Issuance of the RFP
3. Evaluation of responses
4. Vendor meetings and demonstrations
5. Selection and implementation

Vendor Longlist

RFP administration is divided into five sections with activity occurring at various points throughout the process.

Development of a vendor longlist occurs fairly early in the RFP process and is the result of what is sometimes referred to as a market scan of potential providers. The scan is a non-judgmental look at the players in the market who claim to provide the type of services required by the company, such as electronic billing or payroll. This scan is then refined according to company criteria which may exclude privately held companies or banks that do not meet certain rating requirements. The resulting list, the longlist, may simply be too large for the company's requirements. The solution is to keep adding criteria—existing relationship or reputation—to refine the list to a manageable level.

When the longlist and the project plan are complete it is advisable to let the companies or banks on the list know of your plans. This useful courtesy will ensure that respondents have time to assemble the right team. This is particularly important in banking RFPs as it allows the banks to plan their response and address relationship issues—such as credit availability—before the RFP is issued. Keep scheduling issues in mind; it is never a good idea to issue a European RFP in August with a two-week response window.

RFP Issuance

To this point most of the work on the RFP has been performed within the company. This changes once the RFP has been issued to the respondents. The issuer and the respondents are now on a shared timeline with a conclusion that may have significant financial consequences at the end. Further, this can be an expensive process for participants. The internal costs of responding to a global banking RFP will easily exceed

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$100,000—a sum that bankers expect to recoup. Respondents may begin to probe their contacts at your company to get a better sense of their competition and the company's selection criteria. They almost certainly will ask for clarification on points within the RFP.

These questions should come to the single point of contact specified by the company and be answered promptly and completely. The RFP is a tool to obtain the best goods and services so unless the question is inappropriate a reply is recommended. It is also recommended that all questions and answers be shared with the entire bidder pool. This ensures a level playing field for the participants and may elicit other questions that can lead to a better response.

The RFP is a tool to obtain the best goods and services so unless the question is inappropriate a reply is recommended. It is also recommended that all questions and answers be shared with the entire bidder pool. This ensures a level playing field for the participants and may elicit other questions that can lead to a better response.

Let all the participants know the rules and timeline you will follow in the RFP process using a high level version of your project plan. It is also a good idea to ask all respondents for a complete list of people within their organization who need to be kept informed. The following schedule provides some general guidance:

- Advise of RFP four to six weeks in advance of issuance
- Allow for a question period after the RFP is issued (usually one to two weeks) and insist that all communication be addressed to a single source within the company
- Responses can be asked for within two to six weeks following RFP issuance depending on the scope and complexity of the RFP
- Allow one to three weeks to analyze and compare the responses before permitting oral presentations
- A selection decision within two to four weeks of the oral presentations is acceptable

Evaluation

All members of the project team, including operations, tax, legal, accounting and IT should undertake evaluation of the proposals. Best practice is to consolidate the responses into a single document or location such as a spreadsheet, shared drive or Sharepoint site—and then have them reviewed by the team. Prior to the review, the team should create a scoring and weighting methodology that will be used by all members of the evaluation team.

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There are three parts to a good methodology:

1. The areas of evaluation, such as reporting times or systems architecture
2. The respondent score for that area
3. The company weighting of the importance of the area to the company.

When determining the areas of evaluation it is a good idea to follow the basic categories of the RFP with a few items within each area. Too many points of evaluation will lead to reviewer fatigue and too few will not provide sufficient differentiation between responses.

For example branch locations may be essential to a company that has a physical presence throughout a region, but less important to the company that has centralized collections and payments through a Shared Service Center. This brings the answers into perspective and favors the respondents that have positive answers in areas which are key decision drivers for the company, such as having a regional operations center, being part of the local clearing or offering specialized services in a region. Similarly, there are no formal rules on the scale that must be used for the score and the weighting. Ranges of 1-3 or 1-5 provide for a sufficient degree of differentiation without requiring too much of reviewers.

The scoring can be used to identify potential areas of strength or weakness that can be explored in the final meetings. If the number of respondents to the RFP is a large, the initial scoring also can be used to select a group of finalists to make oral presentations to the entire team.

Vendor Meetings and Demonstrations

A presentation is normally part of the final selection process. This meeting is an excellent time to ask detailed questions and drill down into the proposal as well as better understand how the implementation will be handled. Normally these presentations are held at the company's headquarters but depending on the scope of the RFP a regional office or financial center may be appropriate.

It is very easy for meetings to stray from their purpose or run longer than expected and this does not benefit the company or the respondents. Prior to the actual meeting distribute an agenda to all participants with

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clear limits on the amount of time that will be allowed. It is also a good idea to stress that the meetings are for the purposes of discussing the proposal. Particularly with banks there is a tendency for senior managers, not well versed in the company's requirements or their bank's solution, to devote scarce time on strategy and relationship matters that can be dealt with another time. Three hours is a realistic maximum and it can be difficult to schedule more than two such meetings in a day.

Respondents should be encouraged to bring the product and implementation specialists relevant to the proposal and resist the temptation to bring a large team. Linking specialists by phone can disrupt the flow of the meeting but may be the only way to bring a specialist on Africa into a meeting in San Francisco. Many companies have sophisticated videoconferencing facilities and these can be used to very good effect.

The scoring summary prepared as part of the review process is an excellent guide for specific questions during the meetings. Simply watching how the respondent's team manages the time and addresses the questions can be quite revealing about how they would behave if awarded the business.

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Immediately following the meetings the company evaluation team should sit down and discuss impressions and observations and review—or adjust—the scoring based on what was learned. Often, the team may identify additional questions for one or more of the respondents, so it may not be possible to decide on the winner within a few days. Further delays in making a decision can be caused by balancing the amount of business awarded to any one respondent or the need for executive management to review recommendations. It is important to not to delay a decision without good cause as it is both unfair to respondents and suggests a lack of clarity on the part of the company.

Where technology is involved—particularly with a TMS—it is a good idea to see a demonstration of the technology. Aside from a high-level discussion of functionality accompanied by a screenshot or two, more detailed demonstrations should take place with the relevant working groups well before the proposal has been issued and the final review meeting. This allows for scripted scenarios that are essential to evaluating a TMS and also permits daily users who may not be on the evaluation team to offer their views on the competing products and services.

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Implementation

The RFP process has been completed and all participants are, with justification, tired. Allow a bit of time and then begin the real work of implementation. Much will depend on the type and scope of the services covered by the RFP. For example, with a global banking RFP it may be advisable to take a regional approach to implementation. Further, depending on the type of services being acquired, significant resources from Accounting, IT or Legal may be required.

Even with a relatively simple banking RFP opening new accounts takes time even though the bank has documentation experts on its implementation team to guide you. It is an easy—and serious—mistake to underestimate the time and resources required for a global bank implementation. That is the subject for another White Paper, but the best advice here is to follow a disciplined process similar to what was used for the RFP.



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APPENDIX 1—ACTIVITY INFORMATION

Your company may be a household name in Europe and the US but a relative unknown in Asia Pacific or Latin America. If prospective vendors do not realize the size and scope of the potential business, they will not devote the right resources to develop a proper response to your RFP. The RFP process addresses this in two ways; through the development of business requirements—discussed in the body of the paper—and through the relevant transaction and use data which demonstrate the scale and are the subject of this appendix.

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Financial Footprint

Detailed and accurate information allows the vendor to clearly assess whether they are capable of—and interested in—handling the types of transactions required. This will lead to a thorough and well thought out proposal that is a direct result of the RFP.

Develop a clear picture of your company's business footprint that may include detailed information on:

1. **Legal Entity Structure**—the legal names and ownership structure for your company on a global and/or regional basis depending on the scope of the RFP. This should be outlined in a chart showing the ownership, business/product lines covered, tax/legal status (branch, subsidiary, check-the-box), functional currency and the nature of business conducted—such as sales, manufacturing or distribution. Most companies have current legal entity diagrams and treasury can add value to these by including business details on the activities performed at each entity and how the entities relate to one another—including regional financial oversight, intercompany flows and commissionaire arrangements.
2. **Organization**—This portion of the footprint shows the hierarchy of job functions including who has responsibility for banking relationships, the management of cash at the local and regional level and investment and borrowing decisions. For internal purposes it is very helpful to know how financial management reports and relates to business management, including performance evaluation criteria. There are more than a few companies where country general managers improve ratios by discounting or using receivables financing or increase profits by generating

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higher investment earnings on funds that should have been upstreamed years ago.

3. **Current Bank Account or Systems Architecture**—For a banking RFP this should show all bank accounts including the name of the bank, the branch where the account is domiciled, currency of the account and the average monthly cash balances. Where possible, the account hierarchies such as zero-balancing and sweeping should be indicated so that there is a clear picture of how the company currently manages its cash flows. For a TMS or other type of RFP it should show the systems deployed and their interconnection.
4. **Planned Bank Account or Systems Architecture**—For a banking RFP this can be descriptive or a series of diagrams of what bank structure is planned. The description should fully describe techniques such as European pooling, local currency pooling in select countries, USD pooling in Asia Pacific, entrust loan arrangements in China, cash concentration in Mexico or ZBAs in the US. For a systems project show what is desired in terms of the number of systems and how they will relate to one another.



5. **Transaction Values, Volumes and Types**—The average monthly value of cash flows and the volume of transactions along with the type of payment instrument such as wire payments, ACH, check. This information is required by currency and it is advisable to keep all amounts in local currency. It can easily be obtained from account analyses in the US but is more difficult to

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obtain for accounts in other countries. It is usually necessary to create a spreadsheet or other data request to collect the required information from international sources. This can be a somewhat frustrating exercise and it can be tempting to rely on information from the company's ERP. Unfortunately, what is important for a treasurer may not be important to an accountant. There is really very little choice but to go through the detailed work to gather the correct information. For example, specify whether electronic payments are local bulk payments (ACH) or cross border transfers and delineate which transactions are intercompany or third party and segregate payroll volumes and amounts.

6. **Banking Services**—The services used by your business in the relevant geographies. In addition to traditional services such as bank accounts, wire transfers and web-based balance reporting/transaction initiation, most global companies require services such as payroll, rent guarantees, export guarantees, import letters of credit, VAT reimbursements, tax payments and specialized software. As with the transaction values and volumes, it is a good idea to structure a data request to all of your related operations to make sure that the inventory of services is as complete as possible. It is best to understand the full array of services needed before working with the banks.

Collecting the required information is a time consuming challenge. There are traditional sources of information such as ERP and TMS systems and account analyses for US domiciled accounts. But in many cases the information available through these sources is limited in detail and will not give the necessary picture of the transaction detail required. Although a US bank's account analysis shows the specific collection or payment service being used and the associated monthly volumes, outside the US you are dependent on local finance staff to provide the data on payment instruments used—BACS or Bloquetos to mention a few.

There is too much information to gather with just a phone call and physical visits are costly and time consuming. The data needs to be collected in a specific format that allows for efficient compilation and consolidation. The best approach is to use a treasury intranet or other customized data gathering application such as Adobe Acrobat Forms. This methodology helps to ensure consistency of responses and makes it easier to follow up with non-respondents and to clarify the data with those subsidiaries that have contributed. Because the information is in an electronic format it is easier to compile and analyze.

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APPENDIX 2—QUESTIONS AND PRICING

Questions

In preparing RFP questions you need to steer between the extremes of too much specificity and potential irrelevance—"How many people are employed at your branch in Kuala Lumpur"—and vague, general queries such as "What is your approach to relationship management". You should have a mix of yes/no questions, short answer questions and a few questions permitting a longer response. Good examples of each type are:

In preparing RFP questions you need to steer between the extremes of too much specificity and potential irrelevance and vague, general queries. You should have a mix of yes/no questions, short answer questions and a few questions permitting a longer response.

- Can your bank make tax payments in China?
- Are all electronic banking services on the same web platform available through a single logon?
- Where do you suggest the EUR concentration account be located and why?
- Describe your pooling capabilities in the recommended location including the number of current clients with global or regional pools. Include in this description the location of your operations center or shared service center that supports these capabilities.
- What is the interest rate basis that will be applied to the pool header, e.g., LIBOR or EONIA, and what will be the amount of spread taken by the bank? Will this interest be applied to the total balance?
- Does the bank offer any higher-level investment service that would allow an automated sweep of amounts beyond a target balance in the pool header to higher yielding investments?
- What is the charging basis for the recommended cash pooling structure? Include all cost points such as the number of currencies pooled, the number of subaccounts or the number of daily sweeps.
- Describe your service and support strategy including the location of our primary relationship manager, treasury management specialist, technical support team and client services manager.
- How is technical support for computer software and communications issues handled? Do the arrangements for technical support match those of regular customer service?

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- What kind of implementation support will your bank provide? Describe project management, training and installation processes. Is there a special team responsible for large, global clients such as us?
- What is your best estimate of the time required for implementation based on the scope of activity? Are there any elements of our requirements that may be problematic or exceptionally time consuming?
- What resources will be required from us in order to implement your solutions? How much of a time commitment will be required of these resources on a weekly basis? Divide this time between work performed by the operating companies and work performed at headquarters.

Pricing

Developing a precise comparison of pricing is a difficult exercise that can be simplified with a carefully prepared template for the bank fee input. Banks have varying approaches to bundling products and services—the charging basis can be quite different, such as per user or per location, and terminology and descriptions for services are not standardized—pooling, sweeping and concentration can be used interchangeably at one bank and refer to separate services and price points at another.

A well-designed template requires that prices be specified in a common currency such as USD or EUR. For example, a bank might suggest that since all services provided in Singapore are billed in SGD, that prices should be quoted in that currency. A good counter to that request is that the primary purpose of the RFP template is comparability and that final pricing will be negotiated following the award of business and at that time can be quoted in local currency.

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In general, the broad categories of bank charges are:

- Implementation
- Maintenance
- Account Services
- Transaction Processing
- Information Delivery
- Technology

Within each category include the major items that will be required such as number of accounts/sub-accounts, deposits and payments by type (checks, drafts, ACH, wire) and whether local or cross border, web banking access by location and users. Describe each service as clearly as possible from a functional perspective because banks often have different names for identical services, for example, "domestic electronic batch payments" (ACH) or "cross border foreign currency transfers".

Ideally, the template should be in Excel. The individual bank spreadsheets can be consolidated easily into a master that allows efficient quantitative evaluation and fee comparisons. It is important that the banks populate your template with pricing data and not simply include standard price lists, terms and conditions or substitute their own spreadsheet. If a bank chooses to ignore your pricing template and instead includes their own fee form or pre-packaged pricing brochure, it is a pretty good indication of that they may not be the best or most flexible banking partner in the long run.

ABOUT TREASURY ALLIANCE GROUP LLC

TREASURY ALLIANCE GROUP consults with clients globally in the areas of treasury operations, banking, payments, technology and risk. With decades of experience our consultants deliver practical, realistic solutions that meet each client's unique requirements. We welcome the opportunity to discuss how our consulting can help meet your challenges.

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CASH POOLING

A TREASURER'S GUIDE



INSIDE

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INTRODUCTION

Liquidity management is an important treasury objective that is challenging because of the need to juggle excess and deficit cash positions across multiple entities, regulatory environments and currencies. For medium to long term cash mismatches a combination of adjusting capital structures via intercompany and third party lending is the best approach. For the short-term—cash pooling—the offset of deficit positions for some entities with the surplus positions of others is the tool of choice. The benefit is elegant in its simplicity: the elimination of the bid/offer spread on these funds along with improved visibility and control of cash.

There are various approaches to pooling so understanding the definitions, options, nuances and tax implications is essential. If done correctly and with support from tax counsel, implementation of a pooling structure can yield significant ongoing benefits for the company. This paper explains cash pooling and identifies the issues for treasury, tax, accounting and business operations.

If done correctly and with support from tax counsel, implementation of a pooling structure can yield significant ongoing benefits for the company.

The Basics

There are two ways of pooling cash—physical and notional.

In physical pooling funds in separate sub accounts are automatically transferred to/from a header or concentration account in order to eliminate idle cash and fund cash outflows. The participating entities are either in surplus or deficit from a transactional perspective, but the bank accounts themselves are zero-balanced. Physical pooling can be used across multiple legal entities, located in the same or different countries—but in the same currency. The funds movement between the participating entities is accounted for via intercompany loans.

Notional pooling achieves the same result, but it is accomplished by making balancing entries on a set of virtual accounts with no changes to the bank accounts held by company entities. The bank managing the notional pool provides an interest statement that reflects

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the net offset that and is similar to what would have been achieved with physical pooling. As there is no physical movement of money, intercompany loans are not required to account for the offset. This benefit is somewhat negated by strict regulatory requirements that can include the need for cross-guarantees of obligations by participating entities. Notional pooling can be applied on a cross currency basis, but this may further add to the complexity and will be discussed further in this paper.

The following chart provides a high-level summary of the differences between physical and notional pooling:

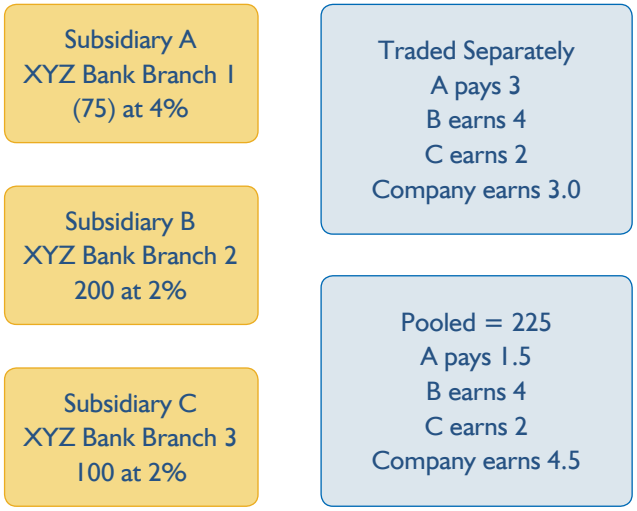
NOTIONAL POOLING		PHYSICAL POOLING
Interest is earned/paid as bank interest	COMPENSATION	Must use arm's length rate, track loans and allocate interest
Can provide tax efficiency	TAX	Withholding taxes can apply to inter-company loans
Highly complex due to involvement of banks and multiple jurisdictions	COMPLEXITY	Greater transparency generates less regulatory concern
Can be implemented across multiple currencies	APPLICABILITY	Must be done on a currency by currency basis
Restricted in many countries	AVAILABILITY	Widely available and most common form of pooling

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POOLING MECHANICS

Notional Pooling

Notional pooling is best explained using the example of a hypothetical company that has three subsidiaries—A, B and C operating in the UK with GBP as the functional currency. The credit interest rate offered by the London branch of the bank is 2.0% and the debit rate of interest is 4.0%.



A, B and C enter into a pooling agreement with the bank and credit and debit interest rates are specified. Day-to-day banking business is conducted as usual for the separate legal entities. Daily transactions can be viewed on the bank's web platform and normal reconciliation takes place. The benefit of notional pooling, as this example shows, is that while the company earned 3 on its total position without pooling, after pooling 4.5 was earned through the elimination of the bid/offer spread, a benefit of 1.5 GBP. This benefit is sometimes shared with the participants by the parent company as an incentive to enter into the agreement—but it is not mandatory from a tax perspective.

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Because of the simplicity and ease of operation, notional pooling is often the technique of choice for in-country, single currency pools. However, it may not be a wise selection in all countries as it may be subject to scrutiny by local tax authorities—the US and Germany, for example. A basic reason for this is the arrangement may be interpreted as co-mingling of funds. Notional pooling is common as an in-country arrangement in the UK, Netherlands and Belgium, which have minimal, or no, withholding tax on interest earned in a pooling arrangement. There may also be country-specific interpretations that require a holding company to function as the pool manager, which currently applies in the UK and France.

Notional pooling, with the virtual set of accounts the bank maintains to achieve the offset makes bank accounting for the pooling arrangement on its balance sheet an important matter for regulatory authorities in the country where the pool operates. In some countries additional documentation, such as cross guarantees among the pool participants, may be required because deficits from the pooling participants appear as assets on the bank's balance sheet. Because there is no interest earned on these assets they appear to be non-performing loans. To justify its accounting treatment the bank obtains guarantees that enable the right of offset and the ability to use surplus funds to cover deficit positions. The requirement for cross guarantees does not apply in the Netherlands, which serves to explain the popularity of the Netherlands as a location for notional pooling.

Notional pooling, with the virtual set of accounts the bank maintains to achieve the offset makes bank accounting for the pooling arrangement on its balance sheet an important matter for regulatory authorities in the country where the pool operates.

Notional pooling becomes more complicated when it expands from a single country to a multi-country arrangement—due to both the cross currency and cross border nature of the pool. When dealing with more than one currency, even within the same country, it is necessary to bring the currencies to a common base currency, often the Euro or US dollar, before the pooling and interest offset can take place. One technique for doing this is through a short-dated swap. Alternatively, a notional conversion to a base currency can be made with the risk covered through the adjustment of the interest rates paid or charged in each currency. Either approach makes the process more problematic and less cost effective as the bank's desire to be compensated for its risk takes place at the expense of the corporate client pooling its funds.

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The advent of the Euro did not fully mitigate the difficulties of cross-border notional pooling. There is the need to accommodate multiple regulatory regimes, demand deposit accounting platforms, dealing rooms and cutoff times. The traditional clearing systems, such as TARGET II, require a physical movement of cash to concentrate the Euro position in one location. Even when a pan-European bank substitutes its network for the clearing systems managing the book involves intervention and work.

Physical Pooling

Physical pooling is often referred to as zero-balancing. It can be achieved in a single country or across multiple countries where the pooled accounts are in the same currency. This type of pooling has a long history in the United States where until recently Regulation Q prohibited the payment of interest on demand deposits and interstate banking was not permitted.

Participants in the pool maintain their own bank accounts which are sub-accounts linked to a main or header account. Participants' day-to-day banking business is conducted as usual. Daily activity can be viewed on the bank's web platform and various account services for collections and disbursements can be set up separately in the sub-accounts. The header account is generally a different legal entity from the operating participants and could be the parent company, depending on the country of domicile. The pool header can also be held by a regional subsidiary, a finance company or any other type of special purpose vehicle (SPV), shared service center (SSC) or treasury center. The accounts are maintained in any country where pooling is permitted and are best located where there are efficient payment and bank systems that enable electronic movement of money between accounts. This is an area where large network banks can be particularly competitive because moving money within a bank network through a book transfer is immediate and relatively less expensive.

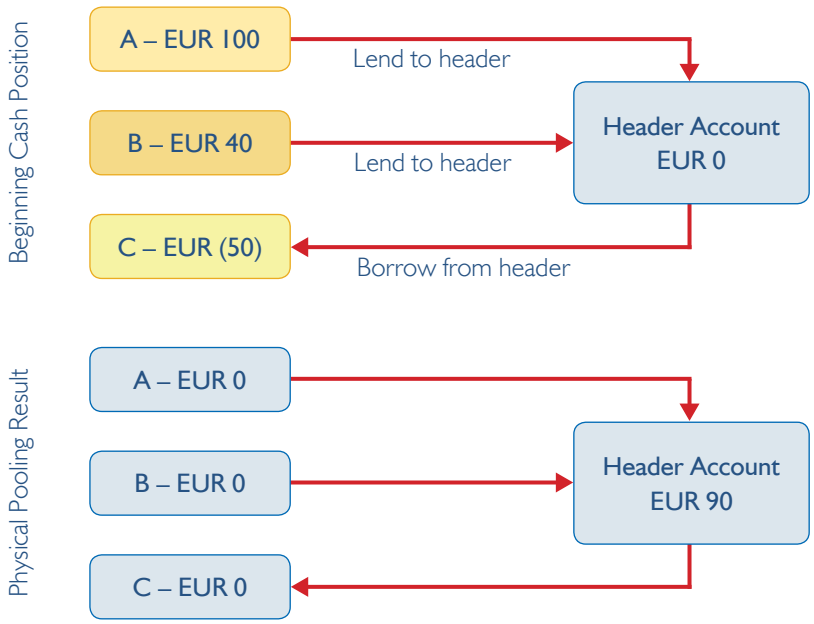
Physical pooling is often referred to as zero-balancing. It can be achieved in a single country or across multiple countries where the pooled accounts are in the same currency.

The participants conduct their daily commercial activity, paying and receiving funds, ideally using bank accounts that are part of the pool to minimize money transfer costs. At the close of each business day all positive balances in the sub-accounts are transferred to the header account and any sub-account deficit positions are covered by funding from the header. The

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overall net position is either invested or, if in deficit, funded through a centralized credit facility. Cash flows between the header and the participant accounts are generally treated as intercompany loans unless all movements take place within the same legal entity.

Consider the example of a company with multiple operations in the Eurozone. Participating entities would open sub-accounts of the header account at the pooling bank. This is illustrated in the diagram below where account positions before and after pooling are shown.



In this situation there are three intercompany loans. A and B are in surplus and lend to the header. C is in deficit and borrows from the header.

Whether the physical pooling takes place within a single country or across border the issues of concern are cutoff times for transactions, actual cost of the transactions and the ability to track the intercompany loans associated with physical pooling. When pooling takes place within the same banking network, the transfers are normally book transfers and transaction fees are typically lower than that levied on a transfer through a clearing system such as Fedwire or EAF. Banks may waive the book transfer charges and assess fees based on a monthly pooling charge based on the number of accounts included in the pooling arrangement or a fixed sweeping tariff.

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Because there is a physical movement of funds this type of pooling is not possible on a cross border basis if FX regulations prohibit the unrestricted cross-border movement of funds, as is the case in Brazil, China and India. Where there are significant tax issues relating to intercompany loans such as in Mexico, cross border physical pooling is permitted but is not practical.

Because there is a physical movement of funds this type of pooling is not possible on a cross border basis if FX regulations prohibit the unrestricted cross-border movement of funds, as is the case in Brazil, China and India.

Both pooling techniques require that a single bank be used for each pooling structure. However, as notional pooling is virtual, although the structural and interest offset arrangements are with one bank, some providers will use their correspondent bank nostro accounts as conduits in countries where they do not have a physical presence.

Hybrid Arrangements

Often, a company may have accounts in an excess cash position across various currencies and countries with a single bank. An approach to handling these balances can be through "Interest Optimization". This is more of a negotiated arrangement with the bank than a specific service and works in the following manner:

- Balances at the end of each day in the accounts across countries are collected and notionally converted into a base currency.
- An interest benefit is paid on consolidated balances—this approach assumes all are in a positive position.
- There is no physical movement of funds or FX conversion.

An additional benefit is that trapped cash held in many regulated countries can be included. This approach is like an International Multi Currency Investment Account. Not all banks will offer this service and the interest yield is likely to be very low, as the rate will be based on Fed Funds or LIBOR. Also, the yields may not be competitive with some local interest earning opportunities—such as seven day "cluster deposits" in India or investments over thirty days in Brazil. Although the currency risk still exists with these local investments, that risk is not mitigated by the interest offset arrangement in any case.

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Another hybrid approach that can be used as an enhancement to physical pooling is referred to as a notional collar. The best example of this is a company that has established a number of physical currency pools in a single location, such as EUR, USD and GBP in London. The company may choose to fund or invest each pool independently or it may have the bank operating the pools notionally pool the header accounts. Cross guarantees are not required because the header accounts are likely to be owned by the same legal entity. Proactive treasuries may prefer to manage the excess cash positions themselves. When this is the case, decisions can be made whether to invest by currency or enter into short dated swaps in order to achieve the notional pool interest effect. The decision will be driven by liquidity forecasts and governed by corporate risk management and investment policies.



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CHOOSING AN APPROACH

The ability of subsidiaries to participate in either a physical or notional pooling arrangement, whether in country or cross border will be dependent on the country-specific regulatory environment where the entity is domiciled. The following chart depicts some high level guidelines:

SITUATION	IN COUNTRY POOLING	CROSS BORDER POOLING
Non-convertible currency	Maybe, varies by country	No
Offshore accounts permitted	Maybe, varies by country	Yes
Restrictions or withholding tax on intercompany lending	Problematic	Problematic
Debit tax on bank transactions	Notional only, if permitted	Yes, if account is offshore

Physical and notional pooling are both well-established methods of liquidity management and the decision to choose one approach over another should be based on thorough analysis including tax review and organizational considerations. Many companies are initially attracted to notional pooling because of its conceptual simplicity and the fact that much of the work is done by the bank. As corporate thinking evolves to include regulatory issues and price, physical pooling generally becomes the more preferred choice. Our work with corporations and banks on pooling indicates that physical pools account for more than 80% of all pooling structures globally.

Some of the factors that account for this preference are:

- **The Euro Zone**—Countries within the zone can be handled through a single physical pool. This reduces the number of accounts which need to be maintained and the related accounting and administrative requirements. Further account reduction is expected with the full implementation of SEPA.

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- **Cash Visibility**—Virtually all cash is visible through web-based balance reporting solutions which allow treasurers nearly instant access to all accounts in the pooling arrangement.

- **Corporate Systems**—The spread of enterprise-wide ERPs make the booking of intercompany loans for physical pooling a simpler task. Where ERP systems are not used, there are third-party TMS services which can easily handle the booking of loans.

- **Bank Systems**—Globally, and particularly in Europe, the banks have integrated and consolidated their operating platforms across regions. In some cases, even if an account is nominally maintained in one country, say France, the accounting system supporting the account may be physically located in the bank's European processing center which could be in the UK or the Netherlands.

Notional pooling can be a realistic approach for mitigating the costs of periodic fluctuations between positive and negative positions in short-term cash. It is also a convenient way for companies to capture the deposit/borrowing spread earned by financial institutions. From a cross-border perspective, notional pooling also works effectively if a company has just acquired overseas operations or where treasury has limited control over local banking arrangements but still wants to be able to manage global liquidity. The overlay banking structure required for the notional pool will not disturb the existing banking structure.

Notional pooling can be a realistic approach for mitigating the costs of periodic fluctuations between positive and negative positions in short-term cash. It is also a convenient way for companies to capture the deposit/borrowing spread earned by financial institutions.

Notional pooling is a practical tool in countries where there is a debit tax levied on cash payments from bank accounts. Physical pooling between separate legal entities would trigger the tax; so notional pooling is the logical choice. It is less effective as a solution when:

- The company has a long-term or permanent mismatch between cash positions. In this case, formal intercompany loans would be used as the most appropriate balancing mechanism.

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- All operating companies are in a long-term surplus cash position. With this positive liquidity situation, the company should place excess cash in higher yield investment instruments, by currency. In this case, using ZBA arrangements in order to bring up all excess cash to single currency pools is the preferred option.

Notional pools that use existing banking arrangements can be quick and easy to implement. Physical pools require a more complex implementation but are less costly to operate and capture more of the company's liquidity. In both cases, implementation may take between six months and one year depending on the complexity and the resources devoted to the task by both the company and the pooling bank.



The final decision often comes down to two criteria: complexity and cost benefit. Notional pooling shifts much of the work to the pooling bank, which tends to increase costs and add to regulatory complexity. Further, many of the costs of notional pooling such as the notional conversion to a common currency are not priced explicitly and this lack of transparency can be expensive. However, notional pooling can be very effective as an overlay banking structure and for this reason continues to be an effective tool in the liquidity management arsenal.

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IMPLEMENTATION ISSUES

Banking Structure

The degree to which the pooling structure will be integrated with the daily transactional requirements of the company is a factor in choosing an approach to pooling. This is because the most cost effective pooling solutions link the liquidity management benefits offered by pooling with the transactional services for receipts and disbursements required to operate a business in each country. The simple addition of a pool bank as an overlay without any change to the local banking structure adds considerable cost due to the extra layer of accounts required, transaction costs in moving funds to and from the pool bank and potential loss of interest on funds that are in-transit.

The degree to which the pooling structure will be integrated with the daily transactional requirements of the company is a factor in choosing an approach to pooling.

Using a single bank for both transactional banking and pooling in a region creates another set of issues. In this case the bank providing the pooling services may not have deep local capabilities in all of the countries in which the company operates. This leads to the need for correspondent banks, strategic partnerships or specialized network arrangements. These can work very well or be a source of ongoing headaches and hidden costs. Thus the design of the overall structure must take into consideration not just the pooling itself, but how it integrates with day-to-day working capital management.

Assessing the Costs

Broadly speaking there are four categories of cost associated with pooling: implementation, maintenance, transactional and opportunity.

1. Implementation costs assessed by banks include setup charges for the basic pooling system, out-of-pocket reimbursement for certain types of on-site technical support and license fees for any bank systems used. Depending on the bank relationship,

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these charges may be waived. But as they are real costs to the bank, the bank will be careful to recoup costs in other areas to ensure that overall profit targets are met.

2. Maintenance costs may include account maintenance, statement rendition and software servicing/upgrading.

3. Transactional costs include wire and book transfer charges. The number of possible charges is limited only by the creativity of the bankers assessing them and the trick is to worry less about specific items and focus on the run cost of the pool. To do this, prospective pooling banks should be asked to prepare an estimated monthly run cost based on the proposed pooling structure and volumes. This will demonstrate how the quoted prices will be applied and can eliminate many unpleasant surprises.

4. Opportunity cost arises because in virtually any pooling arrangement the bank will have use of the company's funds for a period of time during which there may be notional conversions or other transactions. Further, the bank may provide account services for a nominal fee in return for providing pooling services at an apparently low cost. These low explicit costs hide significant opportunity costs such as:

    a. The rates applied to balances may be slightly below the rates a company could achieve in the money markets.

    b. A spread may be taken in the notional conversion of pooling currencies to the base currency of the pool. Where conversion is achieved through the use of interest rate differentials the interest rates may be less competitive than what a company could earn itself.

    c. The type of instrument for investing surplus funds and its tenor is selected by the bank, not the company.

    d. If the pooling bank does not provide the basic operating accounts used by the participants another layer of bank accounts is required. This may necessitate a manual transfer to the pool accounts or a loss of value if the transfer is automated.

    e. If there is a currency movement against the pool base currency, the parent company will have to purchase currency in order to bring the pool back to the zero level.

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Finally, if the bank performing the pooling is not a direct member of the local payment and clearing systems within a given country, the cut-off times for investment may reflect the bank's need for an intermediary. This can change a late-afternoon cut-off time to midday, which, for a European pool means the loss of a full day's interest for US balances.

Pool Location for USD

For companies that maintain USD accounts throughout the world, the question often arises as to whether the pool header account should be located in the US or offshore in a favorable financial center location, such as London, Dubai or Singapore.

Considerations associated with locating a global USD pool in the US include:

- Fees related to current account overdrafts which are technically not allowed in the US.
- The need to sweep funds to an overnight investment or interest bearing account (usually in Cayman or Bermuda) to earn interest on surplus cash.
- Deposit insurance (FDIC) charges that will be assessed until at least 2013.
- Better access to the full range of payment instruments including Fedwire and ACH with their attendant lower costs.
- The inability of US entities to participate in a pool if they are a net user of funds because this would likely be viewed by tax authorities (IRS) as a deemed dividend.
- Improved visibility and access to funds for companies based on the west coast due to time zones.
- The potential to reduce pooling balances if the bank is required to maintain reserves on these funds.

For companies that maintain USD accounts throughout the world, the question often arises as to whether the pool header account should be located in the US or offshore in a favorable financial center location, such as London, Dubai or Singapore.

If the global USD pool is located offshore, keep in mind:

- Overdraft facilities are commonly available.
- There is no withholding tax on interest earned in bank accounts in most common pooling locations.
- Some banks offer the flexibility to receive funds into an onshore USD account and then sweep the funds to the offshore pooling location.

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- If the pool is maintained in Europe it is possible to arrange intraday sweeps between the pool and the onshore USD accounts.
- USD accounts held offshore are not subject to deposit insurance fees—but reserve requirements do apply.

Structural Issues

It's important to review all domicile and structural arrangements and legal agreements that are already in place and which may impact a pooling structure. Examples include:

- The capital structure and documentation requirements pertaining to specific local regulations may limit the flexibility that a company has in using certain types of entities as the main header account holder. For example, if a finance vehicle, such as BV, is set up in the Netherlands with minimal capital, this may dictate that management fees cannot be charged, nor can the entity act as an agent in a pooling arrangement, which would give the BV treasury functionality. This raises concerns about thin capitalization and its consequences.
- When the main account owner is the treasury of a US parent, then subpart F restrictions will likely trigger treatment of pool earnings as deemed dividends. This effectively precludes direct participation by the US Corporate parent in a pooling arrangement.
- If a US subsidiary (not the parent company) is a net contributor of funds to the pool, for example it is collecting EUR from European customers; its collection account which will always be in a positive cash position can be a pool participant.

Pooling Providers

For single country, stand-alone pools an indigenous bank is often the preferred pooling provider. Their branch network, operating capabilities and likely roster of existing pooling clients give them a pricing and experience advantage. When operating on a cross-border basis with multiple currencies, the large global or regional banks have the most expertise. Because the global banks may not have an in-country infrastructure comparable to the indigenous banks in all countries, the global bank may partner with one or more local banks to provide required local transaction services.

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While the regulations governing pooling systems are the same for each bank, the global banks tend to vary in their approaches reflecting different operating systems, technology infrastructure and particular focus and capabilities in a region. It is advisable to solicit pooling proposals from more than one bank—but only once you have worked out the desired account requirements and have a clear concept of the best liquidity and tax structure for the company's operations. Cash pooling is not an off the shelf service. So the recommendations a bank outlines and the description of service capabilities should be designed based on the bank's understanding of the company's unique business, financial and organizational requirements. (For a detailed discussion on preparation of RFPs see our White Paper *The RFP Process—A Treasurer's Guide*.)

While the regulations governing pooling systems are the same for each bank, the global banks tend to vary in their approaches reflecting different operating systems, technology infrastructure and particular focus and capabilities in a region.

Global and Regional Pooling

Global pooling is a tempting concept that may not survive careful analysis. Businesses operate in different time zones with a large network of banks which makes it difficult to manage through a single pooling structure. Most companies establish regional pools in key locations that can take advantage of the intra-regional bank rules that frequently favor local countries. Further, the insolvency rules of some countries effectively restrict the ability of local affiliates to participate in any sort of pool.

Pooling on a regional scale is most common in Europe because of the Euro zone, reliable financial infrastructure and a favorable tax and regulatory climate. It is less used in Asia/Pacific, primarily for regulatory reasons and virtually unknown in Latin America due to FX restrictions and the withholding tax implications of intercompany lending. In the US pooling is achieved almost exclusively through physical means as IRS regulations can interpret notional pooling as co-mingling of funds. Also, the US does not have a banking environment that allows either overdrafts or interest to be paid on current accounts—the interest offset drivers for notional pooling in the first place.

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TAX CONSIDERATIONS

Cash pooling can have significant tax implications and the interpretation and understanding of both notional and physical pooling can vary widely from company to company. The key point is that the decision on the specific approach to pooling, domicile and ownership of the pool header, legal entity and country participation will usually be driven by tax considerations. Treasury will act as the strategic partner in the evaluation process with responsibility for determining the best banking partners and overall account structure.

Favorable tax treatment is an important factor in evaluating what approach to take. Two primary considerations are:

- The content of the underlying agency agreement in place between the owner of the main pooling account e.g. an existing subsidiary or structure such as a BV or Swiss Holding Company.
- The presence or absence of withholding taxes in the country or countries where pooling is contemplated is influential in the choice of pooling method because charging and paying of interest may be either implicit or explicit.

Basic Requirements

Virtually all liquidity management structures, whether physical or notional must comply with the following three basic requirements from a tax perspective:

1. **Arm's-Length Interest Allocation**—All financial arrangements between participants, such as credit lines, cross-guarantees and interest rates should reflect an arm's-length, or market price. While the pool manager (Treasury) may have discretion in allocating the interest income and expense among participants, this interest allocation cannot be arbitrary. The concern is that the pool may be used to shift income from one jurisdiction or entity to another in order to reduce the tax burden.

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2. **Business Purpose**—The entire structure must have a valid business purpose other than tax avoidance or the circumvention of non-tax regulatory restrictions. Pooling structures typically meet this requirement as the net lending and net borrowing positions of the participants are of a short-term nature and the primary purpose of the structure is the efficient management of liquidity.

3. **Economic Substance**—The participants must have formal, legal responsibilities surrounding their participation in the pool including the need to pay interest, suffer interest rate risk and the risk of default by a counterparty. Cross-guarantees, cross-indemnities and other rights of offset are protective measures used by banks that also serve to establish economic substance and need not be a concern as long as all participants are legitimate and solvent. Intercompany compensation at arm's-length rates with respect to guarantees provides additional support.

Other key tax issues that arise in setting up pooling structures include: characterization of interest, tenor of cash position, tax treaties, thin capitalization rules and withholding tax.



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Characterization of Interest

The first step is to determine whether the owner of the main pooling account is acting as:

- **The principal for the group**—If so, the interest earned or charged will be considered to be intercompany interest, subject to withholding tax.

- **An agent for the participants**—Then the interest will be considered to be bank interest which is not subject to withholding tax in certain locations, such as the Netherlands and the UK. This does not govern how local tax authorities may view the interest paid to the pool participant if the subaccount is maintained in country.

The definition of interest is a key determinant of tax treatment and the type of interest will affect the allocation back to the participants and how they are taxed in their respective tax jurisdictions. Pool participants will receive and the pool-header will pay interest at an agreed-upon rate which can be equal to, less than, or greater than the rate that the pool header entity receives from the bank as long as it is arms-length and meets the standards required for transfer pricing purposes.

An underlying tax exposure may exist in some jurisdictions if a pool participant has a net payable balance in the pool for a period of time. This net payable balance raises tax questions as to the recipient of interest payments on the net negative cash balance.

Tenor of Cash Position

An underlying tax exposure may exist in some jurisdictions if a pool participant has a net payable balance in the pool for a period of time. This net payable balance raises tax questions as to the recipient of interest payments on the net negative cash balance—the pool header or the other participants. This is a sensitive area, as often a pooling arrangement is set up as a method of automatically funding entities that are simply operating centers which do not receive funds arising from sales or service revenues. In this case tax direction is essential as there may be other ways to handle funding, such as cost plus, commissionaire arrangements or straight intercompany loans.

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Tax Treaties

Every country has a network of treaties providing different levels of tax concessions for international transactions with the countries that are its trading partners. The level of concession depends on the treaty partner. Certain countries have a highly developed treaty network that facilitates operation of a treasury center/cash pooling arrangement. Their treaty network provides benefits such as low or no withholding tax on cross-border interest, dividends and capital gain payments.

The simple existence of a treaty network does not automatically guarantee treaty benefits to all participants. For a multinational to qualify for the treaty benefits it must be a resident company in each of the treaty countries. That is, it must have a substantial business presence in the treaty country. Tax treaties contain rules to protect against sham operations, nominally resident in the country, but actually set up to take advantage of a favorable treaty benefit. For example, some rules attempt to determine the true identity of the party-in-interest or ultimate beneficiary from a series of intercompany loans or other transactions. Advance planning is important in getting the most out of tax treaties. This would include the use of "capital blockers" in which funds are contributed as equity and withdrawn as loans. These rules must be reviewed in detail and applied to a company's particular situation.

The simple existence of a treaty network does not automatically guarantee treaty benefits to all participants. For a multinational to qualify for the treaty benefits it must be a resident company in each of the treaty countries.

Location of domicile is another consideration. Often, units in tax haven locations such as the Cayman Islands and Bermuda, may not be able to participate in a pooling structure. This requires an additional review by both tax and legal as often a US based company may have multiple entities registered in offshore jurisdictions. Quite frequently Treasury is not even aware of the residency situation.

The domicile of the bank accounts supporting the pooling does not need to be the same location as the entity that is controlling the accounts. Simply put, it is not necessary to physically locate the bank accounts supporting a Swiss company in Switzerland if the banking infrastructure in the UK is more suitable. The Swiss company can hold a non-resident account in the UK. Tax and other logistical drivers determine the location of the pooling entity.

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Withholding Tax

Cross-border treasury management involves the payment or receipt of fees for services and interest payments/receipts on lending or investment activities. These revenue and expense streams are often subject to withholding taxes when the recipient of the service pays money to a treasury service provider or pool header located in another jurisdiction.

The withholding tax leakage will depend on the income tax treaty network between these two jurisdictions. If a tax treaty exists, the withholding tax on the interest payment can be reduced or eliminated. For example, when a US Company pays interest expense to a European treasury center, the withholding tax can be reduced from 30% to zero in many instances if there is a tax treaty in place between the US and the European country in which the treasury center is located. Conversely, similar payments to an Asian or Latin American treasury center will result in higher taxes, in many instances at the full 30% rate.

Cross-border treasury management involves the payment or receipt of fees for services and interest payments/receipts on lending or investment activities.

Treasury service fees can also be subject to a withholding tax depending upon the location of the service recipient and whether or not a treaty exists with the pool manager's (entity holding the pool header account) jurisdiction. Any profit repatriation from this pool header company to its shareholder in the form of a dividend will be subject to withholding tax considerations. For dividends, the withholding taxes could be reduced either under the domestic tax legislation of the Header Entity's jurisdiction or under the tax treaty between the Header Entity's jurisdiction and the jurisdiction of the shareholder.

For example, there can be deemed dividend issues in any pooling arrangement whether notional or physical. Deemed dividends arise when the allocation of the interest benefits or cost of the pool to each participant takes place at arbitrary rates with the effect of avoiding taxation. Because intercompany loans are in place with a physical pooling arrangement and arm's length interest is charged, paid and documented there is a high degree of transparency in the pool. With a notional pool the situation from a tax perspective is more ambiguous and therefore might be a source of concern to many company tax directors and their advisors.

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SUMMARY

The complexities of designing and implementing pooling arrangements may cause some to question the efficacy of pooling as an approach to liquidity management. Despite these concerns, once established, pools are relatively straightforward to manage. Further, the ability to efficiently use all company liquidity to manage varying deficits or surpluses across the enterprise makes the work to implement pooling worthwhile. It is a smart way for treasury to improve the balance sheet but requires careful assessment and cost benefit analysis, close collaboration with tax, an evaluation of overall banking requirements and a focused project approach to select the correct structure and banking services. So although it is not a simple evaluation or a quick fix solution, the benefits will likely outweigh any initial hurdles.

ABOUT TREASURY ALLIANCE GROUP LLC

TREASURY ALLIANCE GROUP consults with clients globally in the areas of treasury operations, banking, payments, technology and risk. With decades of experience our consultants deliver practical, realistic solutions that meet each client's unique requirements. We welcome the opportunity to discuss how our consulting can help meet your challenges.

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TREASURY SYSTEMS

A Treasurer's Guide



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INTRODUCTION

Change is a constant in corporate treasury and is probably greatest in the area of treasury technology. The speed with which business functions have moved from centralized mainframe systems to servers and to the cloud is one part of this evolution. Another is the scope of treasury activities impacted by technology. The simple Treasury Workstations of the 1980s that handled bank balance polling, FX, debt and investments have expanded to enterprise wide Treasury Management Systems that also account for complex derivative transactions, global liquidity structures, risk management and compliance. Significant advances in technology have also paved the way for closer integration with corporate ERPs and single-function systems for escheatment, hedge accounting and valuations.



A combination of treasury focus and IT guidance in system selection turns this risk into an opportunity that can improve the bottom line through optimized liquidity and risk management along with improved control and operational efficiency.

Selecting the right approach will depend on clearly defining the required functionality for your specific needs and this should be coupled with an understanding of the current and future systems environment. A combination of treasury focus and IT guidance in system selection turns this risk into an opportunity that can improve the bottom line through optimized liquidity and risk management along with improved control and operational efficiency.

This paper deals with the different types of treasury systems and how they can fit within a corporate treasury. The principal focus is on how to determine the technology approach that is right for a particular treasury department given the required functionality and systems environment.

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FUNCTIONALITY

The first step in determining required functionality is an assessment of the processes used to manage global liquidity and risk. Many treasuries use a combination of bank reporting systems, spreadsheets and third party packages for specialized requirements. These hybrid approaches get the job done but often require a lot of manual work. This leads to the temptation when considering a TMS to think of it as automating current processes. Automating will likely result from implementation of a TMS but the underlying processes should be examined before they are replicated. One way to do this is to define the user base and their key requirements; what must they have and what would they like to have.

Determining the essential components of a TMS requires discipline because the broad array of options from the technology providers can tempt the treasurer into creating a complex and expensive system, many parts of which may never be used. The best approach is to form a multidisciplinary team including representatives from systems, accounting, treasury and operations to develop a set of business requirements.

Begin with the primary treasury tasks that are currently performed, their frequency and importance. The following matrix can serve as a starting point:

Task	Frequency	Importance
Daily cash management including cash positioning, funding and investment	Daily	High
Bank management such as account management, pricing and service negotiations and signatory management	As required	High
Liquidity management including credit facility management, tax optimization, integration with business operations and investment guidelines	As required	High
Risk management such as the identification and handling of risk, hedging and coordination with accounting	As required	High
Working capital management	As required	High

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Having identified the major tasks that the system is expected to handle, the team can then review basic TMS functionality in order to fully develop the business requirements. Common categories include:

1. Cash management
2. Payments
3. Financial transactions
4. Accounting and bank management

Cash Management

Bank Reporting



The value added by the TMS is that it eliminates the need for the company to use locally deployed bank communication tools or manage the connectivity process, which relieves a large burden from IT.

Bank reporting refers to the gathering of BAI2, MT940 and MT942 type information from the company's banks for previous day and current day reporting. The TMS collects this information through direct bank connections, SWIFT or a local VAN. The value added by the TMS is that it eliminates the need for the company to use locally deployed bank communication tools or manage the connectivity process, which relieves a large burden from IT. Some systems also provide visibility into the daily and intra-day process of collecting the data, so users know if certain banks have failed to report, if files are incomplete or if there was a problem related to login credentials.

Bank information is the life blood of a TMS system and regardless of how the data is received, the real power of a TMS is the ability to pull the data and compile, configure and relate it to financial transactions, liquidity structures and other treasury elements relevant to a particular organization.

Cash Positioning

A TMS should have the ability to prepare and reconcile the company's daily cash position based on bank reporting input and cash forecasting information imported or directly entered into the TMS. Depending on the dynamic nature of the system this provides a real-time view of positions across banks, accounts, entities, and regions. This is not reconciliation in the accounting sense where each transaction is matched with the banking entry. Rather, for treasury

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purposes, the reconciliation process facilitates cash positioning so that cash funding and hedging decisions can be made quickly. It is common to find tools built into TMS systems to match forecasted and actual transactions within defined tolerance ranges, not exact amounts—key for the treasury, but not used for accounting.

Cash Forecasting

Cash forecasting is an area of critical importance for most companies and a good example of where technology can provide significant benefits for treasury. The TMS will be able to accept direct input of forecast data by financial teams in a variety of locations, import data from the ERP or a data warehouse and perhaps extrapolate based on past results. Validating and consolidating the various inputs improves both quality and ease of forecast assembly.

The manner in which all this data flows into the TMS is an important technology consideration. Most of the providers of cash forecasting information are field accounting operations which do not report to treasury and may not necessarily have direct access to the TMS or have limited interface permissions to the TMS itself. Accordingly some of the data may be obtained by automated import from an ERP via IT, directly into a user input screen via subsidiary finance managers or imported from a single-purpose system, such as a trading portal.

Cash forecasting is an integral component of how a centralized treasury plans for the funding needs of its global subsidiaries and then facilitates moving cash through the internal entity infrastructure. Some TMS platforms provide robust functionality to monitor and oversee the forecasting process and accuracy of the data being input by subsidiary finance managers, which in turn can provide a feed-back loop to those subsidiaries on the efficiency of their cash management activities.

In-House Banking

In-House Banking, or IHB, refers to the company acting as a bank for a group of the company's operating businesses. Functions performed by an IHB can include cash pooling and foreign exchange. Having a technology enabled IHB enables companies to benefit from the

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disintermediation possible with an IHB without developing a large and expensive infrastructure to administer the operation.

The IHB is the treasury structure that enables more strategic and flexible cash management for global-oriented businesses. IT is the mechanism that provides the ability to centralize cash management and without a technology solution, the benefits of IHB would be very difficult to achieve.

Payments

Basic Payments

Meeting compliance and documentation demands for payments can be daunting and time-consuming. This is an area where technology can be helpful, but it is important to think through the ultimate objective. Do all the payments have to go through the TMS? To what degree is it prudent to extend system access for the payment workflow process to users who are not part of treasury? Often companies use the ERP for A/P and payroll and the TMS for treasury transactions—such as interbank flows, funding, investing, and hedging activities. In addition, a TMS can integrate payments functionality with financial transactions allowing, for example, interest payments on debt instruments.

If it is determined that the TMS will be used for the bulk of payments, the module needs to provide a workflow for payment approval and release while handling regional requirements such as SEPA compliance in Europe and local formats such as CNAB in Brazil. In addition the module needs to accommodate multiple banks and support this connectivity with timely acknowledgements of transactions processed.



Meeting compliance and documentation demands for payments can be daunting and time-consuming. This is an area where technology can be helpful, but it is important to think through the ultimate objective.

Payment Factory

Shared Service Organizations (SSOs) often centralize payments for the company on a global or regional basis. This requires special workflows that are included in the functionality of some Treasury Management Systems. Although this is considered to be very sophisticated functionality, where it is achievable in a TMS and an organization, it enables treasury to be a strategic partner with AP in the SSO.

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Netting

Multilateral netting is an ideal tool for managing intercompany payment activity on a cost effective basis. Most TMS offer some form of netting system capable of operation on a payables, receivables or hybrid basis. Netting is also a common function for Best of Breed systems.

Financial Transactions

Debt

Multinational companies use numerous types of debt instruments and can benefit from a single system to manage debt and related derivative transactions. These include portfolios of short and long-term borrowings at fixed and floating rates along with lease contracts, all with special features, such as calls, puts and custom amortization schedules.



Most TMS providers include a limited range of debt transactions within their base module, but the more sophisticated transactions will require a special module that raises the ultimate cost of the system.

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Investments

An investment module supports the tracking and management of investment activity. Typically users can manage portfolios of short and long-term investments, including money market funds, interest-bearing, fixed, floating rate and amortizing contracts. As with debt, a limited amount of investment functionality is incorporated in the base package. An additional module may be required to handle specialized instruments.

Foreign Exchange

A TMS can manage basic spot and forward FX transactions, and will generally support the tracking and management of non-deliverable forwards, plain vanilla and barrier options. Transactions can be imported from single or multi-bank portals to help in reconciliation and eliminate re-keying. Depending on the TMS, hedging and hedge effectiveness testing can be performed and mark to market valuations calculated.

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Intercompany

The intercompany module tracks intercompany loan activity based on formal or informal notes from parent to subsidiary or between entities. The ability to track both sides of the transaction including cash flows, settlements, and resulting accounting entries is helpful in documenting this activity and essential when treasury activities generate a significant volume of these transactions.

Accounting and Bank Management

GL Posting and Reconciliation

Transactions created by or imported to the TMS can be entered into the GL through the generation of dual and multi-sided entries from bank and internal transactions within the system. Some systems support the independent reconcilement of bank transactions to accounting entries. Bank transactions imported each day are matched against accounting entries imported from the General Ledger based on user-defined rules for a true bank-to-book reconciliation.

Bank Fee Analysis

Some TMS vendors offer analysis and monitoring of bank fees. This capability is also available from certain specialized vendors but primarily for US banking which uses relatively standardized AFP categories for fee categories. This US approach is becoming more common for global treasuries that take advantage of TWIST standards. The functionality allows users to analyze and reconcile bank fees to compare monthly fees against internal benchmarks.

Bank Account Management

Good treasury practices—and SOX compliance—require a firm handle on details of bank accounts, including signatories. Many systems offer a complete review and approval workflow to manage signature authorities for all accounts and produce the appropriate management, bank, and compliance reporting.

At this point in the assessment process there will probably be a high level of optimism within the team as members see how their work may take less time, be more accurate and enable the treasury to capitalize on market opportunities in FX and investment with the implementation of a TMS. This enthusiasm should be tempered by two realities: the budget for the TMS and the need to have the TMS fit within the corporate systems environment.

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SYSTEMS ENVIRONMENT

Systems environment refers to the matrix of hardware, software and support that exists within the company. The typical company has large systems such as the ERP for corporate accounting and some operating functions, medium-sized systems for CRM (Customer Relationship Management) or a data warehouse and smaller systems for managing tax compliance or other specialized purposes. Usually systems are installed on company servers, powerful computers that can handle the computing requirements of multiple users. These systems are typically referred to as installed systems.

In other cases the system can reside on a third party server, which company users would access through some type of network. The hosts of this type of system are often referred to as ASPs or application service providers. Another option is where the developer of the system hosts the application itself and provides the software as a service, or SaaS.



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The reality of corporate systems is that simple concepts are quite complex because technology changes, businesses grow organically and through acquisitions, systems require time to implement and vendors merge. So the typical company may not be using the latest version of a single ERP configured to the current business mix, installed at a single location and accessed by all users over a proprietary high-speed fiber network supported by technicians who are fully trained on all aspects of the system. The role of the corporate Chief Information Officer, or CIO is to manage the gap between concept and reality providing the benefits of the latest technology while protecting company assets and operating within a designated budget.

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This results in a general set of rules and requirements that will govern the team selecting the TMS. These need to be understood by the team, built into the selection process and negotiated where necessary. Examples of the rules and requirements include:

- Computers and peripherals used on company systems must be purchased and configured by corporate.
- Non-employees may not access corporate systems and employees signing on to corporate systems while travelling must do so through a virtual private network, or VPN.
- Vendors providing technology services to the company must describe the controls they have over their services and submit these controls to audit by an outside party.
- Certain types of data cannot be stored or managed on servers not owned by the company.

Depending on the company, the list can be quite extensive. The implications for the TMS selection team might be that if the company prohibits the storage of financial data outside of the company then an ASP or SaaS type TMS is not feasible. However, this thinking is changing as more companies accept that the security surrounding off site hosting has vastly improved over the past few years.

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BUSINESS REQUIREMENTS

By now there will be a sense of the tasks the system must perform based on current requirements and available functionality in the market. The team should also have a good understanding of the environmental requirements into which the system must fit. The next step in the process is the development of a detailed set of business requirements for presentation to management. These generally follow a format specified by the IT department. Some suggested elements may cover:



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Introduction and Scope

The introduction defines the purpose, scope and benefits of the TMS. For example:

- The TMS will be used for cash positioning, bank account management, payments, cash forecasting and controlling intercompany loans related to cash pooling.
- The TMS is expected to integrate all of the treasury activities of the business entities within scope and act as a central point of integration with the company's ERP, banks and associated financial activities.

Scope defines the geographic, business or other parameters that determine which of the company's businesses will be using or impacted by the TMS. For example:

- In scope entities include all businesses in North America, EMEA, LatAm and Asia Pacific.

General Requirements

This section outlines general expectations for the system. Examples include:

- Library of standard reports including the capability for users to customize reports to their requirements
- Complete holiday calendars for all of the in-scope countries
- Availability in English, Spanish and Portuguese

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- Must provide a dual-factor authentication for all the users with authority to approve payments within the system
- Support interface with SWIFTnet, Oracle and SAP

Functional Requirements

In this section, it is common to list the financial functions, or tasks, that will be performed by the TMS. Examples include:

- Connectivity and integration
- Cash visibility
- Bank account management
- Cash positioning
- Cash forecasting
- Cash pooling
- Payments approval and execution

Each of these areas is then defined in further detail. Following is an example for connectivity:

- ERP sends approved payment files to TMS at 0800 and 1500 each business day.
- TMS sorts files by bank and prepares payment files for each bank within 15 minutes of receipt and then sends to the banks no later than 30 minutes following receipt from ERP.
- Banks acknowledge file receipt within 15 minutes of transmission and users see this acknowledgement in the TMS. TMS will report unacknowledged transmissions.
- Banks confirm that the files have begun processing within timing to be negotiated.
- Banks report transaction status through MT942 within 15 minutes of successful file processing.

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Market Scan

The purpose of the market scan is to develop a list of prospective suppliers based on the business requirements and vendors operating in the market. Using information from public sources such as the web and networking with experts in the field, a list can be assembled of the major players that can broadly meet the company's requirements. The market scan also provides general information about the financial stability, market share, product range and other attributes of potential vendors.



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TMS suppliers fall into three broad categories:

1. Modules from the major ERP suppliers
2. Specialized software companies that operate independently or as divisions of larger companies
3. Bank developed or supported white label systems

ERP modules offer excellent integration with the company's ERP and a familiar infrastructure for the IT department. The functionality of these systems has improved dramatically since their first introduction but they are typically developed from an accounting perspective and therefore lack many of the features that are necessary for the corporate treasurer. This leads to significant customization by the company or their ERP consultants adding complexity and cost to the system.

Specialized developers offer exceptional functionality and can be quite willing to customize their product to company specifications. The major suppliers offer a range of solutions for most price points and are very aggressive in marketing their offerings. However, because this segment of the market is ferociously competitive and consolidating rapidly there is the risk that a particular product may not have a sufficient installed base to survive or continue development.

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Most banks offer the basic web portal for balance reporting, transaction execution and other functionality including FX trading and trade finance. These portals have limited multi-bank capabilities and so do not generally serve as the main TMS for any but the smallest company. Some larger banks have developed or offer on a white label basis more robust functional systems with comprehensive multibank capabilities. These offer the advantage of bank support and commitment with the disadvantage of binding the company to the bank for the long term and sending this message to the bank's competitors.

TMS from the ERP vendors are often preferred by the IT department while treasury finds the functionality of systems from specialized developers to be closer to their needs. Bank systems are tempting because of perceived simplicity and lower cost, but are often not the best choice for a treasury with multiple requirements and banking relationships. Whatever approach is ultimately chosen it should be chosen through an orderly and disciplined selection process.

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SELECTION

There are two parts to the selection process for a TMS, the RFP and evaluation of the responses. The RFP is the structured tool provided to prospective vendors and designed to obtain information on how the vendors can meet the company's business requirements and at what price. RFPs are covered in greater detail in *The Request for Proposal Process—A Treasurer's Guide* available at **www.treasuryalliance.com**.

Evaluation

Evaluation is the process of reviewing, comparing and analyzing vendor responses. TMS proposals differ from many other types of proposal due to the greater specificity of the business requirements. Companies need to see and understand how a TMS performs a particular task using their data and in their environment. For this reason the high level demonstrations that some may ask for are not particularly useful for anyone.



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There are two parts to proper evaluation:

1. The RFP response
2. A scripted demonstration

The RFP response should be read carefully and scored on a common basis with the other responses. Important factors for most companies include: financial stability of the vendor, size of installed base, ability to meet business requirements and price. A properly designed RFP will provide the required information on these factors.

Scripted demonstrations are where the finalist vendors show—as oppose to describe—how their systems will address the company's business requirements. The company supplies each vendor with the same set of tasks and data and observes the workflow and the result. Demonstrations can last from half a day to more than two days depending on the complexity of the system requirements.

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Potential tasks include:

- Enter forecast data for a sample of five selected currencies/businesses. Output should be a consolidated cash forecast.
- Provide five intercompany loan documents and have the TMS calculate the interest payments to term based on the loan terms.
- Create notional accounts for a set of businesses and have the TMS create the money movements required for a pooling effect.

The key criteria for including tasks in the scripted demonstration are those that are of critical importance to the company. The vendor should demonstrate how their system would perform and handle each task.

Final pricing negotiations follow the evaluation. There are two important points to make:

1. Insure that the vendor cost the system as you will install it including firm estimates of implementation consulting and the annual run costs.
2. The market for treasury systems is very competitive so while price should not be the most important selection element all vendors have considerable latitude in their pricing.

The completion of the selection process does not signal the end of the work involved but the beginning of a new phase in the project—implementation.

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IMPLEMENTATION

Implementation is a complex process that integrates resource management, IT issues, solution modeling and systems architecture among other elements. Following are some of the critical elements of the technology implementation process that a treasurer should be aware of:

- **Objectives and Project Scope**—Before beginning the implementation, it is important to document the objectives and project scope. The objectives should speak to outcomes, while the project scope would describe how the outcomes would be achieved. For example, one objective might be to achieve global cash visibility for all bank accounts and the related project scope might be to implement bank connectivity and configure cash management in the treasury system.



Implementation is a complex process that integrates resource management, IT issues, solution modeling and systems architecture among other elements.

- **Budget, Resources and Timeline**—The vendor will propose a detailed project plan, based on the project scope, which should include a proposal for budget, resources and timeline. Most importantly, the treasurer should appoint a dedicated Project Manager who ideally possesses a combination of Treasury, IT and Project Management skills. This Project Manager will work closely with the vendor and internal stakeholders and external parties, such as banks, throughout the project and be responsible for implementation meeting the objectives. In addition, the treasurer should also create a working group for the project. This does not require full-time participation from the members but should be included in their job responsibilities to ensure that it is taken seriously.

- **IT Environment**—For installed solutions, IT should be engaged early in the process to determine and setup the technical environment. Some issues that need to be coordinated between IT and the vendor include whether the application is installed locally on all user machines or on an application server and if remote users access the system through a web application or directly and which database will be used.

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SUMMARY

Treasury systems have come a long way and now meet the needs of different types of user. The advent of the cloud has facilitated the use of vendors that can provide solutions that are quite cost-effective for smaller companies. At the same time technological innovation and experience has paved the way for vendors to provide the breadth of scope that a very large treasury would require. Industry growth has also resulted in a measure of instability in the vendor market that requires careful attention so as not to strand the user with an obsolete system. The benefits offered by TMS have never been greater and the risks, while real, are manageable. Companies that follow a structured process and focused vendor evaluation, will ensure that the risk/reward equation works in their favor.

ABOUT TREASURY ALLIANCE GROUP LLC

TREASURY ALLIANCE GROUP consults with clients globally in the areas of treasury operations, banking, payments, technology and risk. With decades of experience our consultants deliver practical, realistic solutions that meet each client's unique requirements. We welcome the opportunity to discuss how our consulting can help meet your challenges.

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