3 Process Steps you can follow to plug the labor utilization leaks in your business and improve your Services profitability.

The purpose of this document is to give services managers a framework within which to view strategies that will help maximize billable Labor Utilization.

This Guide was created by the team at Promys PSA Software to address issues associated with tracking, measuring and optimizing labor utilization.
Labor Leaks

How fast are you bailing?

When organizations try to improve Labor Utilization, the first roadblock they hit is that personnel don't view their hours as having a hard cost associated with them. Unlike buying a router, they see hours as invisible — something they are supposed to track, but only after they are tasked to do something.

This is where the leaky boat syndrome starts….. labor hours are a hard cost for a business and need to be viewed as such.

To stop the utilization leaks you need to:

1. Measure labor utilization
2. Establish target utilization percentages
3. Identify labor utilization leaks
Tracking the Invisible

Let’s use a real-word example:

Lewis is the services manager of a mid-size IT integration company in Rawley, North Carolina.

He purchased 40 routers at the beginning of the week and at the end of the week, he can only account for 32. So a serious investigation starts into where those other 8 routers ended up. Are they at a customer site? Still in the warehouse? In a technician’s truck? Returned to the vendor? Time and effort gets put into tracking down the missing 8 routers.

But, if there are 8 hours missing out of 40 available hours at the end of the week, Lewis shrugs his shoulders and says, “I hope they went somewhere productive”.

The truth is, in order to maximize the long term profitability of the business, because of the higher margin on Services and the perishable nature of those 8 hours, they are actually MORE important than the unaccounted for routers. We have a different view of things we can touch and feel versus something invisible, yet it’s the invisible that hurts business.
Step 1.
Measuring Labor Utilization
Step 1: Measuring Labor Utilization

The Basics

If you're a services organization, in order to maximize services and company profitability, you need to be able to:

a) Track and measure how your personnel’s available hours are being utilized.

b) Measure how “billable” your personnel's hours are.

Here’s how to determine your HOURS BUCKETS

The most common hours buckets fall into three categories:

1) Project related hours
2) Post sales support related hours
3) Indirect hours (admin, lieu time, absence, pre-sales, vacation, training)
Step 1: Measuring Labor Utilization

The Basics

It’s important to track these different categorizations because without them, it’s very easy to focus solely on “billable utilization” and not take into account critical activities such as pre or post sales support tasks (covered by current service contracts) that will not show up in a billable utilization number.

What some people don’t realize is there are actually three important Labor Utilization subcategories:

- Labor Resource Utilization
- Labor Billable Utilization
- Realized Invoiced Utilization

I used to think only billable utilization was worth tracking…..
Step 1: Measuring Labor Utilization

Definitions

**Labor Resource Utilization**
- This an overall utilization productivity metric. Of the total hours worked by your services resources, how many of those hours were dedicated to revenue generating related tasks such as pre-sales calls, RFP responses, along with billable and non-billable project and post sales support tasks. Resource Utilization is different from Billable Utilization, which we’ll discuss next.

**Labor Billable Utilization**
- Billable Utilization is just that: of the total work week, now many of those hours were “potentially billable” how? Billable Utilization and “Invoiced Utilization” are two different things, as per below.

**Realized Invoiced Utilization**
- This metric relates to how many of the billable hours are actually invoiced. Most Services organizations know that in the pursuit of customer satisfaction, compromises are going to be made, not all “billable” hours are going to end up on an invoice. It’s important to measure a resource’s billable hours separately from invoiced hours, since the resource doing the work has no control over what the organization chooses not to invoice.
So “Billable Utilization” for that week would be a lackluster 50% (only 20 of 40 hours billable).

But that resource was engaged in critical pre-sales future revenue generating activities, as well as important post sales support, so their Resource Utilization % would actually be a solid 90%...

(20 billable hours + 8 pre-sales hours + 8 hours post sales support = 36 hours of a 40 hour work week)

Although it is important to understand the different types of utilization in terms of running a services business, in order to improve Services profitability, plugging billable utilization leaks is the key metric.
Step 2.
Target Utilization Percentage
Step 2: Target Utilization Percentage

Identifying your Target

Once you’re measuring utilization properly, the next question is usually, “What are the industry average labor utilization percentages we should be targeting?”

Goals and Thresholds
An underappreciated aspect of determining an appropriate Target Utilization Percentage, is the margin associated with the type of resource you're going to be calculating billable utilization against.

For example, highly experienced resources with specialized knowledge and high hourly billing rates, who are solving non-routine problems using leading edge technology and providing non-commoditized services are resources that tend to be higher margin resources. Subsequently, you can hit break-even at only 45%-50% billable utilization.

At the other end of the spectrum, junior resources providing commoditized services with low hourly billing rates need to have a much higher billable utilization rate in order to be profitable, 65%-75% billable utilization would be a typical break-even for this kind of resource.
If you take an industry average mix of senior high billing rate high margin resources and junior low billing rate low margin resources, here are billable utilization metrics:

- **60% billable utilization = EBITA of 3-5%** (just getting by)
- **70% billable utilization = EBITA of 6-9 %** (doing o.k.)
- **80%+ billable utilization = EBITA 10%+** (industry leader)

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**Step 2: Target Utilization Percentage**

**Baselines**

Some industry standard starting point metrics would be *(North American averages)*:

1. A normal work week is 40 hours per week and the number of working weeks available is 50, for an annual total capacity of 2,000 hours per services resource.
2. The average “loaded” cost of a full time employee services resource is salary x 20%.
3. The absolute minimum annual margin for any billable services resource should be no less than 35%.
Step 3.
Identify Labor Utilization Leaks
Step 3: Identify Labor Utilization Leaks

Once you get your measurements and targets in place, you want to move the needle...

How do I get my utilization percentages from where it is to where I want to be?

You want to identify where your company is leaking utilization hours and then you need a plan for how you’re going to plug those leaks.

When people talk about Labor Utilization leaks, most people focus on “fulfillment based hours”, but in order to truly maximize utilization what they should really be looking at is the entire solution lifecycle.
Step 3: Identify Labor Utilization Leaks

Sales Impacts Utilization — Forecasting

**Goal:**
Providing accurate sales funnel labor forecasts by specialized resource hours (*project management hours, installation hours, testing hours, UC hours, wireless hours, cabling hours,...*) thirty, sixty or ninety days from now?

**Challenge:**
In many organizations the VP of Services does not find out what resources are required for a project until the day the project actually gets booked. This is especially challenging for organizations working on larger projects, where three or more specialized non-substitutable resources are going to work on a project that will take several months to complete.

Traditionally, the VP of Services scrambles to assign resources to hit the delivery date promised in the sales process, by pulling resources off other projects, scheduling overtime, using lower margin subcontractors, or pushing back go-live dates back on this or other projects.

How will the VP of Services maximize Utilization if they have limited or zero planning runway?
Step 3: Identify Labor Utilization Leaks

Sales Impacts Utilization — Forecasting

Most organizations already have the information to provide services planning visibility, they just need to make it available.

Best Practice Suggestion:
In order to come up with the $75,000 services estimate that was ultimately quoted to the client, a pre-sales engineer somewhere probably already documented how many PM hours, how many testing hours, how many UC & cabling hours were required for the potential project, and that's how they came up with the $75,000 in services estimate. In many services organizations, that information is then saved in an Excel spreadsheet on the pre-sales engineers local hard drive and is never referenced again.

But, since the pre-sales engineer has already broken down the services proposal by hours and by specialized resource, why not leverage that documentation for forecasting purposes? If the Services estimate was created using Excel, you can now “roll-up” the hours estimated by specialized resource type across multiple forecasted projects.

If you take the approach described above you will now be able to provide your VP of Services with accurate Sales funnel labor forecasts by specialized resource hours thirty, sixty, ninety days from now. This should go a long way toward smoothing out the roller coaster quarterly Utilization rates, because your VP of Services will have much more planning runway to ensure the right resources are available in the right time frames, and that the time frames being proposed to the customer are realistic and accurate.
How Lewis views Sales Utilization in his company

Lewis frequently does not find out which resources are required for a project until the day the project actually gets booked. With no visibility or even some advance visibility, it's almost always in dollars. The truth is, a bucket of $75,000 dollars in forecasted Services, is almost completely useless for real world planning purposes.

Lewis is struggling to understand how many PM hours, how many testing hours, how many UC or cabling hours are going to make up the budget.

Without more planning runway will Lewis experience “over utilization” followed by a quarter of “under utilization?”

How many hours am I going to need by specialized resource type?
Step 3: Identify Labor Utilization Leaks

Sales Impacts Utilization — Pre-Sales

**Goal:**
Ensuring that pre-Sales engineering hours are properly accounted for. Engineering/tech time spent creating labor estimates, working on RFP’s, participating in customer requirements gathering and presentation meetings.

**Challenge:**
Pre-sales engineering hours are one of the most overlooked areas regarding labor utilization. Most services organizations are pretty good at tracking “billable” utilization, but forget to include the “pre-billable” investment of pre-sales engineering hours that ultimately results in billable hours. Certain sales people may also be willing to use pre-sales engineering resources on unqualified prospects, unless the organization tracks and monitors the cost of those pre-sale engineering hours by rep. This is one of the most common sales driven Labor Utilization leaks.
Step 3: Identify Labor Utilization Leaks

Sales Impacts Utilization — Pre-Sales

Most organizations already have the information to provide services planning visibility, they just need to make it available.

Best Practice Suggestion:
Tracking pre-sales engineering hours also allows organizations to make decisions regarding when it’s appropriate to start to consider hiring dedicated pre-sales engineering resources, as well as to monitor and guide sales rep behaviour regarding efficient use of pre-sales engineering resources (and as an aside, from a project profitability perspective, pre-sales hours should be included in any project profitability calculation).
Step 3: Identify Labor Utilization Leaks

Projects Impact Utilization

**Goal:**
1) Providing the Project Management team with an early warning system when a project is off budget.
2) Knowing specifically what the problem is that's causing the project to go off budget.
3) Easily cycling implementation lessons learned back into the quoting process.

**Challenge:**
Many organizations manage their Project against the $75,000 total dollars Services budget used in the previous example. There are three Utilization problems with this approach:

1. You won’t find out if a project is in trouble until close to the $75,000 budget ceiling ($71,000 of a $75,000 budget). By then it’s too late to do anything about it, and billable utilization is going to suffer.

2. If a Project comes in above the $75,000 overall budget ($81,000 of a $75,000 budget), there’s no easy way to determine where that extra $6,000 came from. Were you over or under on your Design, Project Management, Testing hours, etc., so no easy way to cycle this lesson learned into future projects.

3. Since there’s no easy way to determine if the the extra $6,000 came from a quoting error, there’s no easy way to cycle any implementation lessons learned back into the quoting process. Subsequently, future quotes may incorporate the same billable utilization impacting oversight.
Step 3: Identify Labor Utilization Leaks

Project Impact Utilization

If you compare the detailed services estimate the project was based on, to the actuals, you’ll know exactly where any labor utilization problems came from and implement permanent fixes.

Best Practice Suggestion:

1. **Early Utilization Warning:**
   As previously discussed, you already have a detailed breakdown of the specialized resource type hours that your project labor estimate was based on. If you create the project assignments in line with the detailed project estimate (Design hours, PM hours, Testing hours, etc.) and then track the detailed “actual” project hours against the “estimated” project hours in that spreadsheet, by specialized resource type, you’ll know for example if you were 20 hours over on your Design hours estimate. Instead of finding out about those 20 extra hours when you only have 5% of your project budget left (and it’s too late to fix anything), you’ll know there’s an issue with your Design hours while you still have 95% of the project budget left to make up for those 20 extra hours.

2. **Knowing the Specific Problem:**
   If you track your actual hours against the detailed breakdown of the specialized resource type hours that the Project quote was based on, then you’ll know exactly where those 20 extra hours came from (Design). Now you can determine if the cause was an unbilled change order, project specific issue, or a quoting issue.

3. **Cycling Implementation Lessons Learned back into the Quoting Process:**
   If it turns out that you under quoted by the 20 Design hours, all you have to do now is update the Design hours in the pre-sales engineers spreadsheet, in order to ensure that all future similar projects are quoted properly. This ensures that this particular billable Utilization leak is plugged forever.
Lewis' Utilization Problems
There are three things Lewis is struggling with…

1) Not finding out a project is in trouble until they are close to hitting the budget ceiling.
2) If a project comes in $6000 over budget, finding out where the extra time was spent.
3) Cycling implementation lessons learned back into the quoting process if something was under quoted.

So Lewis has decided to invest in doing a better job of understanding hours in the pre-sales stage and tracking them against actuals so that implementation lessons learned can be cycled back into the next project.
**Step 3: Identify Labor Utilization Leaks**

**Support Impacts Utilization**

**Goal:**
Ensuring that all Support Services billable hours are captured and that all hours utilized supporting pre-paid support contracts are accounted for so that your organization can provide outstanding levels of customer service and still run a profitable Services business.

**Challenge:**
Most IT Solution providers provide support to their customers first, and ask “billable or non-billable” questions later. In a hyper competitive world where customer satisfaction is king, this approach makes sense. But, you still need to run a profitable Services business.

Sorting out billable vs. non-billable Support hours later, often means they never get sorted out at all, and so billable utilization suffers. Often this is because it’s difficult and time consuming for the Support tech performing incoming Help Desk ticket triage to know what is, or is not covered under Support Contract. And so Support is delivered and what is covered or not covered is determined inconsistently, after the fact.

This results in Support Utilization numbers being high, but, Billable Support Utilization numbers being lower than they should be.
Step 3: Identify Labor Utilization Leaks

Support Impacts Utilization

If you accurately track Support hours, you can maximize billable utilization and still provide outstanding levels of customer support.

Best Practice Suggestion:

1. Ideally, the person doing Support ticket triage should be able to tell the customer contact early during the first call if the support they require will be billable or non-billable. This requires that the Support personnel have fast and easy access to:
   a) Equipment/items under Support Agreement and when that Service Agreement expires
   b) The ability to quickly and easily assign the ticket hours to a particular Service Agreement

2. Even though the Support hours under the Service contract aren’t “billable” at the time Support is delivered, they have in a way been “pre-paid” and so measuring actual hours delivered during the Support Contract period, against the Support contract target cost/margin, will effectively give your “billable” utilization for that Support contract period.

For example, you expect the Support Agreement to consume 100 Support hours during the course of the year, in order to hit your target Support Contract margin, but, it takes 120 Support hours to support that Contract. For all intents and purposes you had 100 hours for that Support agreement that were “billable” and 20 hours were not. Unless Support hours are tracked diligently in the Service contract, it will be almost impossible to determine your Support Billable Utilization numbers accurately.

This will also ensure that all Support Time & Materials hours are captured effectively and that all hours under the Service Contract are attributed to the appropriate Service Contract, which will subsequently ensure maximum billable Support Utilization.
Step 3: Identify Labor Utilization Leaks

Reporting Impacts Utilization

**Goal:**
Gain high level visibility into accurate Utilization reporting information and have the ability to “drill down” to the Utilization details in order to measure targeted utilization with actual utilization.

**Challenge:**
The biggest problem that most managers face in getting to the bottom of Labor Utilization issues, is that they don’t have access to enough granular detail to find and fix the real utilization problems. The prior examples around forecasting Services lump sum values and then managing a project against Services lump sums highlights the issue.

In order to properly managed Labor Utilization, you first have to buy into the concept that hours are inventory, and you need to track every single hour like a product or piece of equipment.
Step 3: Identify Labor Utilization Leaks

Reporting Impacts Utilization

If your utilization numbers are accurate and you can drill down to the utilization details, you can now have the ability to identify and plug utilization leaks.

**Best Practice Suggestion:**
Implement and enforce the discipline to accurately track detailed utilization information. It's the detailed utilization information that will allow you to determine your billable labor utilization leaks and be able to answer questions like:

1. Do I have a billable utilization problem across my entire company, or do I just have a utilization problem with certain customers?
2. Do I have a billable utilization problem with certain Project Managers or with particular Support Contracts?
3. Do I have a billable utilization problem with certain resources, or only when they are doing certain tasks?

This is the kind of detail that will allow you to take specific actions to plug your labor utilization leaks and maximize billable resource utilization.
Here’s what Lewis did...

Now that Lewis has used this guide to understand the concepts he should be addressing in his services operations to plug the leaks, he created an action plan.

Step 1 – He figured out how to categorize and measure his labor utilization hours: project related, post sales support related, indirect hours, etc.

Step 2 – He calculated the labor utilization target percentages that made sense for the company.

Step 3 – He figured out where his hours leaks were in sales, project delivery, support and administrative management and plugged them.

Outcome » Lewis improved his billable utilization by 5% within 3 months.
Ready to tackle labor utilization and stop project revenue leaks in their tracks?

The team at Promys offers no-obligation 30 minute labor utilization analysis to provide useful feedback on how you can identify and plug the leaks within your labor utilization program.

Call 1-866-728-2345 or email John Breakey at jbreakey@promys.com.