CALCULATING ROI FROM AUTOMATION OF TIME AND ATTENDANCE SYSTEM

Return on investment or ROI is a major determinant in the decision-making process of certain software purchases. The key point is “improvement” in various aspects such as operation and discipline but most importantly in terms of money. It’s a fact that labor cost is huge cost in many businesses. Let’s base it on a simple calculation; if one employee’s tardiness for one hour costs a company around USD20, imagine the losses incurred for five hours of tardiness from five employees. You have just lost USD500 and this is only the beginning. A laidback attitude in monitoring staff time and attendance could lead to underestimated losses, which a company could easily overcome through automation.

This article elaborates on the downside of manual attendance calculation and how automation can save a company a lot of money in a short period of time.
To Err is Human
Humans make mistakes. They may misread a statistic, miss a decimal point or inaccurately inscribe data from one system to another. While tracking a part-time employee for 10 hours a week may not seem too difficult to resolve when problems arise, however when tracking a large group of employees, across multiple departments including claims, for 40 hours plus per week, mistakes are inevitable. The chances of objection arising from an overpaid employee is lower than when they are underpaid.

Manual Takes Time
On average, it takes 7 minutes to fill out and process the payroll for a single employee. It would take one Human Resource employee an entire business day to calculate and process the payroll for a company of 60 employees. Other methods include employing additional staff to reduce the time needed to process the payroll, which is also a negative ROI.

Ripple Effect of Miscalculation
Miscalculating claims, overtime or mistaking the decimal point location, will definitely incur additional expenses to a company. More times than not, an error results in overpayment will not be detected resulting in lost cost. If the error is detected before the payment, corrections need to be done and the result will still be a loss, in the form of time and money, of course.

Cheating is Commonplace
Manual time attendance clock is prone to abuse when a dishonest employee falsifies their records or of a friend such as the number of hours worked and leave taken by switching tokens and identities. An employee could be one hour late while the other employee checks him in earlier, and this will not leave any trail for the company to compare and calibrate.

Poor Scheduling
When tracking every minute detail of an employees’ movement becomes too tiresome or difficult to manage, inaccurate entries will be inevitable. A poor insight into employee movements may find some overworked and some under-utilized, affecting the productivity of the company, increasing the risk of losing talent by overworking or underworking employees.

Use Machine for Accuracy
Tracking time and attendance using biometrics system will definitely reduce the risk of human errors and ensure clarity in the data in the event that complications arise because biometric systems do not allow anybody else to clock in “on behalf” of anybody else and the times recorded are real-time and accurate. When the data is clean and it’s being analyzed by a proven software for records and reports, error is at its lowest.

Amazingly Automated
When every data is readily available in the system and the data is correct, calculations of payroll are made based on the correct formulations, which in turn reduces the time it takes to process payroll significantly to the benefit of the company because automation allows batch calculation unlike manual calculation.

Get it Right On the Get Go
The great thing about automation is its compliance with the law and the company’s policy; the calculations are standard which have been checked and tested by the developers before the software is released. The software will capture appropriate data to produce appropriate results based on data provided which is also automated. Hence, fewer errors are likely to be made in automated system.

Biometrics Data Trains Honesty
Time and attendance systems that uses biometrics time clock have been able to curb this buddy punching occurrences because it’s based on one’s body part which is not interchangeable. The use of biometrics promotes honesty amongst staff, as there’s no way for a staff to cheat and not leave trail.

Automated Scheduling
Automated systems have various scheduling in place that can simply be assigned to each employee without any confusion or overlapping of schedules. At the end of the day, productivity can be measured by analyzing the data from schedules being used.

Everything is in Order
With automated systems, payroll can be scheduled at a specific time every month without fail because all the data is in place, ready to be manipulated as and when required.
Untimely Payroll
Employees want to be paid on time. If the monthly payroll was not processed for the month due to an absent mind, individual or time constraints, the number of dissatisfied staff will impact future results. A breach of contract or law could be applicable.

Scattered Data
Keeping manual data can be cumbersome with physical filing and cataloging of files and documents. Data retrieval also takes time and data could be misplaced and lost if the keeper is not careful or organized.

The Burden of Proof is On The Employer
Manual attendance system leaves the burden of proof to the employer because employees have no way to corroborate the data that he surrenders to the company, for example, if a company says you come in at 9:30am instead of 9:00am, the only proof is your time clock card and the employee can’t argue otherwise.

Restricted by Location
In the manual attendance system, unless you are in the office or you have someone to feed you with the information, there’s no way you can access to the system to obtain the information you require or monitor your staff’s whereabouts.

Data History
Registering attendance records electronically keeps a trail of your employees history on record. This eases the time it takes to lookup specific data, as opposed to sifting through folders of paper manually.

The Burden of Proof is On The Employee
An automated attendance system can provide an employee a receipt for his/her attendance with additional features like receipt printing whereby the employee prints his record and keeps in case discrepancies arise. Apart from that, automation provides a small system for the employee to login into the system and match his attendance and correct any discrepancies.

24/7 Monitoring
Specifically with Cloud based time attendance services, management is not restricted to a physical location. Log in and monitor employee attendance records while you away on leave or on your off-day, as long as you have an internet connection.
The advantages of time attendance automation are vast and irrefutable. Now let us look at the comparison in dollars and cents between manual and automation. We then further investigate the extra advantages of Automation via Cloud Service. The series of questions below is an example based on 100 employees using manual or automated services.

**Exercise #1: Manual Card System**

No of employees using card system? 100

Standard Weekly Working Hour for An Employee? 40 hours

Hourly Wage for each employee? $10.00/hr

Time taken to generate a report for one employee: 7 mins

Time taken to prepare payroll for one employee: 10 mins

Time difference between employee arriving to work and filling the timesheet: 5 mins

Unreported time spent on taking long lunches/breaks per week: 20 mins

Rate of human error/timesheet: 5%

Percentage of assistance in buddy punching: 2%

False Overtime salary paid out: 5% of total monthly salary

**Exercise #1: Manual Calculation**

No of Employees: 100

A. Standard Working Hours for all employees: 40hr/week x 4 weeks x 100 = 16000 hours

B. Total Wage/Employee/Month: 160 x 10.00/hr = $1600

C. Total Monthly Payroll for All Employees: $160K

**Exercise #2: Automated Biometrics System**

No of employee using biometrics system? 100

Standard Weekly Working Hour for An Employee? 40 hours

Hourly Wage for each employee? $10.00/hr

Time to generate a report for one employee: 2 mins

Time taken to prepare payroll for one employee: 2 mins

Time difference between employee arriving to work and clock in using fingerprint: 0 mins

Unreported time spent on taking long lunches/breaks per week: none

Rate of human error/timesheet: 1%

Percentage of assistance in buddy punching: none

False Overtime salary paid out: 1% of total monthly salary

**Exercise #2: Automated Attendance**

No of Employees: 100

A. Standard Working Hours for all employees: 40hr/week x 4 weeks x 100 = 16000 hours

B. Total Wage/Employee/Month: 160 x 10.00/hr = $1600

C. Total Monthly Payroll for All Employees: $160K
D. Time taken by an employee to fill a timesheet/month: 5mins x 22 days = 1.83hr

E. Cost based on the time taken to fill a timesheet by an employee = $18.30

F. Cost based on the time taken to fill a timesheet by all employees: $18.30 x 100 = $1830

G. Time taken to generate a report for one employee: 7 mins

H. Time taken to generate a report for all employees: 7 mins x 100 = 11.6 hours

I. Cost to generate reports for all employees: $116.60

J. Unreported time spent on taking long lunches/breaks per month/employee: 80 mins

K. Cost due to unreported time spent on taking long lunches/breaks per month for all employees: 80 mins x 100 = 133.3hr x 10.0 = $1333

L. Rate of human error/timesheet: 5% - Take all employee salary $160K x 5% = $8,000

M. Percentage of assistance in buddy punching: 2% x $160K = $3200

N. False Overtime salary paid out: 5% of total monthly salary: $160K x 5% = $8,000

**Monthly Payout**

A. Monthly salary = $100,000

Human Error = $1833 (F) + $116.60 (I) + $8,000 (L) = $9949.60

Fraudulent Behavior = $1,333 (K) + $3,200 (M) + $8,000 (N) = $12,533

Total Waste: $22,482.60 (22.48% of the monthly salary)
It is conceivable that Automation reduces waste spending from 22.48% to 2.48% by eliminating human error and fraudulent behaviour.

From the calculation above, it’s clear that automation in time attendance provides a company with high ROI as compared to manual time attendance. It applies to small companies and the impact is greater if a company has a large workforce. When mankind starts to time, the value tends to multiply, and it rings true when each minute is calculated with dollar and cents.

CLOUD ATTENDANCE
A Clever Way to Keep Up With Attendance

A company can further save by deploying Cloud Attendance Systems like TimeTec Cloud. The system will provide you with all of the above advantages of automated time attendance system and then some more. At only USD2 per person per month, there’s no need to invest in infrastructure, it’s scalable based on the company’s requirements and the data is accessible and stored for a long time.

Check out TimeTec Cloud Attendance System at www.timeteccloud.com.