TUSD

TUSD Business Process Re-engineering

Business Process Analysis and Recommendations

TUSD Business Process Improvement Team
November, 2012

apriant

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The first rule of any technology is that automation applied to an efficient operation will magnify the efficiency.

The second is that automation applied to an inefficient operation will magnify the inefficiency.

-Bill Gates

Executive Overview

The Budget, Human Resources, Benefits and Payroll departments currently perform roughly 100 separate processes and sub-processes that can be classified as a Payroll, HR, Benefits or Recruiting function. These processes determine everything from the quality of each employee hired into the Tucson Unified, to their job satisfaction, to their rate and accuracy of pay. These departments directly support the efforts of our school staff to produce career ready graduates, increase student achievement and student enrollment. The efficacy of the system that these departments administer is paramount to meeting the goals of the District.

In August of 2011, TUSD contracted Apriant, Inc. to lead a dedicated team of department leaders through an extensive business process analysis. We did this after the implementation of the Lawson Financials product, and the postponed implementation of Lawson HCM illustrated that our current business process design was making implementation of these systems difficult and costly. The work of this newly formed team has culminated in the delivery of this document of business process recommendations.

The specific purpose of this document is to provide succinct recommendations for the optimization of the Human Resources, Position Budgeting, Recruiting, Benefits, Payroll and Timekeeping functions at Tucson Unified. The document and its outputs will be used to begin the detailed planning necessary to complete our HCM and Time System implementations efficiently and effectively.

Business Process Management Guiding Principles

The business process management approach that the team used to examine the business processes at Tucson Unified focuses on improving the District's business process to make them more efficient, effective and more capable of adapting to change. When completing our analysis and recommendations we based them on a framework comprised of the following tenets:

- Customer service oriented approach
- Several jobs combined into one
- Workers make decisions
- Steps are performed in a natural order
- Work is performed where it makes sense
- Approvals are reduced
- Reconciliation is reduced
- Single point of contact

- Organize around outcome, not tasks
- Capture information once at the source
- Minimize non-value adding activities
- Ease of access to reliable, up-to-date data
- Every process has a feedback loop for improvement

Our Methodology

The team followed a multi-step model to capture and analyze the process information and generate the corresponding process recommendations, including project preparation, As-Is process analysis and documentation, process modeling, To-Be process recommendations and documentation.

Prepare for BPM
- Identify cross functional teams
- Identify District's objectives
- Develop strategic plan
- Identify high priority processes

Map and Analyze As-Is Process
- Meet and document as-is process
- Identify process inefficiencies and bottlenecks
- Create Process Model

Develop and Map Process Recommendations
- Meet and discuss suggested changes
- Create Process Model
- Create Process Recommendation document

Implement Process Changes
- Changes implemented prior to and during ERP implementation

Continuous Improvement
- Continually review and improve processes

Preparation

TUSD identified the core functional team that would be responsible for oversight of the business processes in each of their respective departments. The core functional team is comprised of:

Project Sponsor:
- Yousef Awwad, Chief Financial Officer, Finance Department

Project Manager:
- Mohit Goel, Senior Financial Systems Analyst, Finance Department

Team Members:

- Janet Underwood (Benefits Manager, Human Resources)
- Nicole Lowery (Senior HR Program Coordinator, Human Resources)
- Pam Palmo (Interim Executive Director , Human Resources)
- Ellen Brownson (Senior HR Program Coordinator, Human Resources)
- Paula Stilwell (Payroll Manager, Finance Department)
- Shannon Toms (Senior Programmer, Technology Services)
- Matt Knoepke (Consultant, Apriant, Inc.)

Each core team member was responsible for identifying their high priority business processes and their owners, as well as identifying the major areas of concern within each department and setting the strategic direction of the project. The BPR (Business Process Re-engineering) project also had a great deal of supporting help and input from "special guest stars" too numerous to name, but important nevertheless.

Project Timeline

The project began in October of 2011, with the intent to complete analysis by the end of the year. Our initial ambitions were to discuss each business process over the course of one, eight hour session, producing recommendations in a one page summary at the end of each day. As we completed our first processes, the team quickly realized that the issues with each process were far deeper and more complex than a day would allow. After a meeting with the Project Sponsor and the Superintendent's Cabinet, the team adopted the following schedule:

Project Phases	Start Date	End Date
BPR Work Shops 2011	24th October 2011	16th December 2011
BPR Work Shops continued 2012	8th February 2012	31st May 2012
BPR Review Sessions	12th July, 2012	October 31st, 2012
BPR Sign-off	12th July, 2012	October 31st, 2012
Traceability Matrix & Project Closure	1st November, 2012	21st November, 2012

Preparing for the Effort

Our preparation for the effort involved establishing the team, the methodology, goals, and timeline. We spend a good deal of time determining which business process we would deem "high priority" on which we would focus our attention. We also set up our project infrastructure (templates, tools, technology), the expectations we had for ourselves (perseverance, collaboration, ownership, mutual respect, pride, team support, continuous improvement), and the structure of each session.

As-Is Process Analysis and To-Be Scoping Sessions

Beginning in October of 2011, and continuing through June of 2012, the team met in scheduled BPR sessions to discuss the high-priority processes documented by each of the business process owners. Each business member on the team was asked to present an As-Is process assessment for each of their business processes. One or more days were assigned to each process.

Specifically, the team members were asked to include:

- Goal of the business process and how that goal adds significant business value to the District
- Process owner and customer
- District systems and technologies utilized during the process
- Any approvals or controls that exist and the reason for each
- Steps executed during the process, including frequency, inputs, outputs, and total time.
- Process inefficiencies and bottlenecks

The team used this information as a basis for discussion and rework. Our sessions focused heavily on analyzing where each As-Is process was weak or inefficient, and how to use technology, new process or business process optimization to achieve our goals. The result of each session was an outline of the process in an optimized state named the To-Be.

Process Recommendation Development

Once the interviews were complete, the team began the detailed analysis and documentation for each To-Be process. The goal of this segment of the project was to produce useable recommendations and detailed documentation of those recommendations. In total, the team produced 35 documents encompassing 46 high-priority business processes. Those documents have been combined and included herein.

High Priority Business Processes

The core functional team identified 46 high priority business processes to evaluate during this project. Recommendations have been provided for the following processes:

Business Process	Area	Priority
HR052 - Processing Voluntary Transfers	Human Resources	High
HR080 - Stipends	Human Resources	High
BEN032 - Sick Leave Bank (in PAY024)	Benefits	High
PAY050 - Update Sick/Vacation Balances	Payroll	High
PAY041 - Sick Leave Donation	Payroll	High
HR087 - Salary Schedule	Human Resources	High
HR028 - Generate and Maintain Contracts	Human Resources	High
HR033 - RIF (Bumping and Layoff)	Human Resources	High
HR084 - Seniority Tracking	Human Resources	High
HR046 - PAF	Human Resources	High
PAY024 - Leave Accrual Processing	Payroll	High
BEN070 - Benefits Reconciliation Process (includes Benefits Billing BEN004)	Benefits	High
PAY001 - TSA Processing	Human Resources	High
HR058 -20-20 Retiree Processing	Human Resources	High
BEN002 - Benefits Open Enrollment	Benefits	High
HR090 - Worker's Compensation	Benefits	High
TIM001 - Time Reporting - All	Payroll	High
REC019 - Onboarding Process	Human Resources	High
HR041 - New Hire Physicals (in REC019)	Human Resources	High
HR021 - I9 Process (in REC019)	Human Resources	High

BEN014 - Blood borne Pathogens Standard (OSHA) (in REC019)	Payroll	High
BEN019 - FMLA	Payroll	High
HR036 - Leave of Absence without Pay and Benefits (in BEN019)	Human Resources	High
PAY025 – Short Term Leave Request (in BEN019)	Payroll	High
REC018 - Prepare Job Postings	Human Resources	High
REC002 - Certificated Employee Hiring	Human Resources	High
REC006 - Classified Employee Hiring	Human Resources	High
HR063 - Substitute Processing - Subfinder	Human Resources	High
HR062 - Substitutes for workshops (In HR063)	Human Resources	High
HR034 – Recall (In HR033)	Human Resources	High
HR088 - Highly Qualified	Human Resources	High
REC010 - RAF	Human Resources	High
HR057 - Rehire/Reinstate (In HR046, and PAY019)	Human Resources	High
REC014 - Administrative Hiring	Human Resources	High
PAY055 - Workshops and After-School Programs	Payroll	High
HR017 - Employee Evaluations	Human Resources	High
BEN001 - ADA Case Management	Benefits	High
PAY014 - Salary Contract Pay	Payroll	High
PAY028 - Mid-Pay Period Payments for New Hires (In PAY014)	Payroll	High
PAY019 - Termination Process	Payroll	High
PAY015 - Classified Pay-to-the Punch vs. Exception Pay	Payroll	High
PAY034 - Retirement Reporting (ASRS)	Payroll	High
PAY040 - ASRS Service Purchase	Payroll	High
BEN027 - Overpayments	Benefits	High
PAY032 - Payroll Cycle	Payroll	High
PAY022 - GL Interface/Encumbrance Process	Finance	High
HR047 - Position Management	Finance	High

Traceability Matrix

Our Traceability Matrix is an accounting of every development object that came as a result of our To-Be recommendations. By development objects we mean reports, modifications, conversions, forms, queries, security, dashboards, training and workflow. It is an important part of our work, as it will help us scope any future project that relies upon the recommendations in the larger document. At any point we should be able to say that a report or modification ties back to a specific business process. In the other direction, we should be able to say that a business process is comprised of these design requirements. The Traceability Matrix was adopted as a solution to a problem that we had during the implementation.

Example: Human Resources
       Onboarding Process
              Electronic Packet
                     Benefits Docs
                     New Hire Physical Form
                     Report 1
                     Report 2
              Interface to Sigma
                     Inbound
                     Outbound

Business Process Recommendations

General Observations

After investing a year on the project, and undergoing hundreds of interviews with District Staff from various departments, we have made several general observations regarding areas for improvement that we have attempted to remedy within our recommendations:

- **Business System is not used optimally** – TUSD owns one of the most robust ERP systems on the market: PeopleSoft. However, TUSD is running a version of the software that is 10 years old, is over-modified, and whose delivered functionality is either under-utilized or mis-utilized. Much of the power of the application is going unused.
- **Business Processes are paper-based and unwieldy** – Department employees are more comfortable with paper, and therefore have done little to change the status quo with regard to how information travels throughout the District. Paper-based systems are hugely inefficient, as they require more energy to move, to manipulate, to analyze and to archive. Our estimate is that between 25% and 30% of TUSD's administrative workload is wasted on the inefficiencies inherent in paper-based systems.
- **Each process requires far too many approvals** – Whether as a natural extension of the "Command and Control" nature of school districts in the past, or as a monster that has

grown out of perceived necessity, approvals and copies are rampant in most processes that we have examined. Approvals that do not add value, serve to remove accountability from the employees executing the process, as well as adding days or even weeks to the lifecycle of a process. Many of these approvals are meaningless rubber stamps.

- **Each department is a silo of information** - Sharing is currently based upon individual relationships and not on established service level agreements between departments. The complete business process goal is not valued in the current process, only the task inherent to each department.

- **High amount of rework** – Rarely is work captured once, and then leveraged in the future. Employees are constantly reproducing the same work they produced last month or last year. They do so because of the paper-based nature of the systems, the lack of effectively configured technology, or the lack of training in enabling skills such as Excel or Outlook.

- **Too many handoffs** – Very rarely is a process started and completed by one employee. Processes are relayed from one person to another for no other reason than to record their progress, or get a tacit approval to continue. This is wasteful and difficult for the customer to follow.

- **Tens of tracking spreadsheets and databases** – These shadow systems have the unintended consequence of confusing each process with added steps. As a whole, they do little to improve the effectiveness of a process, as they cannot be accessed by any central analyst. In fact, one must know of the existence of the tracking mechanism before knowing what to ask. The overhead is not worth the reward.

- **Work is not completed within the system at the source**- There were a multitude of instances where work was completed by assembling information from various parts of the same database after the fact, rather than letting the system produce the final outcome based upon upstream inputs.

- **Brute force is used in place of strategic process** - Long hours are spent by all departments keeping the district back office running and the paychecks "printing". These long hours are often spent doing tasks that add little value, or that can be accomplished more efficiently. The issue compounds as the employees who should be planning for the next major task are caught in the tactical day-to-day transactions. This destroys any ability to pre-plan for future activities.

- **Lack of functional expertise in PeopleSoft** - There is very little functional expertise with regard to basic setup of PeopleSoft in the departments. This forces Technical Services into a functional role, hampering their ability to complete technical tasks.

Specific Areas for Change

Throughout this project there were several business processes that continually came up as trouble areas and created a great deal of inefficiencies and issues throughout the entire District.

Budget Preparation and Position Management

The current process for budgeting and managing position functions for the District does not provide for a smooth flow of information for all schools and departments. The result of this structure is a process for employee requisitions that must navigate three to five organizational silos, several tracking databases, and often six weeks of time. Responsibility for this inefficiency is shared by all departments and is in the process of being rectified on a process level. TUSD should adopt a budgeting and position management system that provides real time information to principals and department heads regarding the status and funding of every position at their location. Only appropriately funded positions should exist, eliminating the necessity of a process that checks funding for an existing position.

Complete Inputs and Package Outputs

Focus on completing the input for each business process at the source or as close to the source as possible, so that the output of the process is a paycheck, an interface or a report, can be produced cleanly without extra work. This allows for an exception/audit environment rather than one where cleanup, manual work and remediation is the norm on almost every transaction.

Improve PAF/RAF Process

Almost every major inefficiency identified had its genesis in the PAF (Personnel Action Form) or the RAF (Recruitment Action Form) process at some point. Concentrating heavily on these recommendations will give us the leverage and time that we need to optimize the remaining processes.

Policy and Deadline Enforcement

Tucson Unified has a number of policies and procedures that are not enforced, and a number that should be created. We have made specific recommendations in our business process reviews. Generally speaking, we feel that all policies and their enforcement should be reviewed over the next year. We consistently hear of bottlenecks and overpayment problems resulting from both the lack of coherent and published policy, or for the lack of enforcing policy in place.

Project-based Organization

Major, yearly undertakings such as spring staffing or the opening of school should be treated as projects with a project organization and a project manager. This will allow for better

coordination between the departments by setting up a temporary reporting structure that better matches the task.

Next Steps

This business process recommendations document is the first step in a strategy to move TUSD to becoming more efficient and effective organization. The recommendations that we have accumulated in these 35 documents will now feed a second project in which we decide on an appropriate next step for our ERP system. We have a choice to make regarding our ERP system implementation. We can restart our Lawson implementation, using the information we have gathered. We can upgrade our PeopleSoft system, and implement the business process recommendations. Or we can procure an entirely new ERP software product and begin a new implementation. The Business Process Recommendations and the Traceability Matrix that we have created during this BPR project will allow us to objectively match our detailed needs and capabilities against each of the ERP packages on the market to better decide the software that will meet our recommendations in the best fashion for the next decade. In addition, the level of detail included in the documents will allow us to better determine cost and duration of a future project, allowing us to contract more wisely, eliminate unnecessary software modules, acquire the appropriate in-house skillsets, and align scope with budget and capabilities. We will present this analysis in the form of a business case.

The forthcoming business case will make a recommendation, based upon the work in this document, on how to complete the ERP and Time and Attendance projects. These findings will be presented to the Superintendent's cabinet and the Governing Board as our recommendation for continuation of the ERP implementation.

Business Process Re-engineering Summary

The Human Resources, Benefits and Fiscal Services departments are the backbone of the District, providing the necessary support to the entire school staff, and these departments are only as efficient as their underlying business processes. Our work has uncovered numerous inefficiencies within these processes. This Business Process Management document is the first step on the path to correcting these issues.

To increase the operational effectiveness of these departments, and the District as a whole, we have provided recommendations for the most critical business processes. These recommendations can be implemented prior to and during the ERP implementation, allowing the District to leverage the new technology to its fullest.

A school district environment is continually evolving and their business processes should as well. A critical component of success in this business process management effort lies in continuous improvement of the reengineered business processes. These recommendations should not be set in stone once implemented. The District will be in business for a long time and continuously reanalyzing and re-engineering the processes will help keep the District as efficient as possible.

By supporting and adopting the business process recommendations put forth, and focusing effort on continuous processes improvement, the District will be have the tools and best practices to efficiently and effectively conduct the business of providing education and directly support the efforts of school staff to produce career ready graduates.