Los Angeles Unified School District

My Integrated Student Information System

Oversight Report

October 16, 2014

Arnold Viramontes
CEO
The Viramontes Group, Inc.

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The Viramontes Group, Inc. (VGI) was contracted to serve as a third party oversight for the My integrated Student Information System Project (MiSiS) project. As a part of the scope of a work, an analysis report citing the feasibility of the current project plan is the first deliverable. VGI reviewed the project plan dated March 22, 2013 as the basis for this analysis.

Background

The MiSiS project is contained within the scope and schedule committed to the Independent Monitor of the Modified Consent Decree (MCD), the fit gap analysis, legacy systems functionality and business owner input. The project implementation is broken out into five milestones:

Milestone 5	February - July 2013	Release functionality to a few Elementary schools
Milestone 6	August 2013	Release primarily the Elementary Gradebook to elementary and secondary schools
Milestone 7	February 2014	Release a set of functionalities to elementary and secondary schools
Milestone 8	July August 2014	Release final set of functionalities to elementary and secondary schools
Milestone 9	December 2014	Decommission ESIS and SSIS

servations

Implementing a student system at a school district is incredibly complex and contains several elements that require constant attention in order to ensure accurate delivery of outcomes. The project plan serves as the roadmap to an effective implementation. Important to the effectiveness of the project plan are many sub plans that support the overall effort to attain the goals of the project. These together will help define the sustainability and scalability of the effort.

Project Requirements

A fit gap analysis was conducted in order to determine the difference in functionality between the ATLAS system installed at Fresno Unified School District (FUSD) and what was needed at Los Angeles Unified School District (LAUSD). LAUSD had requirements set forth by the Modified Consent Decree and the existing legacy system. The MiSiS development blueprint necessitated a detailed alignment between both requirements. In order to fulfill the requirements of the MCD, the legacy system requirements are essential to provide a base. There was a commitment to implementing functionality based on the rollout approach and milestone deliverables.

The MiSiS requirements definition were derived from The Modified Consent Decree, the Legacy applications, the Fit Gap analysis and input from Business owners. The MCD had specific compliance requirements with stated objectives. The basis for the Legacy system requirements came from the Fit Gap and business owner input. The focus was primarily to ensure compliance to the MCD, which led to a lack of definition on legacy functionality. As with all projects, MiSiS requirements changed during project development causing strain on deliverables. The Legacy requirements lacked stakeholder input and attention to school year milestones, which affected the cadence of development.

The Remaining Effort Assessment is a table of estimated hours to complete the remaining development effort to meet the milestones. It is unclear if this estimate is based on the MCD, fit gap analysis or business owner input or a combination of all three. These hours were not on target for the current product delivery and are in need of revision. The estimate shortfall may be attributed to the gap in requirements versus existing and enhanced functionality.

Project Management

Project management is a crucial element in the implementation of any system. There are many different methodologies that can be utilized. MiSiS employed a modified Agile development approach in the Development Completion Plan. This approach puts a premium on stakeholder input at every stage of the development life cycle.

Project management mandates that the team be communicative, change control be aligned, deliverables modified and timelines changed when a business requirement is not meeting needed functionality. A disconnect exists between project management and change control, reflected in the shortfall of estimated hours needed to implement MiSiS. The project manager is

the person responsible for directing all aspects of the implementation life cycle and is accountable for reporting deviations from the original plan. In the time of this analysis, it appeared that several people were involved in directing the project. There is not one single point of project management contact. This may be attributed to the "triage" state of the project but creates confusion and multiple decision points. Holding people accountable for meeting deadlines, effecting change controls, and acceptable defect levels appears to be a problem within the project management structure.

As with every project methodology, fidelity to practice and accurate reporting are vital to ensure success. One red flag can have a domino effect on the timetable. Through out this project plan analysis and interviews, one theme continues to surface. There were not any indicators from the project team signifying a "No Go" decision. In this initial review, several documents indicated a "Red" condition for certain deliverables but when it came to the "Go/No-Go" decision, project team leadership issued a "Go". This indicates a lack of communication or understanding of application stability critical to implementation given the state of the project.

Project Staffing Plan

The staffing plan should reflect the resources and level of expertise needed for the anticipated workload. The distribution of these resources should overlay the needs to meet the scheduled deadlines. Projects have different needs for resources and the level of expertise varies from one task to another. The staffing plan should be aligned to the project work plan so that the correct resources are available when needed. The MiSiS project encounters several resource deficiencies causing bottlenecks and late deliveries. In the documents reviewed, the plan doesn't allow for resources to be ramped up during peak times for development, testing, and training. There is also a deficiency in the number of subject matter experts and stakeholder involvement to ensure a smoother handshake between tasks.

Proposed Project Organization

The proposed project organization clearly defines one Program Manager accountable for the success of the project. This one single point of contact is extremely important for project continuity. It is not clear the hierarchy above the Program Manager and the reporting level in this structure. Although Full Time Equivalent (FTE) are noted, It is difficult to determine if the FTE's within the structure are dedicated to the MiSiS project or will be split across other areas. The structure lacks representation from the stakeholder community and business owners. There is a reference to Subject Matter Experts but their role is not clear. It would be helpful to have a functional description; percent dedicated and accountability matrix for the different FTE's assigned. The titles alone are not sufficient to understand the process relationships and responsibilities for the project.

Development

MiSiS application development involves a partnership between Microsoft and LAUSD. The project utilized both off shore and on-site resources from Microsoft using a staff augmentation model. Development is dependent on an accurate blueprint that contains detailed specificity for programmers. Applications are scaffolds of modules creating solutions that meet the user requirements. The process of software development is dependent on developers, subject matter

experts and quality assurance. The MiSiS development process has been mired with software bugs and missed functionality. The teams need an effective communications model to ensure that all deliverables are met and adjusted when a requirement is incorrect or changed to reflect current needs. There is little evidence that timelines and expectations were modified and communicated.

Software application projects are an intricate collection of modules that integrate with each other to reach an outcome. This requires coordination and collaboration when developing a system from scratch; but a different layer of complexity is added when a system is being modified to accommodate a new entity. In this case LAUSD is approximately ten times larger than Fresno Unified, which creates a scalability question. There is uncertainty whether the Fresno technology department, to accommodate their objectives, modified the ATLAS software. There doesn't appear to be any evidence that this was taken into consideration during the requirements phase or fit gap. This could hinder the development phase when one outcome is expected but another is encountered.

Testing is the most critical aspect of a development process. It is here where the decision is made that a module meets the requirements both from user need, system and standards compliance. Testing is meant to stress the software in an environment that best emulates the actual operational setting. The MiSiS project lacked sufficient quality assurance resources to adequately test the modules as they were being developed. The decision to run live with summer school exacerbated the problems with testing and cut short the amount of time needed to do a full integration test. The integration testing would have surfaced many issues that could have been resolved prior to the live implementation.

Help Desk

The help desk is the central contact point between the person using the application and the project team. This contact can either facilitate the problem resolution or it can increase the frustration. Help Desk personnel should be structured such that the level of expertise aligns to the level of problem being answered. There are too many threads and avenues for staff to report issues causing possible duplicate entry. Help desk operators are provided a script but little evidence of a daily update of glossary of terms, new resolutions and actions needed. Repeatedly, the project team has requested an artifact to help in tracing an issue resulting in a second call to gather the needed information.

Every new project rollout will experience an abnormal call rate and Help Desks must adjust to the levels needed to accommodate the traffic. The MiSiS project did not ramp up the personnel needed to handle the traffic. The abandoned call rates in most cases exceeded the answer rate. The average length of calls is excessive causing queues, which also leads to abandoned calls. The Help Desk had not been tiered to handle the call load or have the level of expertise needed to answer the question. People get frustrated and will continue to seek alternatives to their questions, which can create multiple calls and possibly duplicate trouble tickets. This not only wastes the time of the person with the issue, it results in multiple people handling the same question.

Help Desks create a repository of data that paint a picture of issues keeping staff from entering information that ultimately help students learn and finance the district. The data, if mined correctly, can also point the project team directly to a problem that could solve many issues. The MiSiS Help Desk traffic was massive and although the data was being categorized it still needs more parsing to help pinpoint issues.

Closing the loop to a staff member submitting an issue helps ease frustration. The Help Desk does not consistently communicate status to individual submitters. Reports have not categorized Issues by Individual submitter making it difficult to report status back to the submitter. This breakout can also normalize issues and help eliminate duplicate requests. There is a lack of evidence that the knowledge base of information is being updated to include problem resolution. The knowledge base can serve as an interrogation point for staff to look for possible solutions to issues they are encountering.

Data Integrity

The single most important issue that an entity must focus on is data integrity. When implementing a new system, conversion of data is a huge risk. The Project plan had some references to data conversion, synchronization and integrations but there was no evidence suggesting a detailed plan for data integrity. The MiSiS system has many channels of information that are fluid through all of the individual applications. The enhanced and bug resolution code touch data and can have an adverse effect. The MiSiS implementation has several occurrences of duplicate students, missing students, scheduling inconsistencies and coding irregularities. These issues could be catastrophic to future of a student in the form of scholarships, college entrance and grade progression. The MiSiS project lacks resources and a plan to track data issues and ensure credibility of the modules changing/adding data.

Analysis

The objective of this report is to provide an analysis of the feasibility of the current project plan. There are many reasons why the current project plan is not feasible unless it is modified to reflect the dynamics of the implementation.

The development of a system is based on the requirements definition and the associated business rules. MiSiS requirements were taken from the Modified Consent Decree, fit gap, business owners and legacy functionality. The focus was on the MCD, as it should have been, but lacked attention to the requirements needed for user functionality. There appeared to be a significant lack of input from the community of personnel that would eventually use the applications. Without dedicated stakeholder involvement, the requirements specifications lack clarity and specification for development. This resulted in an inaccurate estimate of hours needed to complete the project.

The current project management structure and staffing models are not adequate for project completion. Without an adequate team of developers, quality assurance personnel,

subject matter experts and dedicated stakeholders timely problem resolution will be difficult. This will impact enhancements for user functionality and the district's ability to meet scheduled administrative milestones causing the project to stall.

Data integrity is the most critical area that is lacking focus. The duplicate students, attendance issues and grading problems are causing duplicate work. Campuses are frustrated with loss of information and question the accuracy of the data. There is a lack of evidence that a data conversion and integrity plan exists. Every organization depends on the accuracy of data for compliance to federal, state and local requirements. This area is in need of immediate attention.

There has been a significant effort to focus the project team on critical issues impeding the effective use of MiSiS. There are daily status meetings that deal with the top issues and upcoming district and campus milestones. The status room has been turned into a situation/war room to reflect current schedules, issue resolution and system status. The Help Desk has been augmented with additional resources and tiered to handle traffic.

The above observations express many gaps in the current project plan and related schedules. What it doesn't show is all of the hard work and tireless hours put in by the Project team. Many members of the team and management spend an incredible amount of time working on the success of the project. It is important to note that students are being and have been scheduled, attendance is being taken and teachers are accessing the system. There are a number of issues that cause frustration and need to be resolved but it is very important to understand the magnitude and impact of implementing a system at LAUSD.