



White Papers

Calculating utilisation in a services company

This white paper discusses the various approaches to calculating utilisation, best practices, and how you can use your professional services automation (PSA) tool to measure and report utilisation for your company.

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Overview

Whether you're running a consulting firm, software company, or other project-based organisation, utilisation is an important issue for all services organisations. Maintaining high utilisation of your employees drives higher billings, higher revenue and ultimately, higher profits. It is also a critical measure of financial success and sustainability. Yet tracking and measuring utilisation poses challenges.

The goal is simple: establish a policy for calculating utilisation that is consistent across the company and consistent with common industry practices. Unfortunately, the calculation of utilisation is not a simple equation. You'll have to address many questions, such as:

- What is utilisation? Is utilisation the same as "billability"? Should your company use both?
- Which work is counted as "utilised" and which work is counted as "not utilised"? What about "billable" vs. "non-billable"?
- How should you calculate total available hours (the denominator in the equation)?
- How should you institute your utilisation policy? Should you apply the same utilisation calculation to all employees?

This white paper gives you the direction and tools to answer these questions, determine the appropriate utilisation calculation for your company, and apply it across your organisation. Once these questions are answered, you can use your professional services automation (PSA) tool to measure and report utilisation for your company.

What is utilisation?

In its most simple form, utilisation is a measure of time spent working. The numerator includes either all or a subset of time put on a timesheet. The denominator is all or a subset of hours that could have been worked. When discussing utilisation, companies often talk about the numerator (i.e., what hours count toward utilisation) and the denominator (i.e., the baseline hours that someone could be utilised).

In general, companies use three levels of utilisation. Some companies will focus primarily on one level, while others will focus on all three.

Level One: Resource Utilisation

"Resource utilisation" measures the time your resources spend working on useful projects and tasks. Resource utilisation measures the allocation of a resource on a specific set of work, including client and internal work, and tends to ignore "on-the-bench" time during which the resource is neither working on billable nor non-billable work.

Measuring resource utilisation helps managers minimise administrative work, is usually the easiest metric to measure, and is the easiest to act on. If a resource is on the bench and not billing her time, at least the company can have her work on valuable internal projects or sales efforts.

Level Two: Billable Utilisation

The next level is "billable utilisation," which measures the time your resources spend



working on billable projects and tasks. The time spent on internal projects or business development is not included, since this time is not billed to the client. Billable utilisation is almost always less than resource utilisation, which includes hours spent on internal projects and business development. For instance, a resource might be 90% utilised overall (resource utilisation), but because not all time was billed back to the client, billable utilisation might be closer to 70%.

Level Three: Realisation

“Realisation” measures how much of a company’s revenue capacity was captured during a given project or period of time. The goal of this calculation method is to determine how much of the time the resource spent on billable work was actually billed back to the client. Time spent on internal projects and business development is not included.

The appropriate baseline

Available hours, the denominator in utilisation calculation, is one of the most highly debated topics among professional services professionals, who question whether it should be defined as:

- 2,080 hours (40 hours per week * 52 weeks)
- 2,080 hours less company holidays
- 2,080 hours less company holidays and personal vacations
- A more arbitrary number, such as 70% of 2,080 hours.

Available hours also can differ by country, so global firms have to be very careful in how they calculate them. Again, there is no right answer-just what is right for your company. The most common number used in the industry is 2,080. Using this baseline will make your utilisation numbers transparent in your company as well as when comparing your performance to peer companies.

Let’s use the following case example to demonstrate how the choice of baseline affects utilisation calculations.

- A company has 10 days (80 hours) of company holidays and two levels of vacation time.
 - Employees with less than 10 years of tenure earn two weeks of vacation (80 hours) per year, while employees with 10 or more years receive four weeks of vacation (160 hours) per year.
 - Consultant A has one year of tenure, while Consultant B has ten years of tenure.
 - Finally, to make the math simple, assume utilised time is time worked on billable client projects, including all travel and other “downtime.”
 - All time spent by Consultants A and B is spent on billable client projects.
- In a given year, Consultant A works 1,920 utilised hours while Consultant B works 1,840 utilised hours since she has two more weeks of vacation than Consultant A.

Scenario One: Baseline is 2,080 hours.

Answer: Consultant A is 92% utilised (1920/2080) while Consultant B is 88% utilised (1840/2080).



Scenario Two: Baseline is 2,000 hours (2,080 hours less 80 hours of company holidays).
Answer: Consultant A is 96% utilised (1920/2000) while Consultant B is 92% utilised (1840/2000).

Scenario Three: Baseline is 1,920 hours for Consultant A (2,080 hours less 80 hours of company holidays and 80 hours of vacation) **and 1,840 hours for Consultant B** (2,080 hours less 80 hours of company holidays and 160 hours of vacation).
Answer: Consultant A is 100% utilised (1920/1920) while Consultant B is 100% utilised (1840/1840).

Scenario three appears to be the most fair since the more tenured resources are not penalised for taking the vacation time that they have earned. Many companies increase the amount of vacation you get the longer you have been at the company. If this is a company benefit, it should be treated as a benefit, not as something that will hurt your compensation if you choose to use it.

Consistency is the key to success

Whatever calculation you choose as the right utilisation formula for your company, it is critical that you apply it consistently and uniformly across all employees.

Numerator: Utilised Hours

In the simplest example, utilised time can be tracked back to a specific project or set of projects. For instance, time worked on client projects is considered utilised time, while time worked on any other project (e.g., internal company projects) is not. However, the delineation is often not that clear. Not all time worked on a client project is billable. Professional services professionals spend ample time on the road, but should this time spent traveling be considered utilised or billable? Ultimately, there is no right answer as long as you are consistent in your application of this formula across all employees and projects. The key is to establish a common set of categories, both billable and non-billable, that can be used to classify how employees spend their time.

Who decides what is included in the calculation

OpenAir recommends that the project manager (or higher) determine what is included as utilised or billable time, and not the consultant recording the time. You want your billable resources billing their time and to not be burdened with process and trying to determine whether certain work was billable or not. Even if you only have two time types/labor classifications (billable and non-billable), if you ask your consultants to make the decision about what time is billable and what is not billable, consistency goes out the window. Different people will classify the same work differently. Instead, designate certain types of tasks or projects to be included in the utilisation calculation.

Denominator: Available hours

Again, consistency is key. If vacation time is deducted from 2,080 hours to calculate available hours, you need to do this for all employees, not some, or you will compare apples to oranges. This becomes a more critical issue for multinational firms with



different company holidays and leave accrual rules.

At OpenAir, we advocate that our clients use the carpenter's motto of "measure twice, cut once." If you are not sure of the correct utilisation formula, it is important to involve all constituents, including HR, services, and finance, in discussing and agreeing to the right formula for your company. Once you reach agreement, you confidently can calculate and measure your employees' utilisation.

What is the right target utilisation for your company?

Once you decide on the correct utilisation—either billable, resource or both—for your company, the next step is to tie this calculation into compensation. What is the right target for your company? It depends on a few factors, including:

- The utilisation calculation method that your company is using
- Benchmarked utilisation rates for competitors and peer companies
- Your company revenue and margin targets.

For example, if the baseline hours that are used in the denominator of your utilisation calculation are 2,080 hours, then 100% billable utilisation targets would not be feasible. You would need to subtract company holidays, vacations, sick days and potentially, on-the-bench time from your baseline to determine the appropriate target.

In this case, it might be 70-80% utilisation. Conversely, if the baseline hours that are used in the denominator of your billable utilisation calculation excludes company holidays and personal vacations, then an appropriate utilisation target would be higher, perhaps 80-100%.

There are many benchmark studies available, so before settling on a utilisation target, you may want to consult additional sources of information. In addition to looking at peer company data, another data point to use is the calculated utilisation target per resource that allows your company to meet its corporate revenue and margin targets.

For example, let's assume that your billable resources have a fully loaded cost (includes salary, bonus, benefits and fixed-cost allocation) of \$200,000 per year, your average rate per hour is \$200 and your corporate gross margin goal is 40%. To achieve a 40% gross margin, each resource needs to bill \$333,000 to clients. At a rate of \$200 per hour, each resource needs to bill 1,667 hours. If your company uses a baseline of 2,080 hours as the denominator in the utilisation calculation, then your billable resources need to target 80% utilisation. However, if your company excludes company holidays and vacations from the baseline hours (denominator), then the utilisation target is closer to 90%.

Critical to measuring and managing against both overall and billable utilisation is the understanding that time capturers are often not in control of their own destiny. Resource managers are responsible for staffing; the organisation's commitment to skill development can be an important factor in determining your company's target utilisation.

Using OpenAir to automate utilisation calculations

Once your company has decided on your utilisation policy and targets, the next step is to automate this calculation in your professional services automation (PSA) solution. Tools

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like OpenAir allow for great flexibility in the configuration of utilisation. Here are a few examples that you may want to consider.

Tracking utilised vs. non-utilised time

Task Types: You might choose to use task types to control utilisation. In all projects, you can associate certain tasks with a task type of “non-billable.” All time recorded against this task type across all projects can be excluded from the utilisation calculation.

Activity/Service: Activities (also called services) can be used to track utilised vs. non-utilised time. All tasks in a project plan can be associated with a specific service. For example, you could have four activities: Project Management, Consulting, Internal, and Client: Non-Billable. You may want to consider only time recorded against Project Management and Consulting as utilised time.

Project Stages: The stage of a project can be used to determine if time spent on the project goes toward your company’s utilisation goals. For example, if you have stages called sales support, active, lost and closed, you might decide that only active and closed projects count toward utilisation. Lost projects do not because your company didn’t win the deal. Time spent on sales support projects do not count towards utilisation, unless your company wins the deal and it moves into the active stage.

Time Types: Time types can be used to track utilisation at the project level. Time spent traveling can be recorded against the non-billable time type. Specific time types can be excluded from utilisation calculations. Time types are controlled by the end user inputting the time, so generally, OpenAir does not recommending using time types to factor into your utilisation calculations.

Tracking billable vs. non-billable time

The functionality used to differentiate utilised from non-utilised time can be used to designate time as billable. Perhaps certain types of projects or tasks are billable, while time tracked to anything else is not billable.

Additionally, OpenAir’s robust billing rules engine can be used to automate the creation of charges from approved timesheets. Any time that runs through these billing rules and generates a charge is considered billable. All other time is considered “non-billable” and does not count toward your company’s billable utilisation goals.

Comparing utilisation across all users and departments

OpenAir offers functionality to set “target utilisation” by user. Therefore, you can apply the same utilisation calculation across all employees, but set different targets, or thresholds by employee, role and tenure. New employees can have a lower target than seasoned employees, while staff people can have lower target utilisation than services consultants.

Setting the baseline or available hours

OpenAir allows tremendous flexibility in constructing the available hours (numerator) component of the utilisation calculation. The company work schedule dialog allows you to enter the days of the week and the number of hours per day per week that reflect your



company's typical work week. You can also create exceptions to the typical work week, such as holidays. The default work schedule for each individual user is the same as the company schedule. You also can enter exceptions to the company schedule at the user level to further customise the calculation to exclude personal vacations.

After the company schedule has been set up, you can run utilisation reports more effectively. When selecting the denominator, you have the option to use "base work schedule" or "work schedule hours." The base work schedule does not include exceptions entered in the company (or user) schedule. Work schedule hours reflect any exceptions entered in the company (or user) schedule. Therefore, using work schedule hours as the denominator will allow you to exclude holidays from utilisation reporting.

Conclusion

There is no clear answer to how a particular company should calculate resource utilisation, but there are a few basic principles to follow when making this decision for your company.

One, it is imperative to keep the calculation simple. By making the calculation simple, consultants will understand the goal. If they understand the goal, there is a better chance they will beat the goal, and if they don't beat it, they have less reason to complain. If the calculation is not simple, it is understood by no one, and ultimately becomes a number on a spreadsheet that everyone is aiming towards but does not really understand, which can hurt morale.

Two, ensure your calculation is globally consistent. Whatever you decide is the right utilisation formula for your company, it is critical that you apply it consistently and uniformly across all users.

Three, the inputs to your utilisation calculation should not be controlled by the individual resource, but rather decided at the task or project level. Take the human element out of the input, which will help ensure consistency in the application of the calculation.

The investment in a robust professional services automation (PSA) solution such as OpenAir will help you calculate and track utilisation in your organisation, thereby ensuring that all resources are working towards the same goal on a relative basis.

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