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Managerial Accounting for Arborists

Part 3: Cost Classification and Depreciation

By James Komen

This is the fourth article in a five-part series on Managerial Accounting. It relies upon terminology introduced in Part 1: Accounting Basics and continues the discussion of Cost Classification introduced in Part 3: Cost Classification and Depreciation.

Payroll Expense as Period Cost

Employees perform tasks that behave differently on the balance sheet and profit and loss reports. It can be challenging to allocate the expenses associated with payroll with the various accounts because there are so many transactions associated with proper allocation. This is why it is so common to simply drop all payroll-related costs into a generic payroll expense operating expense account. While this strategy is easier, it has two severe drawbacks:

1. It assumes that all money paid to employees is exclusively an expense. It does not allow the possibility of accounting for employee activity as an investment that appears on the balance sheet. If managers base their decisions exclusively on this simplified system, they do not have any motivation to spend time developing new employee skills, maintaining equipment, or developing client relationships because that time is simply recorded as an extra cost that reduces the net profit of the business.

2. It assumes that all payroll is a period expense, accrued independently of the performance of the company's sales department. Managers using the simplified system would be slower to scale back on excess staff in slow times and would be slow to hire when jobs are plentiful. They would assume that the amounts paid to staff would not change even when the workload changes, resulting in excess capacity during slow times and overworked (and unhappy) staff during busy times.

When employees perform different tasks, a portion of their payroll may be allocated to each of the different applicable account types to give a clearer picture of the outcome of their activities. Time spent on ordinary billable field production may be allocated to COGS. Time spent on ordinary administrative tasks may be allocated to period-cost expense accounts.

Payroll Expense as COGS

When field production employees are paid hourly for production time, the accounting is much simpler than when they are salaried. Hourly production payroll may be allocated entirely to COGS for the hours spent on billable work. But accounting for salaried employees is more complex because they must have their payroll allocated based on the hours spent on various tasks. It can sometimes be challenging to track the various activities undertaken by salaried staff because of the additional time burden.

Some companies require staff to log all of their hours so the accounting team may allocate them appropriately. Other companies conduct periodic audits where a member of the accounting department observes the day-to-day activities of each staff member and then projects the results of the audit over the rest of the management period. Both methods of tracking staff hours have their advantages and disadvantages.

Once the hourly data is known, payroll can be more easily allocated to the different accounts. If a staff employee spends 50% of his hours directly supervising field production, then 50% of his payroll may be allocated to COGS, divided proportionately between each job supervised.

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INDUSTRY CALENDAR

» Municipal Shade Tree Management
11/13/2018 New Brunswick, NJ
» Chipper and Chainsaw Operation in Spanish
11/14/2018 Philadelphia, PA
» Diseases and Pests of Trees
11/15/2018 New Brunswick, NJ
» Advanced Climbing, Rigging, & Precision Cutting
11/16/2018 Jacksonville, FL
» Large Tree Climbing and Rigging
11/27/2018 New Brunswick, NJ
» Designing Native and Ecological Plant Communities
11/28/2018 Philadelphia, PA
» World Forum on Urban Forests
11/28/2018 Mantova, Italy
» 37th Annual ISA RMC Pesticide Applicators Workshop
11/29/2018 Denver, CO
» Hazardous Tree Identification
11/30/2018 New Brunswick, NJ
» Precision Chainsaw Cutting & Felling
11/30/2018 Ft. Myers, FL
» Perennial and Shrub Maintenance for Professionals
12/4/2018 Philadelphia, PA
» Aerial Rescue (Hands-on Event)
12/6/2018 Orlando, FL
» An Arborist's Master Class
12/7/2018 St. Augustine, FL
» Ground Skills and Aerial Support
12/7/2018 Orlando, FL
» ISA Certified Arborists Preparation Course and Exam
12/10/2018 Louisville, KY
» MAC-ISA Arborist Certification Course
12/10/2018 Charlottesville, VA
» Illinois Arborist Association Annual Conference & Trade Show
12/11/2018 Tinley Park, IL
» 2018 GAA Winter Workshop and Awards Luncheon
12/13/2018 Atlanta, GA
» Focus on Arboriculture
12/14/2018 Fort Walton Beach, FL
» ISA Arborist Prep Course
1/14/2019 Oakland Park, FL
» Certified Arborist Preparatory Course
1/21/2019 Buffalo, NY
» Indiana Arborist Association Annual Conference
1/22/2019 Indianapolis, IN
» The Structure and Function of Trees
1/23/2019 Plant City, FL
» Tree Planting and Installation
2/20/2019 New Brunswick, NJ

Managerial Accounting

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If 25% is spent on administrative tasks, then that payroll may be allocated to an administrative operating expense account. If an employee is sent home early with full pay after completing a job early, that payroll can be recorded as an **underutilized capacity expense**. Underutilized capacity tracks the resources spent on capacity – whether machine hours, office square footage, or labor hours – that are not used for generating income. It can be a useful metric for managers to easily see potential ways to improve company efficiency.

Workers Compensation as COGS

Worker's compensation insurance represents a large portion of the expense of operating a tree service company. For many small companies, worker's compensation insurance may be 50% or more of payroll. Managing worker's compensation insurance in the company ledger can have a large effect on the appearance of the profit and loss report. For a typical policy, a fixed premium is paid to the insurance provider every month (or quarter). Then at the end of the policy period, the company records are audited by the insurance provider, and a final statement of any outstanding amount is prepared.

Cash accounting companies record worker's compensation insurance as a period expense. Each time a premium is paid, an identical amount is recorded in the worker's compensation expense account – regardless of the actual amount of payroll exposure for that period. When business fluctuates seasonally or irregularly, then the profit and loss report becomes distorted. During slow times, the company's profit and loss report shows worse than the company's actual performance; during busy times, the company shows better than actual performance. If any amount is owed at the end of the policy period, then the final month shows a very poor performance.

Accrual accounting allocates the worker's compensation insurance as the exposure is "used." Since worker's compensation insurance premiums are directly proportional to payroll, the premiums may be allocated as work is performed. Rather than recording the premiums as an expense, they would be recorded in a prepaid expense asset account. Then every time employees are paid for work on a particular job, a proportional amount of the prepaid insurance account would be credited.

Knowing where the company stands with its worker's compensation premiums can be extremely critical for managing cash flow. Suppose a company gets an unexpected increase in its volume of work in the middle of a policy period, but it continues to pay its premiums based on its old predictions of payroll. The insurance provider doesn't find out about the new work until the audit at the end of the policy period. Premiums do not get adjusted to account for the new volume of work in the middle of the policy period. Only after the final audit does the insurance provider submit a final premium audit bill to the insured company.

A cash accounting company would be surprised by the sudden and unexpected final premium audit bill from the insurance provider. It may not have prepared its cash reserves adequately for the expense, resulting in a last-minute scramble to assemble enough cash to pay the bill. Or worse: the company may default on its obligations.

A company using accrual accounting would know to expect the bill because of the balance of the prepaid insurance asset account. When the volume of work increases, so does the amount credited from the prepaid insurance asset account. The debited premiums wouldn't keep up with the credits from the payroll accrued, so the balance of the prepaid insurance asset account would be negative, indicating a balance owed to the insurance provider.

See Figure 1 for an example of a typical policy period for worker's compensation. The company pays monthly premiums based on the prior year's payroll figures. In this example, the company experiences a sudden increase in the volume of work. The balance of the prepaid worker's compensation asset account becomes negative in July. By November, the outstanding balance is $10,000, more than 6 times its regular monthly premium payment. Because it has been accounted for in advance, the company can prepare its cash reserves for the large final policy audit bill in December of $13,000.

Figure 1: Example ledger showing the journal entries for a prepaid worker's compensation asset account and the COGS expense account. In June and July, the company experiences a sudden increase in its volume of work.

	Prepaid Worker's Comp Asset			COGS Worker's Comp Expense		
	Debit	*Credit*	*Balance*	*Debit*	*Credit*	*Balance*
Feb	$1,500	$1,000	$500	$1,000		$1,000
Mar	$1,500	$1,000	$1,000	$1,000		$2,000
Apr	$1,500	$1,000	$1,500	$1,000		$3,000
May	$1,500	$1,000	$2,000	$1,000		$4,000
June	$1,500	$3,000	$500	$3,000		$7,000
July	$1,500	$6,000	($4,000)	$6,000		$13,000
Aug	$1,500	$3,000	($5,500)	$3,000		$16,000
Sept	$1,500	$3,000	($7,000)	$3,000		$19,000
Oct	$1,500	$3,000	($8,500)	$3,000		$22,000
Nov	$1,500	$3,000	($10,000)	$3,000		$25,000
Dec	$13,000	$3,000	$0	$3,000		$28,000

This bill is much higher than the company had paid every other month of the policy year.

Situations like this are very common for tree service businesses where work varies irregularly or seasonally. When the company tracks premiums on a cash basis, they receive an unwelcome surprise at the end of the policy period. Managers often feel their company is being punished for their successes of the prior year.

Speaking from experience, I had this happen to me one year, and I had to scramble to obtain loans so the company could meet its debt obligations. The next year, I implemented an accrual accounting system and we had another unexpected increase in our volume of work. But this time, I saw it coming. I had tracked our accrued payroll and was able to estimate our final audit bill before we received it. Our final audit bill was roughly 10 times our regular monthly premium, but the company was prepared with adequate cash reserves to pay it.

It is important to note that at the end of every policy period, the balance of the prepaid insurance asset account should be zero. When a new policy period starts before the audit for the prior period is completed, consider starting a separate parallel account for each policy year. Then when the completed year's audit is finished, that account's balance will be zero, and that account won't become confounded with the current year's account.

Conclusion

Although the activity of the business may not change, different accounting methods can have a big impact on the managerial decisions of a business. Classifying payroll and payroll-related expenses in different manners can distort or clarify the financial picture of the company. Tracking prepaid expenses and anticipating future liabilities can make the difference between being surprised by or prepared for a big expense like a worker's compensation audit bill. Classifying payroll times helps managers track where the business's resources are being allocated, making it easier to make managerial decisions that can improve the efficiency of the company.

The next and final article in this series discusses methods of financing that can be obtained for businesses based on their balance sheet and profit and loss reports.

James Komen is a consulting arborist in California specializing in risk assessment and tree appraisals. He employs principles of finance and accounting to help clients make informed management decisions for individual trees and for tree inventories. You can learn more about James from his website at www.jameskomen.com.