Applied Consulting VS Hiring a New Employee

Which one would cost less to add to your business mix? If you said a new employee, you may be mistaken.

This question was presented to Applied when a company asked for a quote on a service. They were given a quote of \$69 an hour. Company XYZ asked "How do I justify the cost of hiring your services over hiring a new employee to do the same task?" This questions has probably gone through other company's minds during similar situations, so Applied went to work to show the value of their services with a detailed breakdown of the benefits' that can be saved when hiring them to consult for a customer.

Most companies think that adding a new employee would be less expensive due to the lower hourly wages compared to a consultants hourly fee, but there are other factors that are not considered that affect an employee's wage.

Calculating the true cost of an employee can be challenging. Employee payroll and employeerelated costs comprise an extremely large portion of most business entities' non-recoverable cash outlay. Like most businesses, you are probably in fairly close touch with each employee's hourly wage or salary, and may have a good idea of approximately what payroll taxes cost. But you may not have taken the time to research and compute all of the additional "hidden" or internal burden cost associated with each individual, including but not limited to bonuses, payroll taxes, 401K, benefits, social security tax, Medicare tax, workers composition, general liability, unemployment insurance, severance pay, uniforms or special work clothes, usage of equipment, training, work supplies, office space, administration/IT time unloading, onboarding, CAD software, hardware, PTO, paid holidays, and sick leave.

Did some of those simple items get forgotten when you were calculating what your employee cost?

Applied identifies these actual cost of an employee an "internal burden cost". Which means the indirect costs associated with employees, over and above gross compensation or payroll costs. The burden cost provides a truer picture of total labor expenses than payroll costs alone. The internal burden cost explains many of the expenditures associated with the "hidden costs" that are not readily apparent. Since total labor costs, including the internal burden cost, may be as much as 50% higher than payroll costs alone, it is necessary to calculate the burden cost accurately to get a better picture of profitability.

Let's look at an example of what a new employee could cost. Wendy's hourly compensation is \$17.00 per hour or \$35,360 gross annual payroll.

As Wendy's employer, you look over all the additional annualized cost attached to her position:

- \$3,248 for payroll taxes (based on 3% state unemployment)
- \$3,536 for workers compensation insurance (at \$10 per \$100)
- \$4,800 for health insurance (\$400 per month)
- \$1,060 retirement benefits (3% of compensation)
- \$960 for cell, telephone and/or Internet costs (\$80 per month)
- \$100 in uniforms or for office workers an equivalent amount in kitchen supplies
- \$6,000 in company vehicle usage or for office workers an equivalent amount in equipment usage and maintenance as well as office space
- \$700 estimated annual bonus
- \$200 employee-paid meals, parties and entertainment
- \$250 in training fees, seminars, etc.

Total additional cost: \$20,854*

Next, let's determine how many hours Wendy is potentially available for company project work. There are 52 weeks in a year x 40 hours/week = 2,080 hours annually. Subtract Wendy's additional paid time for the year:

- 6 holidays
- 10 vacation days
- 6 sick or personal days
- 4 days of training

Total additional paid time equals 28 days** (224 hours), leaving 1856 available hours of actually working.

Now let's subtract an estimate of 2.5 hours from the 47 remaining work weeks for miscellaneous administrative meetings, timekeeping, general problem-solving or prep time and any other possible non-project tasks. This reduces the available production time by another 117.5 hours, leaving a total of 1,738.5 working hours remaining on projects, which will be your productive hours.

The final results of Wendy's additional burden cost total is just over \$20,000. This brings Wendy's annual cost to \$56,214.

Burden cost per actual productive hours for your company equals the annual cost of \$56,214 / working hours of 1,738.5 resulting in \$32.33 an hour. This is the bottom line to what Wendy is costing your company as a new hire per hour, which when computed as a percent comes to 90% added to Wendy's base hourly rate.

^{*}These addition cost will vary depending on company, state, full-time or part-time benefits. This is based off the average from Bureau of Labor Statistics, IRS and Better Business Bureau.

^{**}Again these additional paid time days will vary depending on company policies and benefits established.

Ok. Now let's look at an example of what hiring an Applied professional would cost.

Based off the same principles and the above example of the breakdown used in hiring a new employee, here is an example of an Applied customer's annual cost and burden percent.

Categories	Customer (year 1)	%
Salary Mechanical Engineer	\$65,000.00	
Bonuses	\$1,950.00	3%
Payroll Tax	\$5,323.50	8.19%
401K	\$3,900.00	6%
Benefits	\$6,240.00	9.60%
Social security Tax	\$2,730.00	4.20%
Medicare tax	\$942.50	1.45%
Workers Comp (.45%)	\$292.50	0.45%
General Liability (.22%)	\$143.00	0.22%
Unemployment insurance	\$2,294.50	3.53%
Severance Pay (2%)	\$1,300.00	2.00%
Admin/IT Time Unloading (Total 2wk)	\$2,600.00	4.00%
Onboarding	\$10,000.00	
CAD Software	\$4,000.00	
Hardware	\$2,500.00	
PTO 14 days	\$3,500.00	
Paid Holidays 9 days	\$2,250.00	
Sick Leave 4 days	\$1,000.00	
Total = Internal Burden Cost	\$115,966.00	

Company XYZ

KEY:

Normal Mechanical Engineer Cost Upfront Cost/Fixed Initial Cost

All companies would have to pay the first items in the category column, (marked in yellow), for a salaried Mechanical Engineer. The last items in the category column, (marked in orange), is the upfront cost to perform the specialized services that an Applied Mechanical Engineer would do. These are fixed initial startup costs that you would save when you hire an Applied professional to be your consultant instead of hiring a new employee and training them. Depending on your company, there can be a higher upfront cost and time needed to prepare the new employee for productivity. And let's not forget the time and cost it takes, just to find the right person to be that new employee. Applied can step in with staff that are knowledgeable and has the expertise in the specific service needed for your company.

Customer's Employee	
Upfront Cost/Fixed Initial Costs	\$23,250.00
Pro-rated Costs (year)	\$92,716.00
Pro-rated Costs (hour, 2080 hours in a year)	\$55.75
Average hours/month	173.33
Average Cost per month	\$9,663.83

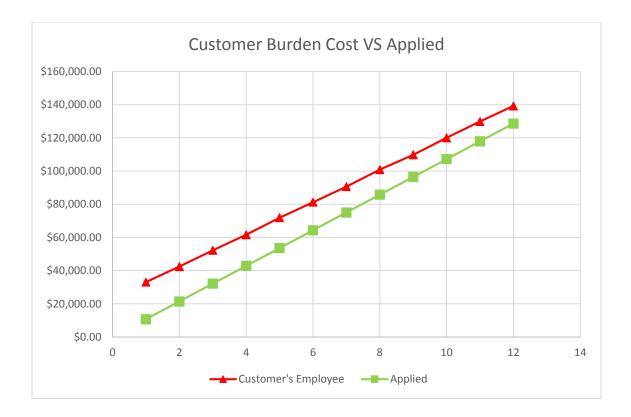
Now let's look at a comparison of what the average cost per month difference is between the above Company XYZ total burdens costs broken down compared to what Applied's average cost per month. The end result would be an hourly rate of \$69.00.

Applied	
Hourly Rate	\$69.00
Total non-billable hours (14 days PTO+9 holiday+4 sick days)	216
Hours per year (2080 hours in a year, based on 40hr weeks)	2080
Total billable hours per year	1864
Average hours/month	155.33
Average Cost per month	\$10,718.00

With these average costs and the upfront/ fixed initial cost, here is a projected annual breakdown of Applied's cost compared to a customer's employee by month.

Month	Customer's Employee	Applied
1	\$33,062.51	\$10,718.00
2	\$42,428.99	\$21,436.00
3	\$52,241.50	\$32,154.00
4	\$61,607.98	\$42,872.00
5	\$71,866.52	\$53,590.00
6	\$81,233.00	\$64,308.00
7	\$90,599.48	\$75,026.00
8	\$100,858.02	\$85,744.00
9	\$109,778.48	\$96,462.00
10	\$120,037.01	\$107,180.00
11	\$129,849.52	\$117,898.00
12	\$139,216.00	\$128,616.00

As you can see from the chart, every month the cost for hiring an Applied consultant decreases compared to a new employee.



With all this new information, NOW how would you answer the question "Which one would cost less to add to your business mix? Hiring an Applied professional or hiring a new employee?" Applied are willing to show you the value of hiring us to be your consultant. The same as they did for Company XYZ.

If you want to learn more about any services Applied has to offer, contact us at (.....)