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RESEARCH NOTE ASSESSING THE VALUE OF KRONOS IN GOVERNMENT

THE BOTTOM LINE

When Nucleus analysts investigated the use of Kronos within public-sector entities, they found these organizations were able to ease their funding challenges by reducing costs such as payroll error, leave overcompensation, and excess overtime. Analysts also found that automation eliminated costly tasks for employees and payroll administrators. Government organizations that used Kronos HR deployed their workers more effectively and reduced headcount requirements.

THE CHALLENGE

Many government and education organizations are facing financial pressure. While costs related to operations, retiree benefits, and payroll are increasing, cash receipts from sources such as real estate and corporate taxes are decreasing. Nucleus Research has analyzed deployments of Kronos software at both government and private-sector entities and found the automation of payroll and HR-related processes resulted in significant reductions to payroll and related costs. The purpose of this research note is to assist managers within government and education organizations by identifying these cost reduction opportunities. The findings are based on analyses of Kronos deployments at school systems, county governments, universities, city governments, and towns.

KRONOS

Kronos provides applications that automate processes and data collection for HR and payroll departments. The Kronos product offering includes:

- Time and attendance functionality that records how much time each employee works and applies the appropriate pay rule to each hour worked.
- Scheduling tools that automate the creation of schedules based on demand factors, employee skill sets, and employee availability.
- Absence management tools which calculate the amount of time off each employee has accrued.
- Human resources tools for maintaining complete employee records — including data points such as address, tax status, and certifications — so that data is available to other Kronos applications and can be analyzed.
- Labor analytics, which enables the analysis of key performance indicators such as productivity, absentee rates, and overtime at various levels in an organization.

TOPICSEmployee Management
Applications**BENEFITS OF KRONOS FOR GOVERNMENTS**

When Nucleus analyzed Kronos deployments at government and education organizations, analysts found operational benefits that included lower payroll costs and improved productivity.

Reduced payroll costs

Nucleus analysts found that when government organizations support payroll and HR-related processes with automation, payroll costs were lowered as a result of reductions to payroll error, payroll inflation, overtime, unearned leave, and headcount.

Reductions to payroll error and payroll inflation

By enabling the systematic collection of attendance data and the uniform application of pay rules at public-sector entities, Kronos significantly reduces sources of errors and inflation that increase payroll costs. Overpayments caused by errors are reduced because managers and payroll administrators no longer have to manually process time-card data, an error-prone process which Nucleus found can cause organizations to overpay employees by an average of 1.2 percent. Payroll inflation, the overstatement of hours worked by employees, can also be significantly reduced using automated data collection with time clocks and carefully configured rounding rules.

Nucleus has found that errors cause organizations to overpay their employees by an average of 1.2 percent.

Nucleus analysts found that reductions to both payroll error and payroll inflation can be significant:

- By replacing time sheets with time clocks and carefully programming rounding rules, Broward County Public Schools reduced its total annual payroll for substitute teachers by 4 percent.
- A major state-run university used Kronos to reduce payroll error by 93 percent.
- A user at a city government in Ohio said, *"Our payroll error is significantly lower, although we haven't calculated it. Before the deployment, managers in each department interpreted pay rules their own way and were sometimes generous on a selective basis. Eliminating this is definitely saving money."*

Improved employee utilization

By maintaining detailed records about each employee, including their certifications, salaries, and skill sets, Kronos HR enables public-sector organizations to reduce employee headcounts and total payroll. Nucleus analysts find that the more a government or education entity knows about its workforce, the more efficiently it can use its workers and avoid hiring new workers. At a city government in Ohio that was restricted by a hiring freeze, a manager used data in Kronos HR to swap employees and make sure that each employee was doing the job they were most qualified for. By improving the utilization of each employee, the city was able to avoid new hires while attrition caused total headcount to reduce by 8 percent.

Reduced leave-related overcompensation

Automated leave tracking enables government and education organizations to reduce unearned leave compensation. Tracking employee leave accruals manually

is costly because it is conducive to the granting of unearned days off to employees. Without accurate leave data, managers responding to leave requests often grant excess leave because they don't have time to manually calculate an employee's leave balance, they calculate it incorrectly, or they grant the time off in an effort to avoid a potential conflict with the employee.

Nucleus has found that on average, employees take 1.25 extra days of leave time per year. This is equal to 0.48 percent of payroll.

Nucleus analysts found that when public-sector organizations used automated leave tracking, excess leave was reduced because managers had ready access to accurate balances, enabling them to avoid granting unearned time off. A user at a city in Ohio said, *"Managers don't have to adjust leave balances if someone is late for their shift. The clock just records they were tardy and takes it out of their accrual balance."* This user also said, *"Now if an employee has two weeks of vacation, they get two weeks instead of two and a half by accident."*

Reduced overtime

Government and education organizations that automate with Kronos have access to reporting that helps managers to both identify the sources of overtime and assign shifts to employees least likely to incur overtime rates. Kronos time clocks can also be integrated with scheduling applications so that pay rules are properly applied and an employee is paid for only approved overtime. Nucleus analysts found that identifying the sources of unnecessary overtime and applying related pay rules more accurately can result in significant benefits:

- *"If a worker stays longer than their 8-hour shift for some arbitrary reason, and maybe they aren't really working during that time, the time clock will record that time as unapproved overtime and not apply overtime rates unless it's approved."*
- *"I have reporting at the department, manager, and employee level. If someone incurs too much overtime, I look into it and it stops. People know overtime is being watched, so it's way down."*

By using reporting to reduce overtime and instituting new HR policies, some public-sector organizations can reduce their comp time liabilities. At many government entities, employees accumulate comp time balances that increase over time as they work overtime and accrue unused sick days and vacation time. In fact, at many organizations, the value of comp time days earned in the first year of a worker's career will be paid out based on the salary they earn when they cash out those days, which is typically upon their retirement. A county government in New Jersey reduced its comp time liability by 50 percent in six months because it used Kronos reporting to institute an aggressive overtime reduction program and required employees to draw down comp time balances before using any other type of leave time. A user at this government organization said, *"Reducing this balance was significant. An hour of overtime now costs less than an hour of comp time decades from now when an employee retires."*

Improved productivity

Automating payroll and related processes increases productivity by eliminating record keeping processes for employees, their managers, and payroll administrators. Without automation, the completion of payroll requires each

employee to manually record their attendance on a time sheet, which is then approved by their manager, and manually transferred to a payroll system by a payroll administrator. Processes for requesting leave, tracking leave, scheduling, and changing employee data points such as addresses or marital status is also time consuming for employees and their managers.

Nucleus has found that on average, 85 percent of organizations had some savings from payroll processing time improvements.

Nucleus finds that these tasks can be eliminated by automation, resulting in improved productivity:

- A user at the City of El Paso said, *"Our clerks don't have to spend time tracking down and trying to decipher hundreds of poorly documented leave requests."*
- By adopting Kronos, a school system in Tennessee reduced the amount of time required to process each of its 24,750 annual leave requests by two minutes.
- By using Kronos to eliminate time sheets, a county government in New Jersey eliminated 18,000 hours of annual administrative work for employees and their managers, and 7,000 hours of annual work for payroll administrators.
- A payroll administrator at a school system in Michigan said, *"I save one day per bi-weekly pay period because I don't have to collect time sheets, nag people for them, and physically enter them into a system."*

Nucleus often sees public-sector Kronos deployments with productivity benefits that are significant enough to enable reductions to headcount requirements:

- By deploying Kronos, Broward County Schools eliminated 60 minutes of time and attendance work per pay period for the administrators at its schools and reduced the headcount requirement for the payroll department by one.
- A payroll manager at a major state-run university said, *"Before deploying Kronos, we spent most of our days on the phone and had a line of people going out the door. Now we hardly have any questions and we have four people instead of five."*

IDENTIFYING KPIS

Managers considering the adoption of Kronos for their public-sector entity should baseline the benefits prior to the deployment. Measuring the values of KPIs prior to the deployment and estimating their expected and worst-case values six to 12 months after the go-live date can form the framework for a business case for adoption. It also allows the deployment team and stakeholders to agree on milestones to be achieved by the deployment and criteria for success. Metrics champions should consider include:

- Payroll error. Employees let you know when they've been underpaid. Since underpayments are likely to equal overpayments, the total annual amount of manual checks cut due to underpayments is a valuable KPI. Use it as an estimate of total payroll overpayments. To validate benefits after the deployment, measure the value of annual manual checks again.
- Overtime. Overtime statistics tend to be readily available. Determine both annual overtime expense and its percentage of total payroll and use this percentage to normalize for any potential growth in the organization. After the deployment, calculate the amount of overtime as a percentage of total payroll again to determine how much overtime was eliminated as a result of the

deployment and any overtime-reduction initiative that may have accompanied it.

- **Productivity.** Time and attendance deployments improve productivity for employees, their managers, and payroll administrators. Using direct observation or interviews, estimate the amount of time each group spends on each payroll cycle. After the deployment, survey workers in each of these groups again to determine how many fewer hours they dedicate to the completion of a payroll cycle. Since most of the work is performed in the payroll department, the benefit will likely be higher here. Keep in mind the total time saved will not necessarily translate into new work completed by these employees. A reasonable correction factor of 50 to 75 percent should be used to translate from time saved to time worked.

CONCLUSION

For many government entities, payroll is their largest expense item. Given the need for these organizations to cut costs, it is no longer enough to leave payroll and HR-related processes unsupported by automation and hope for accuracy. Nucleus found that when government organizations automate with Kronos, reductions to payroll error, payroll inflation, leave overcompensation, and overtime can be achieved. Organizations also used Kronos HR to improve visibility into their workforce on an employee-by-employee basis, enabling them to better deploy their workers while accomplishing their mission without additions to staff.