Elements of Sucessful Organizations

Achieving strong leadership, smart management, and an engaged workforce.

Delivering Rich Services While Achieving "Lean" Public Sector Workforce Operations
The Future IS Now

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John F. Kennedy once said, "When written in Chinese, the word *crisis* is composed of two characters. One represents danger and the other represents opportunity." Today, public sector leaders are facing a specific kind of crisis—a budget crisis. With this crisis comes the ongoing leadership challenge of balancing services, optimizing tax payer dollars, and achieving operational efficiency. Realizing that they must work smarter to adequately provide essential services and maintain education institutions and programs, some leaders in the public sectors are asking: "How can I use this current crisis as an opportunity to radically transform the business of government and education?" To answer this question, many are turning to a process improvement technique called "Lean"—an outgrowth of the Six Sigma statistical modeling of manufacturing processes and methods originally developed by Motorola in 1986. (Some people actually use the term "Lean" Six Sigma.) "Lean" got its start in Toyota's manufacturing operations but its concept is being applied across all sectors. In a nutshell, "Lean" process improvement refers to a collection of principles, methods, and tools that improve speed and efficiency in any business environment by eliminating waste. Its goal? Business and operational excellence, growth, and innovation.

Public sector leadership is increasingly taking note of "Lean", realizing that using its approaches and removing the wasteful, insignificant parts of a process, public sector organizations like state and local governments and

educational institutions can adapt and focus on achieving operational efficiencies that dramatically speed up the delivery of, and improve, services and programs for students, constituents, and citizens.

The truth is, if you're seeking to maximize organizational efficiency, you're pursuing a "Lean" strategy. You may not necessarily call it "Lean", but any focus on increasing the organizational effectiveness of people, processes, and employee and customer satisfaction is likely consistent with "Lean" principles.

"Lean" recognizes that for most processes, only 5% of activities add value for the consumer, making 95% either unnecessary non-value-adding activities, or waste.[1] By clearly defining value for a specific service or product from the customer's perspective, non-value-added activities and waste can be targeted for removal. Eliminating waste is the greatest potential source of improvement in process performance and customer service. Once waste has been identified, processes are redesigned to allow services, information, or products to flow through the new process without interruption.

"Lean" methods apply to all areas of public sector service delivery; however from an organizational perspective, "Lean" methods and tools can be applied to any process where there is an employee who:[2]

- chases information in order to complete a task;
- must jump through multiple decision loops;
- is constantly interrupted when trying to complete a task;
- is engaged in expediting (of reports, purchases, materials, etc.);
- does work in batches;
- finds work lost in the "white space" between organizational silos;
- doesn't know what they don't know.

So where might public sector leaders focus first when it comes to "Lean" principles?

In a down economy, the demands for government and education services will increase at the very time layoffs, furloughs, and reduced work weeks are happening. Economists call this "capacity constraint," but as any public sector leader will tell you, their ability to continue to deliver services at consistent levels is impossible. It's like putting a balloon with a fixed capacity

for air in a vice and squeezing the vice until the balloon pops. The balloon will give for a while, but at some point, it will collapse under the stress. The walls of public sector, or in this case, the public sector labor force, are like the walls of the balloon. The workforce management processes that support the labor force may not be growing in size and number, but making your workforce management and labor processes more operationally efficient and "Lean" will give you more capacity. And with labor costs and payroll accounting for half or more of state and local government operational budgets, and as much as 80% of educational operational budgets, the potential for cost savings and efficiency gains is significant.

"Lean" Workforce Management Example in the Public Sector:

A teacher or bus driver gets called away for training or is out sick for the day, and the first-call subs or qualified drivers are already working that day at other schools or shifts. In actuality, this scenario usually happens with multiple teachers or bus drivers in the school at the same time. The principal or office staff furiously searches for a replacement by calling qualified subs, one at a time, to see if anyone is available. Instead of simply accepting this scenario as business as usual, applying "Lean" principles eliminated the phone calls and hands-on management that create so much waste.

The "Lean" approach to filling a sudden staff vacancy uses mobile technology to locate the best and most qualified replacement. An automated system recommends eligible substitute teachers according to the school's needs and hierarchies. Once identified, this pool of qualified replacements is instantly notified by text message of a substitute slot and interested teachers can reply to the text. The system accepts the first response, notifies that person, and lets all other text recipients know that the slot has been filled. The school's schedule and timecard software is instantly updated.

When schools quickly fill classrooms with highly qualified substitute teachers, they do more teaching and less searching for available resources. Administrators focus on their own role and do not drop everything to cover missing employees. All of our "Lean" priorities—

operational efficiency, the best use of employee resources, and excellent service to students — are achieved.

In "Lean" government and education, waste is anything that adds to the time and cost of delivering a service but does not add value, from the point of view of a citizen or student. Value-added activities eliminate waste and transform services into something the consumer wants. Non-value-added activities are meaningless to consumers, and as a result, they are not happy to have their taxes or tuition dollars going toward paying for them. The labor wasted in non-value-added activities can be significant, and unless the public sector is able to accurately measure its waste, cost, and performance, non-value-added activities can be difficult to identify and stop.

Non-value-added labor can represent significant challenges for government and education. For example, when worn out equipment is used to clean roads after a snowstorm or a hurricane, worker time is wasted in the form of slow response, poor service, and waiting for maintenance performed too slowly. To compound the problem, what if you have a worker assigned to the equipment who isn't necessarily fully-trained to run that equipment because you made a poor schedule or assignment in your haste to response to the emergency? All of this leads to longer and less efficient cleanup. And even though the difference may seem insignificant for a single storm, when compounded over several major storms or events, it can add up and result in significant variances. And depending on how these variances are captured and measured, the waste may be lost between the manual capture process and general ledger labor allocation. For most public sector organizations, these minor variances are summarized as the difference between payroll and earned hours and are carried forward into the next fiscal year.

There is a great deal of variability in the delivery of services to citizens and students, and managing the unexpected can be challenging. Take the City of Gulfport, Mississippi for example. Hit by Hurricane Katrina in 2005, the city was "slammed" twice by a 28-foot storm surge that wiped out 90% of its buildings.[3] Katrina was followed in 2008 by Hurricane Gustav. And in April 2010, a major oil spill occurred. Fifty-three thousand gallons of oil leaked into the Gulf each day,[4] causing more than $119 million to be lost in tourism revenue[5]. City of Gulfport employees had to respond to these disasters,

and they had to be deployed on a moment's notice. Public employees guarded beaches and fire department employees trained people on managing hazardous materials. In the absence of an automated workforce management system, scheduling, deploying, and capturing the cost of these workers was impossible. Gulfport had an extremely difficult time tracking labor cost reimbursements during the two hurricanes, which put needed funds for other routine expenses in jeopardy. Fortunately, by the time the oil spill occurred, Gulfport had an automated labor tracking system in place and this system helped the city allocate labor costs in real-time to specific project budgets so that tax dollars associated with the cleanup could be reported to the oil company or to FEMA for rapid reimbursement.

When labor isn't aligned with demand, public sector organizations find themselves with over- and under-scheduled employees and a labor allocation that is out of sync with demand. This type of variability can be particularly challenging for public sector groups like departments of transportation, public safety, and education facilities or food service workers who depend on equipment availability to get their jobs done. Volatile demand can also wreak havoc. Often the connection between workload, employee schedules, and equipment or tool requirements is managed by supervisors who are forced to rely on a combination of their own experience and very limited information, rather than actual, real-time labor data. Even when this information exists in an ERP system, it's often summarized at too high a level to aid decision making. To be truly effective, labor allocation information must be more granular and available in real-time to leadership.

A real-time view of what's actually happening behind the scenes to deliver a service is important for government and education organizations seeking to apply "Lean" to the workforce. Unexpected events, unscheduled equipment downtime, and increased demand are a reality for every public sector organization. The challenge is to quickly identify the problem and respond appropriately. For example, when a campus safety worker in higher education or K12 calls in sick, it's important for a replacement officer with the right qualifications to be located immediately. Or when a family crisis requires intervention from social services, an employee with the right skills must respond. Unfortunately it may take hours, or even days, for a situation

like equipment downtime or a teacher's leave to be reported to leadership, and by then the waste and the degradation to the classroom has already occurred. With real-time visibility to data, leaders can react immediately to disruptions. And because the information is being collected over time, leadership can identify and evaluate trends and recommend optimization and capacity improvements for the future.

Some public sector organizations may use a wage standard to cost an operation, but differences in actual wages paid and premium pay used can have a significant impact on the actual cost of fulfilling a service. Reconciling actual wages to a service or a production line can uncover startling trends of overtime abuse, absenteeism, and inefficient use of premium wages. In the case of responding to a natural disaster, a proportion of the workers deployed for cleanup are probably working overtime hours, and the hourly wage they are paid may be significantly different than their normal hourly wage. In education, a teacher who is paid 12 months out of the year for 180 days of work may be declared an exempt or salaried employee for this job. In the afternoons, however, the teacher may work an hourly job with a different wage as a coach or a tutor.

Similar scenarios occur in higher education, where a significant percentage of the workforce is made up of student workers who hold multiple jobs, with each job reporting into a different supervisor and possibly earning a different wage. The key with these workers is having visibility into overtime ceilings and work hour thresholds—thresholds that may threaten the student's ability to qualify for financial aid.

If you think about the "Lean" methods introduced earlier, there are plenty of reasons why public sector organizations would want to examine their payroll processes as a first step toward increasing operational effectiveness. Payroll is highly repetitive across the organization, the processes and requirements involved in the delivery of paychecks are the same, and payroll's redundant steps are supported by a lot of paper. There are also many feedback loops and check-off points to identify and correct payroll errors. To illustrate payroll's arduous processes, let's examine a real life example from the City and County of Denver and see what happened to a simple time-off request before and after their "Lean" Workforce Management implementation.

With a manual, paper-based payroll system, accurately processing payroll for employees at Denver's 51 agencies was a major headache. Employees completed paper timesheets and three-part leave slips that often took weeks to reach the agency's timekeeper, who manually entered data into PeopleSoft. The payroll department had no access to the source documents for verification and was unsure if pay rules were applied consistently and accurately. Without timely workforce information, employees and their supervisors did not have accurate leave balances, making it difficult for supervisors to know if an employee had available time off. Note the list below of the 21 steps it took for an employee to request time off under the old system.

For Denver, an automated time and attendance solution has brought new efficiencies to payroll processing. Payroll staff was reduced by 60% from 80 to 35 people, with impacted employees moving to open, unfilled positions or choosing to retire. The reduction of 45 full-time equivalents has resulted in $1.5 million in yearly, sustainable cost savings. In addition to the labor resource cost savings, the city was able to increase productivity and efficiency, and improve compliance with accurate and consistent application of pay rules and policies that they estimate will save them another $4,200,000 across the next 5 years and $900,000 thereafter in sustainable savings.[6]

Time-off Request for Vacation Before "Lean" Implementation

1. Employee calls agency payroll department to see how much time off they have available.
2. Employee fills out a three-part carbonless leave slip to request time off.
3. Employee gives this form to supervisor for signature.
4. Supervisor signs the form.
5. Supervisor gives a copy of the form to the employee for their records.
6. Supervisor keeps a copy of the form for their records.
7. Supervisor sends the form to the payroll/HR technician.
8. PR/HR technician holds on to the leave slip until payroll processing time.

9. On payroll cut-off, the agency PR/HR technician alphabetizes the forms they've received for the pay period.

10. The PR/HR technician manually keys the information into PeopleSoft Time and Labor.

11. City payroll department runs the Time Admin process to process all time entered in Time and Labor.

12. The agency PR/HR technician audits what they have entered against the Time Admin report.

13. If there are errors, the PR/HR technician contacts the employee, the supervisor, or the city payroll department.

14. If errors are not corrected by the time city payroll is ready to process, the entries will be deleted.

15. After payroll is processed employees receive their paychecks.

16. If there are errors in the employee's paycheck they call their agency PR/HR technician.

17. The agency PR/HR technician calls the city payroll department.

18. The city payroll department researches the issue and calls or emails the technician.

19. The technician calls the employee and lets them know what happened and how the error will be corrected.

20. If the employee understands, the process is completed.

21. If the employee does not understand, they contact the city payroll department for help and the cycle begins again.

After implementing an automated workforce management solution, Denver was able to reduce the number of steps by more than half. Today the vacation request process looks like this:

Time-off Request for Vacation After "Lean" Implementation

1. Employee enters vacation request into Kronos Automatic Scheduling System using time clock or terminal.

2. System validates the rules and verifies that the employee has time available.

3. If employee's request is valid, an email is sent to employee's supervisor for approval.

4. Supervisor receives notification and either approves or declines employee's request.

5. Employee receives notification that time-off request has been approved or declined.

6. Employee approves timecard at the end of the pay period.

7. Supervisor approves employee's timecard at the end of the pay period.

8. City payroll department signs off on all timecards.

9. City payroll department audits all data in System and makes any necessary adjustments.

10. All time-off requests for the time period are sent to PeopleSoft Time and Labor via an interface.

When an education or government organization deploys "Lean" workforce management practices, they are impacting their largest operational expense: the workforce. They are also touching their two most important constituents: their employees and their customers (citizens and students). With "Lean", organizations gain automation, simplification, and effective execution of workforce practices. Paper trails as well as time and effort toward creating the perfect paycheck are significantly reduced, payroll errors are minimized, risk is mitigated around labor law compliance, organizations are able to enforce collective bargaining agreements, and they are able to improve workforce productivity. As the public sector moves to reinvent itself in response to the current budget crisis and other hurdles that will surely impact them in the future, Workforce Management Systems and an investigation into "Lean Labor" practices are perhaps two of the most immediate and high impact mechanisms. "Lean Practices" help government and education organizations control labor costs, allowing them to put those dollars toward the preservation of critical programs, services, and jobs … the very essence of their mission.

ENDNOTES

1   George Stalk Jr. and Thomas M. Hout, *Competing Against Time: How Time-based Competition is Reshaping Global Markets,* (New York: Free Press, 1990).

2   Michael L. George, *"Lean" Six Sigma for Service,* (New York: McGraw-Hill, 2003).

3   *"Gulfport, Mississippi's History with Tropical Systems,"* Hurricanecity.com, accessed March 8, 2011, http://www.hurricanecity.com/city/gulfport.htm.

4   Campbell Robertson, Clifford Krauss, "Gulf Spill Is the Largest of Its Kind, Scientists Say," *The New York Times,* August 2, 2010. http://www.nytimes.com/2010/08/03/us/03spill.html?_r=1&fta=y.

5   David L. Butler, PhD and Edward Sayre, PhD, *Economic Impact of the Deepwater Horizon Oil Spill on South Mississippi: Initial Findings on Revenue* (The University of Southern Mississippi), June 14, 2010.

6   *City and County of Denver Realizes Millions in Labor Cost Savings with Kronos Solution* (Kronos Incorporated, 2010).