Capstone Project – Systems Upgrade in a Professional Services Firm

Company History and Structure

Business: ***Strategic Interventions***, a consulting and training firm which provides IT and Human Resources consulting, customized training programs and strategic consulting. The firm is structured as an S corporation for IRS purposes, and is located in New York City. It was founded 10 years ago by the current practice group leaders.

Structure: The firm is led by 5 directors who run the firm's main areas of practice (business lines). One director acts as the CFO and Treasurer, and has been in that role for several years. Another functions as President; that role is rotated every two years. Each Practice Group Leader also serves as an Engagement Principal, and oversees other Engagement Principals.

Practice Group Leaders:

Joe Graham – runs part of the general consulting practice (clients in manufacturing, government, IT, aerospace). He oversees 4 engagement principals.
Bill D'Angelo - runs the rest of the general consulting practice (clients in retail, healthcare, finance); currently President . He oversees 4 engagement principals.
Sam Hirschberg - runs the IT Planning and Implementation practice. He oversees 3 engagement principals.
Mark Stanton – runs the customized training program practice. He oversees 2 engagement principals.
Jim Slater –runs the HR Consulting practice; also CFO. He oversees 2 engagement principals.

Both general consulting groups (Joe and Bill teams) stay within their own functions. However, the IT and HR consulting groups both run their own projects and support projects in other areas when expertise is required as part of a larger project. The training programs group primarily supports other projects in the other four groups by implementing the training required to support consulting outcomes. However, they are also occasionally contracted to develop and manage their own projects. As a result, overall company engagements can be projects in up to 4 groups, reporting to different practice group leaders and coordinating the efforts of four engagement principals. Agreeing on revenue and expense allocations as a result of the overlapping ownership can be problematic.

At any given time, there are approximately 30 senior and 60 junior analysts, who are primarily assigned to consulting practice groups. There are 10 more specialized professional staff members, who are part of the Customized Training practice staff. They may be supplemented with analysts temporarily assigned from other practice groups. There are two levels of senior analysts, and two levels of junior analysts. Each analyst has a primary billing rate, but may be billed at a different rate based on their project role. The project role and associated billing rates are determined when a client contract is initiated; while there are standard rates, it is not uncommon for engagement principals to modify those billing rates slightly depending on the client relationship. Usually project role determines billing rate, but sometimes the primary billing rate is used.

Each Practice Group has its own administrator. The practice group administrators have responsibility for gathering billing data, including hourly time estimates for each client project; preparing draft client bills; and monitoring the administrative requirements of client contracts to ensure the firm is in compliance. There are five general administrative assistants that can support the needs of the practice group administrators, and handle outsourced work for them during particularly heavy billing cycles. At other times, they support project team needs.

The remaining central administrative staff consists of:
Donna Donato – Controller (3 FT accounting staff members)
Tim Snyder – HR Manager (1 FT staff member)
Eric Gilmore – IT Manager (1 FT Graphic Designer/Layout Supervisor, 2 staff members, each 0.75 FTE)

Background

Bill D'Angelo, the newly appointed president, is not happy with the current financial systems; he feels they do not provide actionable data about project costs, project profitability, and employee utilization. He feels that profitability should be higher, given the increase in clients and associated revenue. The firm averages 300 client engagements at any given point; some clients have multiple engagements. However, client bills are still assembled by administrators based on the project principal's directions. Bill is planning to purchase a new modular general ledger system that includes a job costing module that integrates with company payroll. Such a system will allow all costs to be allocated directly to a project, and will let the company identify ways to improve profitability.

In contrast, most engagement principals are opposed to the idea of a job costing system. They like the control they have. Currently, each principal negotiates a contract directly with the client. Some of the details negotiated are the billing and reporting terms. The principal determines the % of project completion, or the appropriate hours and costs, to bill to the client. The bills are created by the practice administrators, and the amounts billed are entered into the financial system as project revenue by client. Currently, there is no net profit or loss calculated by engagement. Bonuses for project principals are partially based on the percentage of revenue contributed to the firm over the course of the year. The project principals are concerned about their loss of control over client billing; currently, any adjustments made to actual time or costs before billing are completely discretionary and invisible to financial reporting. They fear their lack of control over client billing will affect their ability to maintain client relationships and develop new engagements. Additionally, they are concerned about potential changes in how their compensation may be calculated. A job costing system will drive revenue calculation and client billing, and take away the discretionary power of the principals.

Jim Slater and Donna Donato, while supportive of improving the financial systems and getting a better understanding of profitability, are concerned about workload distribution during and after the implementation of the plan. Right now, a great deal of data entry is done by the practice group administrators with support from the administrative assistants, and accounting and HR enter the remaining data

Current business processes for Strategic Interventions are as follows:

Timekeeping and billing

Employees provide total regular hours, sick time, vacation time and any overtime hours directly to the accounting staff for input to the payroll interface.   Overtime for junior analysts is paid at time and a quarter. At the same time, employees provide an estimate of engagement hours worked to the practice administrators responsible for the engagements; the practice administrators use this data to manually create bills, marking up labor to contracted rates for each engagement. There is no system that ties out the hours billed to the hours submitted to payroll; there is also no overtime markup passed on to clients.

Expenses and Payables

Expenses are either processed via purchase order approval, or charged to company credit cards. A principal must approve each purchase order, and the same principal reviews and approves the invoice when the goods or services are received. Invoices are routed for approval through the practice group administrator, who will copy invoices as source material for, and to accompany, client billing. Once invoices are approved, they are sent back to the accounting group for payment. The approving principal, and any client code noted, are included in the Accounts Payable records, but A/P is not the source of billing information.

Credit cards statements are documented by the employee, and provided to the practice group administrator with a detailed expense report for review and approval. It is up to the practice group administrator to investigate any questionable charges submitted. The PGA will also copy any billable expenses and backup for client submission. Once the PGA has approved the statement and noted the amount to be reimbursed, the entire statement and expense report is submitted to Accounting for payment. Again, while the engagement –related information is noted in client billing, individual employee expenses are not categorized in any way within the accounting system.

Any internal expenses (IT, graphics, etc) are not billed to clients directly; it is assumed that these costs are covered in the OH amount charged.

Billing and Receivables

The PGA will gather expense and time data for each client engagement and create draft bills on the predetermined client schedule, utilizing specified billable rates, expense markup and a 5% administrative expense markup on the billed time. The engagement principal will review each bill and may adjust the number of hours, the expense markup, or the expenses billed. The final bill is then sent to the client, and a copy is sent to the accounting department, which sets up the client receivable. Terms are net 30; however, in practice, no finance charges are applied until after 90 days, at which point the principal will be encouraged to pursue collection from the client.

Profitability Reporting

Each practice group reports on practice profitability. This reporting compares the cumulative project performance to the percentage complete on the original project budget, and aggregates across all projects in the group. The reporting is created by each principal, and summarized by the practice group administrators. The bonus potential for the principals in a given group is heavily based on the group's net revenue as a percentage of total gross revenue, all derived from billing. However, the bonus potential for the practice leaders is weighted more heavily on the firm's net bottom line.

Bill is very frustrated with the current state of financial reporting and analysis, and has been complaining about it for several years. Now, as President, he is finally in a position to take the action that he has been telling Jim Slater was necessary for the future of the firm. While employment and client engagements are increasing, profitability is decreasing. There are many ideas floated around as to what the solution might be, but no data is available. Bill has a lot of questions.

Bill would like to develop an overall understanding of client billing, and put some new standards in place. What is the average markup for principal time? Senior analyst time? Junior analyst time? How much time gets written off before billing clients? What percentage of the actual pool of time available from analysts is actually billed to clients? How much overtime is generated but billed at a flat rate? Could staff be deployed more effectively?

There is much confusion about how to coordinate client engagements that cross practice areas. Bill would like to have a methodology, and would like some uniformity around treatment of engagements for the same client. He ensures that happens for his clients when he partners with IT or training for larger engagements; given that he has less traditional clients than many other principals, he doesn't understand why everyone can't see the logic and importance of this. He feels that billing rates should be based on employee level, not employee task – but not everyone agrees. He also feels that all clients should be billed monthly, not on a negotiated schedule.

Bill would like to be able to understand employee utilization; how are the analysts and principals spending their time? What percentage of their time is utilized on project work, and what time is administrative, development or sales? This is an important factor in calculating the right OH rate.

Finally, Bill's biggest concern is project profitability, as well as the profitability of the entire firm. The 5% OH rate charged on employee time billed to clients is just a guess; no one has ever tried to identify a data-based rate to charge that would actually cover administrative overhead and costs. While Bill agrees budget to actual is a good first step, it is just not enough - profitability has been declining for the firm at a faster rate than administrative costs have been increasing. He has been examining engagement profitability reports, and all engagements are at least as profitable as in prior years, if not more profitable. Bill suspects that time and expenses are not being passed along to clients so that principals can keep their numbers, and their compensation, high.

The auditors, Heinrich and Olds, are very much in favor of new systems and processes. They have expressed concern before about client bills being created from offline data, rather than being created within the general ledger system. This is a significant deviation from accepted accounting practice. Additionally, sometimes the PGAs forget to process client expenses correctly, and either pay tax on items that should be paid by the client, or fail to both pay the tax and pass it to the client. Finally, multi-state tax reporting is very difficult when all billed time and expenses are offline; this requires a lengthy and cumbersome recreation before filing the corporate returns. Having time, expenses and billing processed into and through the G/L in detail will make their job quicker, easier and more accurate.

Joe Slater agrees with Bill's concerns: however, he is concerned with moving too much work too fast from the PGAs to his small accounting group, compounded by new work involving much greater emphasis on detailed data entry and verification. He is just not sure how his group can manage that. As an experienced HR consultant, he is very aware of the negative possibilities that can result from this level of change. He understands the benefits, but fears the negative impact on the firm. Holding employees and principals accountable for how they use all of their time is a paradigm shift for Strategic Interventions. He is concerned about the impact on the firm's ability to attract and retain the best people.

However, from a personal standpoint, the current system penalizes Joe. The primary use of his group is to support projects primarily driven by other groups. Only around 30% of his group's revenue is driven by their independent projects, and the rest of his revenue is allocated back from the other groups. Often his analysts are billed at a lower rate, and his revenue reduced, because the engagement principal wants to shift more revenue to their own group. He feels his group receives less than their fair share of the bonus pool because of this, and thinks that his consultants will benefit financially with improvements in revenue tracking and job costing.

Mark Stanton is on the fence about the new plan. The customized training programs he runs function like any other client engagement; however, some content development takes place before the actual contract is initiated. For the open enrollment programs, content is developed before any students are in place. Currently, both those situations fall into administrative expense and aren't tracked in terms of time spent, thus reducing program expense and increasing net revenue. Mark is concerned that including development time will make his programs more expensive, and less client or student-friendly. However, his team also spends a great deal of time providing support to the other groups in planning their projects, and this time is also categorized as administrative. With a new job costing system, the billable time for his group will be much more accurate, and they will be able to book revenue for work done supporting other groups. For Mark and his group, the costs and the benefits may balance out; however, it will likely benefit his team financially when bonuses are awarded.

Sam Hirschberg feels that the company systems are archaic, and overdue for replacement. He was part of the selection committee that identified new G/L software to purchase, and favors one with a state of the art job costing and time tracking system. However, Sam is well aware of how challenging this implementation and transition will be, and fears that his group, due to their expertise, will be largely responsible for making this implementation work. He is determined not to let that happen. Like Joe and Mark, his team will likely benefit, depending on how the system is implemented, from recognizing revenue on internal project support.

Joe Graham, the immediate past president, is completely opposed to the entire plan. He believes that control of client communications and billing belongs with the engagement principals. As long as the firm makes a profit, he sees no reason to change, and resents any attempt to limit his control. Both Joe and Bill have teams that generate all revenue from external clients. The current structure strongly favors their ability to acquire and retain client projects via flexible pricing and use of internal resources to support project activity without any expenses charged. Any policy change is likely to have a negative impact on Joe's team financially.

Current situation

The audit firm's recommendation, and Bill's determination to make this move, led to a vote of the practice group leaders, and the majority approved going ahead with the implementation of a new system. The details of system capabilities and process changes were not addressed in the group leader discussion; they were left for future decisions. Joe Graham was the lone "no" vote.

The audit firm recommended several general ledger and job costing packages that appeared to be a good fit for the needs of the firm. Sam and Bill reviewed the recommendations in detail, and chose a fairly new multi-module product, FinanceMaster. Because of its modular structure, they felt it would be easy to implement the requirements of the firm without adding unnecessary complexity. The entire system can be converted at one time if desired, but It also allows modules to be added on at a later point. The product is priced by module, and has a fixed annual maintenance fee, regardless of the number of modules used. Only the General Ledger/Accounts Payable module is a mandatory installation. Every module can operate with an interface to other modules, utilizing manual data entry, or interfacing with other non-FinanceMaster systems.

The modules available to install are:

<u>General Ledger</u> – supports chart of accounts, cash and/or accrual basis reporting, system control balances, project accounting periods separate from fiscal year, all module interfaces, and includes basic Accounts Receivable aging on invoices from any source (Billing module, Job

Costing module, or manually created). It can interface with either the Payroll module or external payroll services. It does not have a budgeting capability included. The new chart of accounts definition will allow creation of some revenue and cost tracking by using subaccount/master account capabilities; however, the analysis is only as good as the data source.

<u>Accounts Payable</u> – supports multiple invoices and funds on a single check, consultant 1099 forms, routing entries for approval automatically, and use of commodity codes

The General Ledger and Accounts Payable modules cost $260K for software, customization and installation.

<u>Purchasing</u> - permits applying tax by tax coding system, joins multiple POs or items into larger order to obtain bulk discounts, establish multiple levels of approval, permits tracking purchases by project, activity and/or task. This module is $30K for software, customization and installation.

<u>Budget Planning and Monitoring</u> – creates and maintains multiple budget versions, incorporates allocation controls, can roll up project budgets to corporate budgets, downloads and uploads from PC-based systems, permits entry of financial or statistical measures (hours, units). This module is $30K for software, customization and installation.

<u>Payroll/HR</u> – associate multiple pay rates for each employee, track contract pay, manage leave accrual, support timecard entry (either by exception, positive entry, or both), enter or calculate hours and rates, permit remote location time card entry, maintain records of time usage per employee and by project code, and maintain multiple employee billing rates. This module is $65K for software, customization and installation.

<u>Extended Accounts Receivable/Billing</u> – maintains multiple billing templates, creates invoices based on transactional information, custom interfaces permit data entry from other systems (either batch or interactively), can predefine and utilize automated client charge structure (late fees, interest, etc.), tracks receivables outstanding by project owner, by client, and by type of project. This module is $65K for software, customization and installation.

<u>Job Costing/Project Accounting</u> – builds project costs from automated updates or data entry, maintains multiple markup structures by activity/task classifications, can incorporate or eliminate OT charges by employee category, bills actual costs vs. % complete, maintains original project budget data for comparison reporting, variance reporting actual costs to date vs. % budget completion, maintains project category codes allowing rollup of project activity and billing by group, owner, type of project, etc., allows manual billing adjustments, tracks markups and write-offs based on actual vs. billed data, creates project invoices for batch update, and can generate internal revenue/expense transfers based on project time spent. This module is $65K for software, customization, and installation.

Additionally, FinanceMaster will create the actual user binders and train the new users, for an additional fee of $10K per add-on module. Documentation and training are included in the primary G/L and A/P purchase.

The principals have agreed that the software budget for the initial installation cannot exceed $400K, and they have allocated $20K to incorporate some training, for a total software budget of $380K. That figure does not include the internal cost of resources to support this effort.

A team of employees will need to be assigned to this project effort. The principals have agreed to make accommodation to allow the best project team to be assigned to the work, so that the new system is effective in improving the firm's operations. Some employees will be assigned on a part-time basis to the team. In order to successfully utilize this software, it will be necessary, for each module, for team members to:

- Define the current process and process flow for each functional capability in the new module
- Identify how to best use the capabilities in the new module to meet the needs of the firm (extent of capabilities used, level of detail, integration with other modules, reporting, etc.)
- Document the structure of the new module codes and levels so that the FinanceMaster installation team can customize the system databases, dropdowns, etc.
- Define the best new operational process for use of that module (primary responsibility for data gathering, data input, validation, reporting, modification, etc.)
- Document that process so that training can be done on both the changed process and the system skills

For example, in order to define and install the payroll module, the team would have to identify the answers to questions like these:

- Which employee categories have multiple pay rates? What are those multiple pay rates?
- For each of these categories, can the rates be calculated on a standard percentage basis, or do they need to be specifically entered for each employee since the number and % difference in rates can vary even within an employee category?
- Are there multiple categories of contract pay?
- How is leave accrued?
- Should all employees be required to enter timecards to track use of time?
- For employees who are entering timecards, must they account for every hour or is it sufficient to account for billable project time? Can employees self-identify OT hours, or must they input a complete time card that shows each hour spent in order to justify the OT?
- Will employees enter their time cards directly? Or will administrative staff or accounting staff enter their time cards?
- What must the timing of data entry be in order to permit the timely generation of payroll?

After a senior management off-site meeting over the Labor Day weekend, the practice group leaders returned with the announcement that the new financial system project would commence on October 1st. Their goal is to have the installation completed by the end of the year, so that operations can switch on January 1st to the new system, in sync with the fiscal year.

You have been identified to lead the project team on this major systems change. Fortunately, you don't have to worry about any systems installation; the FinanceMaster team onsite will execute all tasks required to make the systems work as specified for the firm. However, you and your team will need to identify what needs to be done, how it should be done, and how to use the systems options to make that new process happen.