



Business Case

Project Name: Financial Partners Data Mart

Channel: Financial Partners

Project Sponsor: John Reeves

Project Lead: To be determined

Project Description

Describe the need for change (the business problem to be addressed).

Within the FP Channel, the current process to extract information is time consuming, inconsistent and costly since data is fragmented across various legacy systems. Contractor support is required to satisfy existing and new business requirements, customized reports and flexible queries.

What is the purpose of the initiative?

The FP Data Mart is the infrastructure/system that will provide customer information for employees and partners. The FP Data Mart will ultimately be the main source of consolidated customer information that will support several key business areas within the Channel.

The purpose of the complete Data Mart initiative is to provide executive/summary information and decision support capabilities around several key business functions which include Risk Management, Customer Relationship Management, Compliance Management, and Portfolio Management. The FP Channel is responsible for both current and retired loan programs and as such is under customer and program obligation to ensure the capture and comparative ability of all programs. By collecting information from several sources into a central location, personnel in the Channel as well as external partners will be able to more efficiently identify areas in which each party may assist the other while improving the support for students within the Federal Family Education Loan Program.

In order to realize interim and immediate benefits prior to implementation of the complete Financial Partners Data Mart, a phased development approach will be used. It is currently anticipated that the Data Mart will be developed in four phases. This business case focuses on the first two phases.

What is the scope of the initiative, including what it is not?

While a variety of systems will ultimately be source systems for the data mart (including the enterprise wide data warehouse), the first two phases of this initiative will limit the number of source systems to those existing systems that were previously determined to provide a major impact for risk management, customer relationship management, compliance management, and portfolio management.

Phase I of the overall Data Mart initiative will establish the data mart infrastructure within the Channel and will provide initial Customer Relationship Management, Compliance Management, Portfolio Management, and Risk Management functionality related to the thirty-six Guaranty Agencies. Information from FFEL, FMS, NSLDS, and PEPS will be extracted, transformed as required, and loaded into the data mart. This will occur on a periodic basis as determined by customer or business defined requirements. Various reporting (i.e.: the relationships between GAs, Lenders, and Servicers; identification of 'top' GAs; the Risk Scorecard) will be developed to support some of the analytic processing that is required. Analytic reporting includes 'what-if' analysis, trending, and benchmarking in



areas related to the operations, default management, loan servicing, financial information, and regulatory requirements of the Guaranty Agencies.

Phase II of the Data Mart initiative will be comparable to Phase I in some respects and follow the identical development processes; however, it will provide initial Customer Relationship Management, Compliance Management, and Risk Management functionality related to approximately four thousand Lenders.

As part of the analysis, this initiative will address functional requirements for risk modeling. At this time, it is anticipated that the majority of the functional requirements that would be required of a Risk Modeling Commercial Off The Shelf (COTS) solution will be satisfied by the data and analytic capabilities within the data mart. If the majority of the risk analysis requirements are satisfied by the data mart, then the cost effectiveness of a separate COTS solution for any remaining requirements will need to be addressed by a separate initiative.

There are existing issues related to the accuracy and timeliness of the information contained within some of the source systems listed above. The scope of this project does not include the time and effort required to correct these issues. It is possible with the available reporting within the data mart, that these issues may become more noticeable.

The scope of Phase III of the Data Mart, which is not addressed in this business case, may include additional functionality related to Customer Relationship Management and Compliance Management.

The scope of Phase IV of the Data Mart, which is not addressed in this business case, may include additional functionality related to Portfolio Management in support of Financial Partners business processes.

What is the start date and end date of the initiative?

The start date for Phase I is November 2000 and the expected end date is June 2001.
The start data for Phase II is July 2001 and the expected end date is January 2002.

What other business areas/external groups are affected by the implementation of this initiative and how are they affected?

The Guaranty Agencies and Lenders are affected. They will be able to see the information related to their risk (via the web) and they will be able to work more closely with SFA to determine areas where they require assistance. In addition, by 'drilling down' on the available information, it may be possible to identify areas upon which SFA may effect a data integrity strategy and corrective action.

The CFO is affected. During the initial phases, the new Financial Management System (FMS) will need to provide information to the data mart.

The CIO is affected. NSLDS will need to provide information to the data mart. In addition, communication/coordination related to the SFA Enterprise level common data standardization initiatives will be required.

The Schools Channel is affected. The PEPS system will need to provide information to the data mart.

The Financial Partners Channel is affected. The FFEL system will need to provide information to the data mart. The information from FFEL will be historical and will be used for trending analysis prior to the retirement of the FFEL system. The Web Portals initiative is affected as employees, Guaranty Agencies,



and Lenders will access data from the data mart via the web. A determination will be made in future phases for broadening the accessibility of the information in the data mart.

The Students Channel is not effected during the initial phases of this initiative.

What systems are impacted by the implementation of this initiative and how are they impacted?

PEPS, NSLDS, FMS, and FFEL will all need to have information extracted from them. The extracts will occur on a periodic basis, which will be determined during the initial months of the project.

What business processes are impacted by the implementation of this initiative and how are they impacted?

The business processes related to Financial Analysis and Oversight will be affected. These business processes currently receive information from the separate systems. Information is then consolidated into IDEA and Excel spreadsheets. These processes will change to access the data mart and execute reports and ad hoc queries to conduct the analysis directly from a single source.

Technologies Used

List the proposed technologies that will be used to implement this project

Name/type	Proposed use	Has technology been used at SFA before? Where?	Does Technology fit SFA's Architecture Standard? Explain.	Does SFA have the technical expertise to implement this technology? Why?
Oracle 8i	Database management system	Yes. IFAP, CFO Data Mart	Yes. It was selected by the CIO as the RDBMS of choice for supporting data warehousing	Yes. SFA CIO members will need to go to training.
Informatica	Data Acquisition	Yes – CFO data mart, Delinquent Loans Mart	Yes – this tool was selected as part of the new enterprise standard under the modernization effort	Not yet, CIO has just now completed the first two projects using this tool. SFA CIO members will need to go to training.
MicroStrategy	Web-enabled query and reporting tool	Yes – CFO data mart, Delinquent Loans Mart	Yes – this tool was selected as part of the new enterprise standard under the modernization effort	Not yet, CIO has just now completed the first two projects using this tool. Some FP members will



				need to go to training.
Mid-range platform (Sun, HP, NT, Hardware)	Houses database and tools above	Yes – CFO data mart, Delinquent Loans Mart	Yes – this platform was selected as part of the new enterprise standard under the modernization effort	Not yet, CIO has just now completed the first two projects using this platform. SFA CIO members will need to go to training.

Benefits

This initiative lays the foundation for providing a consolidated view of information about our partners. It also enables the web portal and other tools and technologies to be more effective. For instance, it can simplify the FP web portal by providing a single system from which to satisfy many of our partner and employee requests. This initiative supports SFA’s three main objectives. It will ultimately reduce costs by providing capabilities that currently either do not exist or are very inefficient to provide. It will increase customer satisfaction by providing more timely information to our partners that will allow them to work more effectively with SFA. It will increase employee satisfaction by providing them with the information and tools to better support ‘partner’ relationships both internally and externally. It also has a long-term benefit in ensuring consistent data and a single resource of data.

Reduce Unit Cost

Quantified Benefit (\$)	How will benefit be measured/realized?	When will benefit be realized?
Reduced manual effort required to conduct financial analysis and desk reviews (80% of preplanning and desk reviews from regional personnel - \$190,000; 20% of 2 people in HQ on financial analysis - \$15,000)	Number of hours to conduct initial financial analysis; number of hours to conduct desk reviews	June 2001 and January 2002 when the data mart is operational
Proactive identification of potential financial risks to SFA by leveraging the analytical power of the Data Mart architecture and design (assume annual incidents of \$2,000,000 for GAs and \$5,000,000 for Lenders and that the data mart can assist in early identification of 50% of the amount)	Time elapsed between the actual incident and the recognition/ identification of the problem; the total monetary value associated with the incident	June 2001 and January 2002 when the data mart is operational



Changes to existing review 'systems' that will not be required (Current extracts from FFEL into IDEA and other spreadsheets will not need to be changed to pull information from FMS) (assume 3 extracts at \$150,000 each and 30% of one person's time for 6 months - \$11,000)	Number of hours that it would have taken to change the existing processes; number of new extracts that would have been required	June 2001 and January 2002 when the data mart is operational
Improved coordination/communication between HQ and the regions by using a common system (reduced/eliminated costs for operations and maintenance of extracts)	Reduced number of extracts from systems which currently support the different groups	June 2001 and January 2002 when the data mart is operational
Reduced need for new extracts/reports required from existing systems (these will still not provide the same level of functionality as the data mart) (assume 5 new extracts and development costs at \$200,000 per extract)	Number of existing and proposed new report/query requests no longer needed from NSLDS, FMS, FFEL, PEPS to support Customer Relationship Management, Compliance Management, and Risk Management	June 2001 and January 2002 when the data mart is operational
Reduce amount of paper required to produce reports since they will be viewable online	Number of reports that no longer need to be printed	June 2001 and January 2002 when the data mart is operational
Reduced development costs for the web portal for providing information through the web portal by initially connecting with a single system instead of multiple systems (development costs that will be avoided - \$300,000)		June 2001 and January 2002 when the data mart is operational
<i>Assumptions</i>		
<ol style="list-style-type: none"> 1. Many of the costs are estimates as detailed records regarding manual efforts, costs of paper storage, and costs related to coordination are not readily available as they have not been maintained prior to the inception of the PBO mandate. 2. Costs related to proactive identification of potential risks are estimates only. The actual amounts are entirely dependent upon the type and extent of a given problem. 		

Increase Customer Satisfaction



Quantified/Qualitative Benefit	How will benefit be measured/realized?	When will benefit be realized?
GAs and Lenders will be able to review information to help them assess their risk and compare their performance with a peer group	Ratings on Customer Satisfaction Surveys	June 2001 and January 2002 when the data mart is operational
GAs and Lenders will be able to identify areas in which they need technical assistance	GAs and Lenders proactively requesting assistance based upon their risk areas	June 2001 and January 2002 when the data mart is operational
<i>Assumptions</i>		
1. Technology will enable an advanced basis for data integrity, ownership, and conflict resolution.		

Increase Employee Satisfaction

Quantified/Qualitative Benefit	How will benefit be measured/realized?	When will benefit be realized?
Financial Analysis and Oversight is conducted more efficiently	Ratings on Employee Satisfaction Surveys	June 2001 and January 2002 when the data mart is operational
More user friendly system from which to access information	Ability of employees to effectively use the system	June 2001 when the data mart is operational
Improved coordination/communication between DC and the regions by accessing the information from the same system (the data mart)	Coordination on the Oversight and Technical Assistance performance reviews	June 2001 and January 2002 when the data mart is operational
<i>Assumptions</i>		

Estimated overall dollar amount of all benefits listed above.



Quantified Benefits					
BY	BY+1	BY+2	BY+3	BY+4	Total
<u>\$800,000</u>	<u>\$2,605,000</u>	<u>\$4,766,000</u>	<u>\$3,500,000</u>	<u>\$3,500,000</u>	<u>\$15,171,000</u>
Assumptions					

Costs

Provide costs, including those to implement the initiative and the costs to support it over its useful life.

COSTS						
	BY	BY+1	BY+2	BY+3	BY+4	Total
Development	<u>\$1,500,000</u>	<u>\$1,500,000</u>				<u>\$3,000,000</u>
Operations						
Prod. Proc						
Key Pers.						
Ad Hoc						
Sys. Maint.	<u>\$50,000</u>	<u>\$164,900</u>	<u>\$173,200</u>	<u>\$181,800</u>	<u>\$190,900</u>	<u>\$760,800</u>
Telecom.						
Data Center						
Sub. Ops						
Total	<u>\$1,550,000</u>	<u>\$1,664,900</u>	<u>\$173,200</u>	<u>\$181,800</u>	<u>\$190,900</u>	<u>\$3,760,800</u>
Assumptions						
<ol style="list-style-type: none"> 1. This project will utilize the software component licenses that the CIO purchased for the enterprise technical architecture project. No additional software licenses will be required. 2. This project will have to pay monthly charges for system maintenance of the production environment for its share of use of the various servers (to include but not limited to a database server, MicroStrategy server, an Informatica server, backup servers, etc.) and services (to include but not limited to: database backups, connectivity, disk space, general technical support, etc.) (\$8,000 per month) The environment will be in the VDC. 3. This project will have to pay monthly charges for system maintenance of the development environment for its share of use of the various servers (to include but not limited to a database server, MicroStrategy server, an Informatica server, etc.) and services (to include but not limited to: database backups, connectivity, disk space, general technical support, etc.) (\$2,000 per month) The environment will be in the VDC. 4. Increase in costs are assumed to be 5% per year 						



5. All technical maintenance costs are placed in the 'Sys Maint' row. These costs are assumed to come from the operational budget.
6. The analysis, design, development, and testing phases to target-state of this initiative will contain an independent Quality Assurance review as determined by CIO. The associated QA cost is borne by the CIO and not the Channel.
7. Application maintenance is assumed to be \$50,000 per year. Since this is a multiple phase initiative, some enhancements to the application may be developed as part of subsequent phases.
8. In order to maintain standardization on all SFA development projects, tools to support the development lifecycle from requirements gathering through enhancements will be provided by CIO at no cost to the Channel.

Total Cost of Ownership

What is the level of required enhancement after implementation?

There will be several other development and implementation phases after the initial two phases. These later phases will have a separate business case. Enhancements for the functionality provided in Phase I and Phase II should be minimal after the initial implementation. Any major enhancements as well as additional functionality will be incorporated in future phases of the overall FP Data Mart initiative.

What is the life span of this initiative?

The Data Mart is expected to be effective for between four and seven years. It is expected that additional requirements will be developed during this period and that these requirements will be used to enhance the functionality.

Alternatives

Discuss what could be done in place in this initiative and describe the consequences of each alternative.

Alternative	Consequence
Remain as-is	The level of customer relationship management, compliance management, portfolio management, and risk management that is currently available will continue to be available. The extensive risk management that is required for sound fiscal business practices is not available and the customer relationship management required for true 'partnering' is not available.
Non-technology solution	There is no non-tech solution that is either realistic or prudent.
Enhance an existing system	The existing system depends upon multiple extracts from current systems and the use of Excel, IDEA, Easytrieve, and SQL. Limited improvements are possible, but not to the appropriate level of fiscal responsibility and customer relationship dependencies.
Implement on a smaller scale	The approach taken for Phase I is the smallest feasible scale. This phase will only affect the thirty-six GAs



Other	None
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Risks

Risk	Description of Risk	Mitigation Strategy
Financial	Cost overruns due to rework; expanding scope; delay in receiving approval of deliverables, resolution of issues, and establishment of technical environments	Develop/use existing standards; maintain close coordination between the project team and those responsible for approvals and resolutions; provide sufficient lead time for the VDC
Technology	Relatively new technology for SFA	Apply 'lessons learned' from the CFO data mart and the Delinquent Loans Mart; Use personnel from MicroStrategy and Informatica on the project
Scope	'scope creep'	Specifically identify the systems from which information will be extracted and what functions will be supported – all extensions to this will be considered enhancements which will require a modification to the existing Task Order, will require another Task Order, or will be considered for implementation in future phases
Management	Lack of resources within SFA; lack of SME sufficient to provide intricate detail on process and dependencies; inadequate existing contractor support due to contract demise or realignment	Leverage Modernization Partner resources to manage the project; work closely with eCAD technology Product Management Team and the SFA Project Lead (or designee) to resolve issues
Exposure	Identification of areas where data from the source systems (e.g.: FFEL, FMS, NSLDS, PEPS) is not consistent compared to what the GAs and Lenders maintain	Acknowledge the potential for the inconsistency which will need to be resolved through an industry partnership initiative which is beyond the scope of this project.

Acquisition Strategy

Sources (Indicate the prospective sources of supplies or services that can meet the need of this project. List the most likely offerors for the requirement, and/or the manufacturer and model of the equipment that will most likely be offered).

Modernization Partner will supply dedicated project team personnel.



The software licenses that already exist and that are supporting the development, testing, and production environment of the CFO data mart will be used.

The type of hardware that is supporting the development, testing, and production environment of the CFO data mart may need to be acquired if capacity does not already exist in the VDC. The costs associated with using this hardware is included in the cost section of this business case.

Competition (Describe how competition will be sought, promoted, and sustained throughout the course of the acquisition, including any performance requirements that will be required).

This project falls within the current modernization plan and as such is applicable for the SFA Modernization Partner. Outside competition will not be sought.

Contract Considerations (For each contract contemplated, discuss contract type selection; use of multiyear contracting, options, or other special contracting methods, ex: performance-based).

The contract will involve both a firm fixed price component and a performance based incentives component.

Schedule/Milestones (including acquisition cycle)

#	Milestone	Start Date	End Date
1	Phase I – Project Start		11/20/00
2	Phase I - Project Plan		12/15/00
3	Phase I - Established Development Environment		01/15/01
4	Phase I - Functional Requirements and Data Model		01/29/01
5	Phase I - Detail Design		03/30/01
6	Phase I - Training Plan		05/21/01
7	Phase I - VDC Signoff of Production Readiness Review		06/22/01
8	Phase I - Deployment		06/29/01
9	Phase II – Project Start		07/01/01
10	Phase II – other milestones		TBD

The actual dates and milestones related to Phase II will be determine based upon the outcomes of Phase I and closer to the planned start of Phase II.