ACQUISITION OF SOFTWARE AND SERVICES TO SUPPORT THE CORPORATE HUMAN RESOURCES INFORMATION SYSTEM

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OFFICE OF AUDITS

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FROM:

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SUBJECT: Acquisition of Software and Services to Support the Corporate Human Resources Information System (Audit Report No. 00-011)

The Federal Deposit Insurance Corporation's (FDIC) Office of Inspector General (OIG) has completed an audit of the initial planning and procurement phases of the Corporate Human Resources Information System (CHRIS) development project. The CHRIS project was initiated to develop an integrated, automated system that would support core human resources business functions performed by the Division of Administration's (DOA) Personnel Services Branch (PSB). The FDIC expects to fully implement CHRIS by the fourth quarter of 2003 to consolidate the FDIC's human resources information systems.

During the project's development, the OIG will continue to provide proactive audit coverage and provide FDIC management with suggestions and recommendations regarding the project. We will follow up with periodic audit reports regarding the status of CHRIS. Our overall audit objectives are to determine whether (1) CHRIS development is adhering to established and generally accepted system development life cycle (SDLC) procedures and (2) system deliverables satisfy user requirements in a cost-effective and timely manner. The purpose of this audit report is to provide management with our conclusions regarding the project's early development activities, including initial project planning and the award of software and services contracts to support CHRIS.

BACKGROUND

Human resources administration encompasses a wide range of functions related to the management of personnel from the time a prospective employee applies for a position until the time that the employee leaves the Corporation. It includes establishing policies and procedures related to the recruitment, employment, classification, training, management, promotion, and retirement of personnel. Human resources administration also includes the collection and maintenance of the data related to the employment process.

The FDIC's human resources management program is administered by approximately 180 PSB employees located in Washington, D.C.; San Francisco, California; Chicago, Illinois; Atlanta, Georgia; and Dallas, Texas. The FDIC's workforce totals approximately 7,000 employees.

Because the FDIC is exempt from some statutes and regulations that govern human resources management programs in most federal agencies, the Corporation has developed its own compensation systems. In addition, the FDIC must account for supplemental benefits that are not available to career civil service employees in the federal government, such as dental and vision programs, disability insurance, and an FDIC tax-deferred savings plan.

The CHRIS project was initiated to provide an integrated, state-of-the-art technological solution to support current and future requirements for delivering human resources programs and services throughout the FDIC. Currently PSB maintains 14 human resources information systems that operate on 7 different technical platforms. Further, the human resources data elements for those applications are not standardized. In addition, personnel and payroll processing services are provided by the United States Department of Agriculture's National Finance Center. As a result, the CHRIS project team determined that the processing of personnel actions lacked integration and was labor-intensive. The CHRIS team also identified fragmentation of data, processes, and software applications as a significant barrier to the effective planning and managing of human resources programs across the organization.

CHRIS will replace FDIC's 14 major human resources systems with the installation of a commercial off-the-shelf (COTS) software package. The decision to replace the current human resources software with a COTS package was approved by the CHRIS Steering Committee after it considered alternative solutions. The FDIC selected PeopleSoft Inc.'s Human Resources Management for the U.S. Federal Government (PeopleSoft) after market research indicated that the package was a mature product and best met the FDIC's needs. The PeopleSoft product selected is designed specifically for federal customers. When fully implemented, PeopleSoft will provide an integrated solution that will facilitate the recruitment, employment, classification, training, management, promotion, allocation, and retirement of FDIC personnel. The project will proceed in a phased approach with a total of five CHRIS project phases spanning approximately 45 months. The five phases are (1) personnel processing and payroll interface, (2) vacancies, performance management and labor relations, (3) training administration, (4) benefits administration, and (5) time and labor. The FDIC's initial estimates for completion for the 5 phases of the CHRIS project are 4th quarter 2000, 2nd quarter 2001, 4th quarter 2001, 3rd quarter 2002, and 1st quarter 2003.

FDIC selected PricewaterhouseCoopers LLP (PWC) to provide integration support following a request for quotation that included a written offer, oral presentation and a price proposal. PWC was selected from a total of five respondents. As integration support advisor, PWC will provide high-level and detailed planning with deliverables that are in accordance with the FDIC SDLC. The key deliverables will include a project definition report, project work plan, including Gantt chart and resource allocations, and recommendations regarding FDIC PeopleSoft technical configuration. PWC as integrator will also perform a detailed analysis for phase I that will be based on the FDIC's requirements stated in the high-level requirements document, the summary requirements document, the FDIC unique requirements matrix, and the associated policy documentation. The analysis will provide detailed descriptions of FDIC's human resources business processes, workflow, and data requirements that can be met through the PeopleSoft human resources software; are not met through the PeopleSoft functionality and FDIC human resources business processes, PWC will propose alternatives and assess those risks.

OBJECTIVES, SCOPE, AND METHODOLOGY

The objectives for this phase of our audit were to determine whether the FDIC (1) identified a business need for an integrated consolidated human resources system, (2) considered all alternatives when addressing those needs, and (3) adhered to procurement policies and procedures in the solicitation and award of the COTS software and service contracts. Our audit work was limited to the project's initial planning activities through the award of the project's Software and service contracts. We conducted the audit between July 1998 and December 1999.

To accomplish our audit objectives, we interviewed CHRIS project team members, analyzed CHRIS Steering Committee decisions, and reviewed documentation produced by the project team. The documentation reviewed included the CHRIS cost-benefit analysis (CBA), functional requirements worksheet,¹ market research studies pertaining to the availability of integrated human resources packages in the private sector, and the results of site visits to other federal agencies that have implemented PeopleSoft software. We also reviewed the CHRIS project work plan, client information technology plans, the FDIC Board of Directors' case requesting expenditure authority for CHRIS, and the processes used for selecting both the COTS software and service contractor. During our review, we provided management with suggestions to improve CHRIS planning documents and processes by expanding membership on the CHRIS Steering Committee and clarifying information in the CBA. Management took immediate action to address our suggestions.

RESULTS OF AUDIT

The CHRIS project team successfully developed the documentation and analyses needed to support a decision to acquire COTS software to replace the FDIC's human resources systems. The CHRIS project team also determined that the current human resources systems were cumbersome, technologically outdated, and unable to support the integration of the large volume of data needed to manage the Corporation's workforce. Finally, the CHRIS team developed a CBA to determine the most cost-beneficial course of action for the FDIC in developing an integrated CHRIS. Our review supports the CHRIS project team's recommendation to acquire COTS software to support its human resources business functions as a reasonable and valid decision resulting from the CBA analytical process. Further, the solicitation and award process for the implementation of CHRIS was well supported and followed FDIC procurement policies.

REQUIREMENT FOR A HUMAN RESOURCES INFORMATION SYSTEM

The CHRIS project team justified the business need for an integrated state-of-the-art human resources application to replace the Corporation's current information systems supporting human resources management. The team concluded that the current systems had become technologically outdated and were unable to support the integration of the large volume of data and functions needed to manage the Corporation's workforce of approximately 7,000 employees. The project team identified numerous technical and functional shortfalls with the current human resources information

¹ A matrix of business functions mapped to supporting business activities, current systems, and requirements.

systems, including system design weaknesses, the use of separate databases for the stand-alone applications, the use of outdated technology, and maintenance difficulties.

The CHRIS team focused on the Corporation's need for accurate and timely human resources information, efficient transaction processing, and the ability to build a foundation for future enhancements. The team determined that the accuracy and timeliness of human resources information could be improved by eliminating duplicative systems, providing FDIC managers with desktop access to basic information about their employees, and ensuring that the Corporation has the ability to produce reports linking information from the various human resources functions. They believed that without addressing these issues, the potential existed for FDIC management to base its personnel decisions on missing, incomplete, or inaccurate data. The CHRIS team determined that current transaction processing was not efficient because the human resources processes were (1) both paper and labor-intensive, (2) required duplicate data entry, (3) used mainframe applications that were not user-friendly, and (4) were supported by incompatible systems. The CHRIS team also determined that the FDIC's current human resources software system was based on obsolete programming languages and database management systems. As a result, it was difficult to find resources and tools to support needed modifications.

We believe that the CHRIS team's recommendation to pursue the human resources program enhancements that were needed to support the Corporation's strategic priorities and to comply with new statutory, regulatory, and negotiated requirements when needed was justified because existing systems were outdated and duplicative. Further, the methodology used to develop that conclusion was reasonable and valid.

ANALYSIS OF ALTERNATIVES

The CBA developed by the CHRIS project team was well supported and considered several viable alternatives. The methodology employed was reasonable, valid, and followed generally accepted SDLC costing practices. The project team considered five alternatives. The alternatives were to (1) continue operating and using the 14 non-integrated human resources systems, (2) rewrite the existing individual applications using a common environment, (3) develop CHRIS using in-house resources, (4) implement CHRIS using a COTS package, and (5) receive the full range of integrated human resources information system services from another federal agency.

The CBA considered the costs, benefits, and risks for each of the alternatives. A 10-year life cycle was used to develop the cost estimates, and intangible benefits were considered for each alternative. In the final analysis, each alternative was scored against specific categories of risk. Based on this CBA process, the CHRIS team recommended the COTS alternative because it represented the best balance of costs, benefits, and risks. We believe that the approach taken by the CHRIS team was reasonable and was based on the best data available to the project team at the time.

SOLICITATION AND AWARD OF SOFTWARE AND SERVICE CONTRACTS

The Acquisition Services Branch of DOA followed the FDIC's policies and procedures in the solicitation and award of the CHRIS contracts. The FDIC selected PeopleSoft as the COTS human

resources software package. The selection was determined only after extensive market research was conducted in both the private and public sectors as to the availability of a readily available product. This market research included an initial request for information that gave interested vendors the opportunity to review the FDIC's high-level functional requirements for a comprehensive human resources system and to respond to 55 specific criteria needed by the FDIC. For each criterion, the FDIC required the vendors to indicate whether their product (1) currently met the requirement, (2) could meet the requirement through a link to third-party software or through enhancements, or (3) was unable to meet the requirement. The vendors were also asked to provide a brief description in support of their responses. The CHRIS team's analysis and conclusions were based on specific vendor responses. Based on our analysis of the procurement documentation, we believe that the FDIC selected the contractor that best met its needs in terms of cost, risk, functionality, technical architecture, service, and support.

The FDIC also followed sound contracting principles when selecting PWC as the integration support contractor. The selection followed a request for quotation that required a written offer, an oral presentation, and a price proposal. The statement of work was well written and was divided into two distinct segments. The first segment provided for high-level planning activities for all phases of the CHRIS project and detailed planning and deliverables for Phase I. The second segment of the statement of work will consist of task orders issued to the contractor to provide detailed planning and deliverables for any or all remaining phases of the CHRIS project. The fee for the first segment was based on a firm fixed price. However, the fees for task orders issued pursuant to the second segment of the statement of work will be determined at the time needed (firm fixed price or time and materials).

To determine which vendor to select, the CHRIS team established a technical evaluation panel (TEP), developed evaluation criteria, and reviewed vendor written responses regarding past experience and key personnel. The TEP also conducted oral presentations during which each vendor presented its approach for integrating the PeopleSoft application. Based on vendor responses, the TEP developed a consensus technical score for each vendor. By adding cost points to the technical score, the TEP then computed each vendor's overall score. After further discussions with the vendor with the highest overall score, the CHRIS project team recommended to the source selection official that PWC be awarded the contract. We believe that the approach taken by the CHRIS project team in developing both a statement of work and evaluation criteria, and when evaluating vendor responses was reasonable and followed FDIC contracting policies and procedures.

CONCLUSION

Based on our review of the initial planning and procurement phase of the CHRIS development project, we believe that the FDIC has followed generally accepted SDLC procedures to date and adhered to sound contracting principles. We are making no recommendation at this time. We will continue to follow this effort and will issue additional products when appropriate.