CHART OF ACCOUNTS WHITE PAPER

NSCA



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Chart of Accounts White Paper

Is your company not making money and you don't know why? This is a common question among many Systems Integrators. The answer may actually be hiding in your financial statements. But you may not be able to find the solutions you need if your financial statements are not organized in a meaningful way.

To better understand your financial statements, you need to look at your Chart of Accounts, which forms the backbone of any financial reporting system. The Chart of Accounts is a list of all the possible accounts which can be used to categorize money in and money out. These accounts are grouped together by account types to create the Balance Sheet and the Profit and Loss Statement (also referred to as the P&L or Income Statement.) But unless these accounts are created and organized in a meaningful way, the statements that are produced from these accounts will not be effective for good financial management.

NSCA has long been the leader in providing top-notch technical education and training for integrators. And while technical knowledge is crucial to operate a company in this industry, business knowledge is crucial to manage a successful and profitable company. Therefore, as a benefit to NSCA members, NSCA has developed a recommended Chart of Accounts. As part of this package, NSCA has made available as a download both an Excel spreadsheet that contains a listing of suggested accounts as well as this White paper. It is hoped that this information can help Integrators organize their financial statements in a meaningful way to provide the most benefits for their own companies as well as a create a basis for benchmarking multiple companies within the industry.

Often, newly formed integrators will set up their books in an all-purpose general fashion. They may purchase an off-the-shelf generic accounting package or use an outside accounting firm that does not specialize in this industry. Many integrators have long looked for guidance in creating a set of books that is specifically designed for this industry and have not been able to find it. NSCA has recognized this need and therefore has undertaken this project to create a resource to help members succeed.

Furthermore, NSCA continues to regularly research and produce benchmarking studies. This recommended Chart of Accounts will be the basis of data collection and analysis for the financial component of future benchmarking studies. Companies that adopt and utilize this recommended Chart of Accounts will find data input more streamlined and the results will be more easily comparable against their own company information.



NSCA's fundamental goal for creating this Chart of Accounts is to provide integrators with the help they need to set up an accounting system and be able to answer the question: "Where is my company making or losing money?" The information contained in this white paper provides the logic behind this industryspecific Chart of Accounts as well as tips on implementing and using it within your own company. While a white paper about accounting may not be as exciting as one based on technology, it is the hope that you will read through this document to better understand the value of using this industry-specific Chart of Accounts.

What is a Chart of Accounts?

A Chart of Accounts is simply a listing of all the accounts that can be used in any financial transaction. Accounting is a 'double entry' system, meaning that every transaction must include at least two accounts. For example, when writing a check for rent, the transaction affects both the Rent expense account as well as the Cash account. In today's modern accounting software program, much of the actual accounting is completed behind the scenes. For example, when entering this rent check, the software may only ask for one account – the Rent account. This is because the software is creating an entry in the system that post the costs to the account(s) selected, and in the background, posts the other half of the entry to the default Cash account.

Maintaining The Right Level Of Detail

One key to a useful Chart of Accounts is the level of detail in the listing of accounts. The number of accounts should not be too general as to not provide any information. For example, combining all overhead costs into just one account called "Overhead" does not help you analyze your telephone costs compared to your marketing costs. On the other hand, too much detail is also not useful. For example, creating a different expense account for each vendor or for each job is too detailed for a good Chart of Accounts. And that information is typically available in other areas of the accounting system. Imagine trying to analyze office expense when there are separate accounts for toner, paper, staples, etc. While it might seem like valuable information, having so much detail produces a Profit and Loss Statement (P&L) that is pages and pages long and will probably never be analyzed. Too much detail can be so confusing and poorly organized that it provides little to no usable information.

Another key to a valuable Chart of Accounts is the order and grouping of the accounts. The financial statements are typically produced in the order in which the accounts are listed in the Chart of Accounts. They are then grouped into two types – those accounts that appear on the Balance Sheet and those accounts that are on the Profit and Loss Statement. For more detailed explanations of the different accounts and information on this grouping, please see the Appendix: The Characteristics of the Accounts



While we do not need to delve into each account, there are a few accounts that are so fundamental to the operation of an integrator that it is important to look more closely at these accounts.

Cost of Goods Sold Accounts

The most important task for today's integrator is to segregate costs into two types: cost of goods sold (COGS) and overhead expenses. COGS are all the costs that are specifically related to the jobs or projects you produce. Overhead expenses are considered the fixed costs of running a company. The total of the

COGS accounts are subtracted from the income to produce the gross profit. Therefore, these COGS accounts are considered "above the line". Notice the simple P&L format in the figure to the right. It is important to note that there is no actual account called "Gross profit;" this number is mathematically derived and doesn't exist in the chart of accounts. The same holds true with the Net profit.

Income from operations
Cost of goods sold
Gross profit
Overhead expenses
Net profit

Many accountants have different names for the different accounts. Often, Overhead expenses are also referred to as Selling, general and administrative (SG&A) expenses. Larger companies may have two types of COGS accounts, included Direct Job Costs and Indirect/Direct costs. See below for more information on the Intermediate Chart of Accounts.

Gross Profit and Gross Margin

The most important numbers that the P&L can provide is the gross profit and gross margin numbers. These numbers help you determine the profitability of the job produced by the company. The gross profit of any project must provide enough profit to cover the overhead expenses and leave extra dollars for net profit as well.

These numbers are calculated using the following formula:

Income	-	COGS	=	Gross profit \$
Gross profit \$	÷	Income	=	Gross margin %

Notice that gross profit refers to dollars earned by the jobs, while gross margin refers to the percentage of profit that is earned by the jobs.

The Importance of Job Costing

A good P&L statement can provide valuable information about the overall profitability of the jobs. However, without good job costing, analyzing the gross profit on a job-by-job basis can be difficult. For example, a company that has



several very profitable jobs and one very unprofitable job may show a P&L with a significantly lower gross margin than the prior year. But without accurate job cost reports, you may not be able to isolate the source of the poor performance to one specific job, a few jobs, a specific project manager or technician or some other factor.

Job costing is typically not presented inside the P&L, using the Chart of Accounts. Depending on the account software used, job costing may be accomplished as a secondary coding of all expenses (as a function of the software.) Other companies create job cost reports using Excel® or another system outside the accounting system. It doesn't matter what system you choose to use for job costing, as long as you are job costing accurately and reviewing the job cost reporting information.

Good job costing means tracking all costs that are necessary to complete a job. It also means that the job cost reports should balance to the P&L. Therefore, anything coded to the COGS section of the P&L should be allocated to a specific job or jobs. Since these costs appear above the gross profit on a P&L, these costs are typically referred to as "above the line" costs. On the other hand, anything coded to an overhead account will not be allocated to a specific job or jobs. Since the overhead accounts appear below the gross profit, these are referred to as "below the line" costs.

Key Question

The key question to ask when creating your own Chart of Accounts is: "What costs are job specific and should therefore be included above the line and what costs are overhead costs and should be included below the line?"

For example, in the recommended Chart of Accounts, the account called Sales commissions is currently included in the overhead account range. For the purposes of this white paper, Sales commissions are considered to be a part of overhead and not a COGS account. One reason sales commissions are considered below the line expenses is that it can facilitate comparing total sales compensation across companies. For example, some companies pay a high salary and low commission while others will pay low salary and high commissions. Therefore, by keeping both sales salaries and commissions below the line, a company can analyze its own total sales compensation costs and compare it to other companies.

Tracking Customer Deposits

Within the group of current liabilities is an account called Customer deposits, (sometimes referred to as Unearned revenue or Income in excess of costs.) This is a critical account for today's integrator. When you invoice a client for a deposit on a job, that money should not be considered income because it has not yet been earned. That money represents liability – the company owes the customer



either some equipment or a refund. Customer deposits should be used for the purchase of the specific equipment for the specific job that paid that deposit. Too many integrators go out of business by using tomorrow's money to finish yesterday's jobs. Making the mistake of counting customer deposits as income will produce a P&L that overstates your income and can fool you into thinking you are more profitable than you really are. Keeping track of Customer deposits as a liability will help you better manage your cash and use your financial statements to measure your true profitability.

The Importance of Budgeting

A good Chart of Accounts can also benefit your company by helping you create an operating budget. Just like using job cost budgets to keep your projects on track, an operating budget will keep your company on track. The best part about budgeting is that you can use the 'dartboard' method: just start by creating a spreadsheet of how much you expect to sell, spend on those jobs, and spend on your operating costs. Throw some numbers onto the sheet. Then see how much money is left at the end, (or if there is anything left at the end.) Next, work with the numbers to see how changing the numbers affect the bottom line. It doesn't have to be perfect; it just needs to be a reasonable set of goals and expectations.



Basic and Intermediate Chart of Accounts

For NSCA purposes, two sample Chart of Accounts have been created; a basic list of accounts for smaller companies and a more extensive list for intermediate to larger companies.

The basic Chart of Accounts has a simple structure, best used to track gross profit, overhead expenses and overall profitability. There is a clear line between above-the-line COGS costs (those related to specific jobs or projects) and those below the line. There is little to no focus on Indirect job costs, those that are not easily identified with a specific job but are allocated to jobs via some other process. While the basic Chart of Accounts does not focus on Profit Centers, it can be modified to create a simple set of classes or subaccounts to track profitability by a secondary classification.

The Challenges Of An Intermediate Company

A growing company that reaches the intermediate size range faces new challenges that smaller companies don't. These can include reporting requirements such as financial audits, bonding reports, board of director reports and profit center reporting.

In particular, managing a growing company by profit centers is critical. Just managing the sheer number of employees requires a division into more manageable units. As well, geography may play a role, requiring a company to also divide the company into units based upon location, not only for profitability analysis but also for tax reporting purposes.

The Chart of Accounts needs to include accounts to support these extra requirements. The changes to the COA fall into three major areas:

- 1. More revenue, COGS and expense accounts to provide more detail
- 2. Balance sheet suspense accounts to manage the "matching principle"
- 3. Sub-Accounts (sometimes called account segments) to manage profit centers

<u>Intermediate Company – More Accounts</u>

Generally, intermediate companies will have more lines of business that are significant enough to warrant separate accounts. For many integrators, lines of business would include things like system integration, managed services, box sales, and time and material service. It is important to remember that to be able to measure gross profit for each of these lines of business, you will need to match revenue and COGS accounts. Some businesses will want to even separate revenue into different accounts for equipment, labor and possibly others accounts so that gross profit can be measured by type of sales (labor, equipment, etc.) and analyzed on that basis.



Intermediate Company – Balance Sheet Suspense Accounts

Two of the key principles of Generally Accepted Accounting Principles (GAAP) are the matching principle, and the revenue recognition principle. Basically, revenue is earned when goods and/or services are delivered, not when invoiced or when cash is collected. If the P&L shows revenue for a portion of a specific project, then the expenses should also show on the P&L for that same portion of the project. This requires a deferral of revenue or expenses so that the revenue and expenses on the P&L represent the same activity. T

There are several ways to handle this deferral, including use of Customer deposits or Earnings in excess of costs liability accounts or Underbillings or Costs in excess of earnings asset accounts. No matter what method is used to align the revenue in the P&L to "match" the expenses for the same activity, it is managed via balance sheet accounts.

For example, here is a step by step process for one job:

- Invoice is created to sell a projector to a customer
- Invoice is posted and sent
- The projector has not been shipped, so no revenue can be recognized
- The invoice must go out to the customer to manage cash flow
- The revenue from the above invoice is not recognized as revenue on the P&L, but instead, posted to a sales suspense account (on the Balance Sheet.) This account goes by several names and may be called Revenue suspense, Customer deposits, Income received in advance.
- The revenue is now sitting on our balance sheet in an liability account as a
- When the equipment is shipped, the sales suspense account is reduced (debited) and revenue is recognized on the P&L (credited).
- At the same time inventory is reduced (credited) and COGS equipment is recognized (debited).

The process described above produces accurate financial statements that follow the matching principle. A similar method to produce the same accurate results is to use Work in Progress (WIP) adjustments. In this method, all revenue and expenses are directly posted to the P&L; but on a regular basis, the revenue is adjusted to reflect the percentage of completion of the jobs in progress. This adjustment is done using a WIP schedule to determine percentage of completion income.

No matter what process is used, the matching principle becomes far more important to intermediate companies that issue monthly statements. Many small companies will simply make some year-end adjustments for their annual statements.



<u>Intermediate Company – Sub-Accounts</u>

As a company grows, it needs to be managed as if it consisted of a group of smaller entities. This takes the form of profit centers. A profit center may be a physical branch office, or it may be a department that exists in multiple branches.

Sub-accounts allow the coding of profit centers, in alignment with the main General Ledger (GL) accounts mentioned previously.

Companies can have multiple sub accounts to manage multiple types of information. For example, a company can have subaccounts for departments (separate functions such as integration and security) and another set of departments for location (for companies that operate multiple branches or across multiple states.)

As multiple types of information tracking are needed, it creates a matrix. The table below shows an example of what these might look like. In this example, we have 11 locations and 5 departments.

Branch/Department Assignments					
Branches		Departments			
LAX - Los Angeles	01	Administration 00)		
NYG - New York	02	Integration 01			
MIA - Miami	03	Service 02	<u>,</u>		
SEA - Seattle	04	Engineering 03	3		
BOS - Boston	05	Managed Service 04			
ATL - Atlanta	06	•			
CLT - Charlotte	07				
DCA - Washington	80				
YYZ - Toronto	09				
YUL - Montreal	10				
YOW - Ottawa	11				



This type of profit center tracking can be facilitated using a powerful numbering system in in your accounting software to allow great flexibility in reporting.

Main Account	Sub-Account (Branch - Department)			
XXXX	BBDD			
XXXX = Main account Number as per	BB = Branch			
basic and intermediate tabs	DD = Department			
The dash in the middle	e is just a visual divider			
Main Account = 4000 System Integration Equipment Revenue	Sub-Accounts = 0101 Branch = LAX, Department = Integration			
Examples				
5000-0901	Systems Integration Cost of Material Toronto / Integration			
6420-0800	Office Supplies Washington / Administration			

See the included example spread sheet, that shows how we can view company gross profit at an overall company level, and then for individual or groups of branches.



The NSCA Recommended Chart of Accounts Spreadsheet

The Chart of Accounts spreadsheet is a listing of the suggested accounts that can be used in your accounting system. Note that there are several worksheets in the workbook, including the Basic, Intermediate. Both are similar, but the basic has less detail than the intermediate. There are also different worksheets to show how to set up sub-accounts and different examples with subaccounts.

When reviewing the Excel spreadsheet, notice that each account has been created in the order in which it should appear on the statements and has been assigned account numbers. Account numbers allow you to determine the order of the accounts instead of being forced to have accounts presented in alphabetical order. The numbers included are just suggestions and can be modified or changed in your own company.

Basic vs. Intermediate

The key difference between the Basic and the Intermediate worksheets is the way that all job costs are allocated within the COGS section and the use of subaccounts.

Job Allocation Decision

In deciding which worksheet to use, you should ask yourself the question: What costs do I want to directly allocate to the jobs and how do I want to allocate those costs? In the basic worksheet, Consumables and Small tools are considered COGS. It is true that these costs are related to the jobs and should not be considered as overhead. However, due to the nature of these costs, it may be difficult to assign them to jobs at the time of purchase. Consider what happens when you purchase connectors in bulk and not specifically for a job. If you code this to COGS, your P&L will more accurately reflect the true cost of the jobs. However, if you do not assign the costs of the connectors to any specific job, then the jobs will appear to be more profitable than they actually are.

This is called *Gross Margin Fade*. If you do not accurately job cost all costs that are included in the COGS section of your P&L, then your total job costs will not match the P&L, thus causing Gross Margin Fade.

For example, below is a comparison between a P&L and specific job cost reports. Notice that the P&L shows a total COGS of \$270,000 and a gross margin of 30%. Consumables and Small tools were included in the COGS for this company, but not assigned to any job. Therefore, when analyzing the jobs, the total COGS assigned to jobs was only \$230,000 or \$50,000 less. Each job



appears to be more profitable than it actually is because the four jobs are missing \$40,000 worth of job costs.

	P&L	Job 1	Job 2	Job 3	Job 4	Total of 4 Jobs
Income COGS Gross Profit	385,000 <u>270,000</u> 115,000	75,000 <u>38,000</u> 37,000	45,000 26,000 19,000	125,000 <u>74,000</u> 51,000	140,000 <u>92,000</u> 48,000	385,000 <u>230,000</u> 155,000
Gross Margin	30%	49%	42%	41%	34%	40%

If Project Managers run jobs by looking only at the job cost reports and not the overall P&L, then they can be fooled into thinking that each job is more profitable than it really is.

Depending on your accounting software, it may be easy to code consumables to a COGS account, without providing job detail. These companies may choose to use the Basic Chart of Accounts. However, it is imperative to realize that coding costs to the COGS section of the P&L without assigning them to a job will create Gross Profit Fade.

Intermediate Worksheet

The Intermediate Chart of Accounts uses an allocation method to better assign not only job-specific costs to the COGS section of the P&L but to the jobs as well. This spreadsheet contains a specific group of accounts called Indirect-direct accounts. These are accounts that contain costs that should be considered job costs, but are difficult to code to specific jobs. For example, field vehicle fuel costs are really not overhead costs but job specific costs. However, it would be nearly impossible to break down each fuel bill to the jobs that used up the fuel. Instead, these costs are lumped together into this indirect-direct expense section. They are then allocated to the jobs, based on some specific criteria, such as percentage of total costs, percentage of income, or percentage of labor costs.

As these costs are accumulated and then allocated, the net total of the Indirectdirect costs should be close to zero. If your allocation method is correct, then all of these costs will be allocated to the jobs and the net will have a negligible impact on overhead. This means that your gross profit truly reflects the profit that each job earns to offset overhead expenses and provide a net profit.

Adopting This Chart of Accounts

For new companies or companies changing their accounting system, adopting this Chart of Accounts should be a simple task. For more established companies, this Chart of Accounts can be seen as a recommendation for modifications. If you chose to change your accounting system to this Chart of Accounts, it is best to



make this change at the start of your fiscal year. The one downside would be the diminished historic trending, where it will be difficult to compare year over year information. However, if your current financial statements are not accurate or useful, previous year over year analysis may never have been done.

If you do not feel comfortable making these changes yourself, you may provide this as a resource to your accounting professional.

Moving Forward

Consider the benefits of producing accurate and meaningful financial statements. Better information will help you make sound financial decisions regarding pricing, performance, production, cost management and cash flow management, just to name a few. It is more important than ever to take your business seriously. Maintaining a good Chart of Accounts is the backbone of your financial statements and can help you analyze your performance over time as well as measure the financial effects of your decisions.



Appendix - The Characteristics of the Accounts

The Characteristics of the Balance Sheet Accounts

All accounts that belong on the Balance Sheet are divided into three categories, Assets, Liabilities and Equity.

Asset accounts represent everything you own. They are typically grouped by liquidity – meaning how easily they can be converted to cash. The types of Asset accounts include:

<u>Current Assets</u> – Includes all cash accounts as well as any other asset that will be cash or will become cash within the next 12 months. Some examples are Accounts receivables (A/R), Prepaid expenses, and Inventory

<u>Fixed Assets</u> – Includes physical assets such as vehicles, furniture and showroom equipment. These represent items that will provide value to the company for more than one year. They are major purchases that cannot be expensed in one year. This means that since these assets provide value over several years, only a portion of the costs can be included on the Profit and Loss statement each year. The method to expense these costs over time is called depreciation. Companies will typically establish a threshold amount (such as \$500) where purchases that cost less than \$500 will be expensed on the P&L immediately and purchases that cost more than \$500 will be capitalized in a Fixed Asset Account and expenses over time.

<u>Accumulated Depreciation</u> – This is the cumulative amount of the fixed assets that has been expensed on the Profit and Loss statement over the life of the assets through yearly depreciation. There are several different methods of depreciation; you should seek advice from your tax professional for the best depreciation method for your company. The difference between the Fixed Assets and the Accumulated Depreciation represents the "Book Value," which is the remaining value of the fixed assets that can become an expensed in future years.

Other Assets – Other assets that will not become cash over the next 12 months belong in an Other Asset category. Some examples are Security deposits and Notes receivables.

Liability accounts represent everything you owe. They are also grouped by liquidity – meaning how soon you expect to pay these liabilities. The types of Liability accounts include:

<u>Current Liabilities</u> – These are short term liabilities that will be paid or used over the next 12 months. They include items such as Accounts payable (A/P), Payroll taxes payable, Credit lines and Customer deposits.



Within the group of current liabilities is an account called Customer deposits, (sometimes referred to as Unearned revenue or Income in excess of costs.) This is a critical account for today's integrator. When you invoice a client for a deposit on a job, that money should not be considered income because it has not yet been earned. That money represents liability – the company owes the customer either some equipment or a refund. Customer deposits should be used for the purchase of the specific equipment for the specific job that paid that deposit. Too many integrators go out of business by using tomorrow's money to finish yesterday's jobs. Making the mistake of counting customer deposits as income will produce a P&L that overstates your income and can fool you into thinking you are more profitable than you really are. Keeping track of Customer deposits as a liability will help you better manage your cash and use your financial statements to measure your true profitability.

The same can be said if you sell service contracts and/or extended warranties. Again, it is important that when you receive money from customers for future work, it should not be considered income until the service is provided or the work is performed.

Other Liabilities – Money that is owed, but will not be paid back within the next 12 months is considered an Other Liability (also referred to as Long Term Liabilities). Some examples include Vehicle loans, and Shareholder loans, (depending on if they are expected to be paid back beyond the 12 month timeframe.)

Equity accounts are often the most confusing accounts for small business owners. The total of the equity accounts represents the difference between what the company owns and what the company owes. The names and types of accounts that exist in the Equity section depend on way the company was established. Companies can be set up as Sole Proprietorships, Partnerships, Sub Chapter S Corporations or "C" Corporations. Check with your tax preparer to determine the type of equity accounts you need for your company.

Depending on the company type, there are several types of equity accounts that represent how money was put into the company by the owners. But no matter what type of company structure you have, there should be an account called Retained earnings. This account represents the addition of each year's net profit, less the amount that has been withdrawn by the owner(s) as a draw, dividend or distribution (depending on the company structure.) This can be confusing, but the key to understanding Retained earnings is to think of it like a bucket. Each year, the net profit is poured into that bucket. But each year, the owner(s) may also take money out of the bucket. The amount that is left in the bucket represents the earnings that have not been pulled out of the bucket – or retained inside the bucket. Hence the term Retained earnings.



It is important to note that there is no specific account called net profit. While the net profit does appear on the Balance Sheet, it is a consolidation of the balances of all the income and expense accounts that are used in the P&L. Therefore, there should be no account called net profit in your Chart of Accounts.

The Characteristics of the Profit and Loss Accounts

While the Balance Sheet accounts appear at the top of the order of the Chart of Accounts, most business owners are more focused on the Profit and Loss (P&L) accounts. Why? Because the sum of all the P&L accounts equals the net profit – the "bottom line." Another way of looking at all the P&L accounts is to add up all the income accounts and subtract all the expense accounts. The net will be the net profit.

Just like the Balance Sheet accounts, each P&L account belongs to an account type or category. In a simple P&L Statement, the accounts are assigned to the following categories and are typically listed in that order: Income; Cost of goods sold (COGS); and Overhead expenses. In more complex companies, there may be additional sections. And because accounting has a reputation for being confusing, there are often multiple names for the same thing. For example, Cost of goods sold might also be called Direct expenses, Revenue and Income may be used interchangeable, and Overhead can also be referred to as Operating expenses or Selling, general and administrative expenses (SG&A).

The P&L is then created from listing and grouping the balances in each of the accounts. Notice the simple P&L format in the figure to the right. It is important to note that there is no account called "Gross profit;" this number is mathematically derived and doesn't exist in the chart of accounts. The same holds true with the Net profit.

Income from operations

Cost of goods sold

Gross profit

Overhead expenses

Net profit

Income from Operations

The majority of income earned by the company should belong in the Income section. The number of income accounts should be minimal. It may be beneficial to separate the income by the types of work that produce that income, specifically labor and equipment sales. This helps your company determine the gross margin on labor as compared to the gross margin on equipment. If the margin erodes on equipment, or you sell new product lines or services, it is important to be able to know how profitable each aspect of your business is.



Cost of Goods Sold

The most important task for today's integrator is to segregate the costs into two types: Cost of goods sold (COGS) and Overhead expense. COGS are all the costs that are specifically related to the jobs you produce. Overhead expenses are considered the fixed costs of running a company. The total of the COGS accounts are subtracted from the Income to produce the gross profit. Therefore, these accounts are considered "above the line".

A good Chart of Accounts has minimal number of COGS accounts, specifically Equipment, Labor, Labor burden, Subcontractors, and Other job costs. Job costing is not performed within the Chart of Accounts but typically outside the Chart of Accounts. Some inexperienced integrator's try to job cost within the Chart of Accounts by creating a series of separate COGS accounts for every job. This makes the P&L long, complicated and generally difficult to analyze. Other integrators make the mistake of creating separate accounts for every vendor. However the same vendor information can typically be gathered from the accounts payable system and should not be duplicated in a Chart of Accounts.

Notice that in the recommended Chart of Accounts, the COGS section contains accounts that are specifically related to jobs. Without this segregation, it is impossible to track the job costs and measure the company gross margin. Notice that the COGS section contains all job labor, specifically technicians. Even if technicians are paid on a salary basis, instead of an hourly basis, the time they spend on the jobs should be included above the line in the COGS section. Also included above the line are the labor 'burdens' – these are the additional costs that are incurred by a company that has employees. In the recommended Chart of Accounts, they are combined into two types of burdens: mandatory and voluntary

Mandatory burdens include payroll taxes, workers compensation, and any other burdens that are required by law. Voluntary burdens include health insurance, pension contributions, vehicle costs, small tools, etc. The goal of a good accounting system is to combine all the costs associated with job labor to determine the true cost of performing the jobs.

There are different opinions about some of the accounts in the COGS section. More sophisticated companies will burden their jobs with more costs, costs that vary with the volume. One example is liability insurance. The cost of liability insurance is typically tied to the volume of the company – the more jobs sold, the more the cost of the liability insurance policy. Therefore, in this Chart of Accounts, liability insurance is considered a mandatory burden and belongs above the line.

It is important to note that including additional costs above the line will result in a P&L which has higher COGS, lower gross profit, and reduced overhead, when compared to a P&L that classifies these costs as overhead costs. However, the



net profit will not be affected by moving costs from below the line to above the line. You may ask: "why bother?" The answer is that by including more costs above the line you gain a better picture of how much it actually costs to produce the work you do. And thus you will not be tempted to lower the price to a point that does not cover all your costs.

While the Chart of Accounts spreadsheet contains only two labor burden accounts, Mandatory burden and Voluntary burden, you may benefit from creating additional accounts (or subaccounts) for the different components of these accounts. For example, Mandatory burden can be further broken down by Payroll taxes, Workers comp, Liability insurance, etc. Voluntary burden may be broken down by creating specific accounts (or subaccounts) for Pension, Health and Other burdens. This is one case where more detail may be beneficial.

Overhead Expenses

The money that a company spends that cannot be specifically tied to jobs is considered overhead. Many of these costs are considered 'fixed costs' meaning that rate of change of overhead expenditures is not directly tied to changes in the volume of work.

One of the reasons that overhead costs are grouped together, separate from the COGS accounts is that the total overhead costs represent the costs that the company will spend, not specifically tied to the volume. One metric that can be created from the overhead costs is the 'burn rate.' The total overhead costs divided by 12 represents the monthly cost of operating the company. The jobs or projects must produce a gross profit equal to, or exceeding, the burn rate in order to stay in business.

Other Income and Expense Accounts

There are other income and expense accounts that cannot be attributed to the jobs that are performed. One example of this is an account called Discounts earned. This is the early payment (or prompt payment) discount that vendors offer when bills are paid within a specific time frame. The discount should not be passed onto the client and should not be used to reduce the COGS for a job. It can be considered a bonus for good cash flow management. This credit is different than negotiated discounts that vendors offer, such as large volume discounts, loyalty discounts, etc. These types of discounts can be used to offset the COGS for a specific job.

Notice that there is no account called Miscellaneous income or Miscellaneous expense. While there may be some special circumstance that produces miscellaneous income or expense, these should be minimized. All too often, a poor Profit and Loss statement has large numbers in miscellaneous categories, thereby reducing the usefulness of the statements.



About the Authors

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About NSCA

NSCA is the leading not-for-profit association representing the commercial electronic systems industry. The National Systems Contractors Association is a powerful advocate of all who work within the low-voltage industry, including systems contractors/integrators, product manufacturers, consultants, sales representatives, architects, specifying engineers and other allied professionals.

