Tempus Resource
by ProSymmetry

Increase Productivity and Reduce Burnout with Utilization Rate Data in Your Scenario Planning

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Part 1

Calculating and Optimizing Resource Utilization Rates

Of the many metrics that give Resource Managers crucial productivity insights, resource capacity utilization is one that helps them "better see how many work hours for a resource are occupied by projects or tasks," thereby also helping "improve billable utilization to maximize each team member's efficiency within the organization."[1] Resource utilization rates are essential for multiple Resource Management functions, including current and future staffing decisions—especially in response to external shifts in the market, labor force, or COVID-19 landscape.

Resource Utilization Formula

A resource's utilization rate is calculated using the following formula:

Utilization Rate = Working Time / Total Time[2]

It's also common to see the term "Billable Hours" used in place of "Working Time." Essentially, the formula divides time a resource spends on a project by their total time available. For example, if a resource spends 80 of a total 160 work hours on a project within a given month, their utilization rate on that project = 80/160, or 50%.

Tracking utilization often occurs alongside tasks such as defining resource attributes and resource leveling.[3] These rates help determine if and when resources need to be reallocated, when low utilization rates are causing financial loss, or when high utilization rates may risk burnout or project errors.[4]

Resource Allocation vs. Resource Utilization

While resource allocation involves staffing a project then managing those resources for the duration—this can include reassignments or workload alterations—resource utilization is the strategic measurement of resource effectiveness, using efficiency metrics and a robust framework for assessing resource conditions.[5]

Utilization Reporting Beyond Spreadsheets

A resource utilization report contains the current performance of all available resources,[6] and is often created using a purpose-built resource management tool with advanced capabilities beyond simple spreadsheets, such as data projections and scenario analysis. In fact, the Resource Management Institute declares it "encouraging news that spreadsheet dependence declined from 71% to 58%" between 2018 and 2019.[7]

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> *"The Resource Management Institute recommends monthly or more frequent measurement of utilization data so trends can be spotted and addressed early . . . Real-time dashboarding is the future."*[8]

Gain Visibility and Flexibility by Tracking Utilization Rates

Resource utilization tracking can offer insights beyond individual capacity. By assessing capacity and performance, you'll gain organization-level visibility into project interdependencies and potential resource conflicts. Additionally, you'll be able to compare planned or booked hours vs. actual hours, which can help you recognize when you need to adjust project plans before serious issues arise.[9]

When external forces impact labor demands, organizations can turn to utilization rate tracking in order to pivot. Rather than alter their labor force with new hires or terminations, research shows that "varying the hours of work of their existing employees" can help organizations "respond to productivity fluctuations."[10]

Part 2

Optimizing Resource Utilization Rates

100% is Not Optimal

Making the most of your available resources with proper utilization tracking is the key to enhancing productivity. Also crucial for maximizing your ROI, utilization rates allow for the agility to reschedule or reassign resources quickly, especially if they are under- or over-utilized. An overutilized resource is one who is beyond 80% capacity.

While it may seem counterintuitive to have resources working at less than 100%, organizations need to abandon the idea of "maximizing" resource utilization rates and seek instead to optimize performance and productivity. The reality is that basic human needs prevent anyone from working at absolutely full capacity. Within an 8-hour workday time is spent on breaks, eating, checking in with colleagues, preparing for tasks, transitioning between tasks, and other duties not directly related to advancing specific projects.

> *"Since projects are temporary endeavors with a defined beginning and end, people need to know that they left the project with slightly more than they started with. This could be in the form of additional knowledge or skills, or a better shot at future projects via a strong resume/CV entry...If the project does not meet these needs, the people will not contribute their full capabilities to the project (or leave altogether)."* [12]

### *The 2080 (Full-Time Equivalent) Standard*

According to a 2019 survey by the Resource Management Institute, enterprise organizations are tracking multiple kinds of employee hours, including:

- **Billable**
- **Projects**
- **PTO**
- **Sick leave**

- **Training**
- **Admin**
- **Internal Meetings**
- **Overtime**[13]

Moreover, 32% of enterprise organizations are tracking all of the above hours for their resources. Clearly, tracking, managing, and optimizing utilization is a highly complex endeavor. Using the 2080 Standard (the total number of work hours in 52 weeks) is therefore recommended to drive "better overall utilization performance" and "enable more precise peer to peer benchmarking."[14] The standard is currently used by two-thirds of enterprise organizations surveyed by the Resource Management Institute.
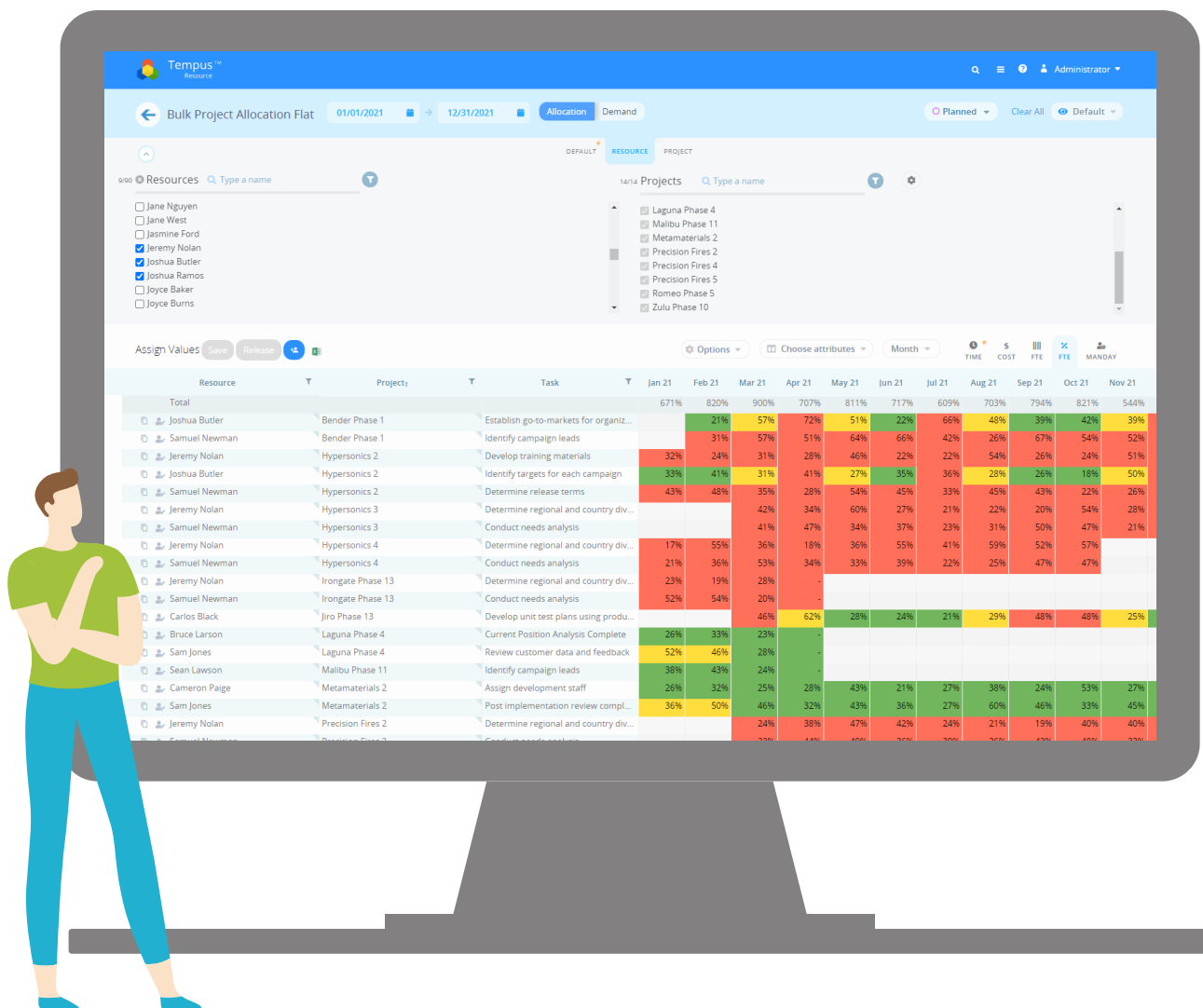
Part 3

Critical Utilization Errors and Employee Burnout

Enterprise organizations are using the 2080 Standard at a rate of 65%, according to the Resource Management Institute, even while 70% report that utilization is "very important" to their resource management practices.[15] Without a standard method for tracking utilization rates, organizations lack visibility and agility, and the power to turn utilization data into actionable insights.

Below are some critical errors and failures with utilization rates, and their main consequence on employees—burnout. Beyond simply fatigue or overwork, burnout is a serious condition that is defined as "a state of physical or emotional exhaustion that also involves a sense of reduced accomplishment and loss of personal identity."[16]

"23% of employees reported feeling burned out at work very often or always, while an additional 44% reported feeling burned out sometimes. That means about two-thirds of full-time workers experience burnout on the job." [17]

Burnout causes an array of physical and emotional symptoms, including "chronic fatigue, insomnia . . . headaches, stomachaches, anger, isolation, irritability, depression, and more."[18] One recent study found that workplace stress in the U.S. alone cost $190 billion in yearly healthcare spending and resulted in $500 billion in economic costs and 550 million lost workdays.[19]

"Being able to help your team with data is amazing. When the teams come and ask why you can't get that done in eight weeks? With Tempus Resource, you now have the critical data to be able to show them, specifically. It's not just a question of management thinking that people just need to work more efficiently, you really can show them hard numbers to document what the organization is able to do, and what's simply just out of reach, to help protect your team from burnout."
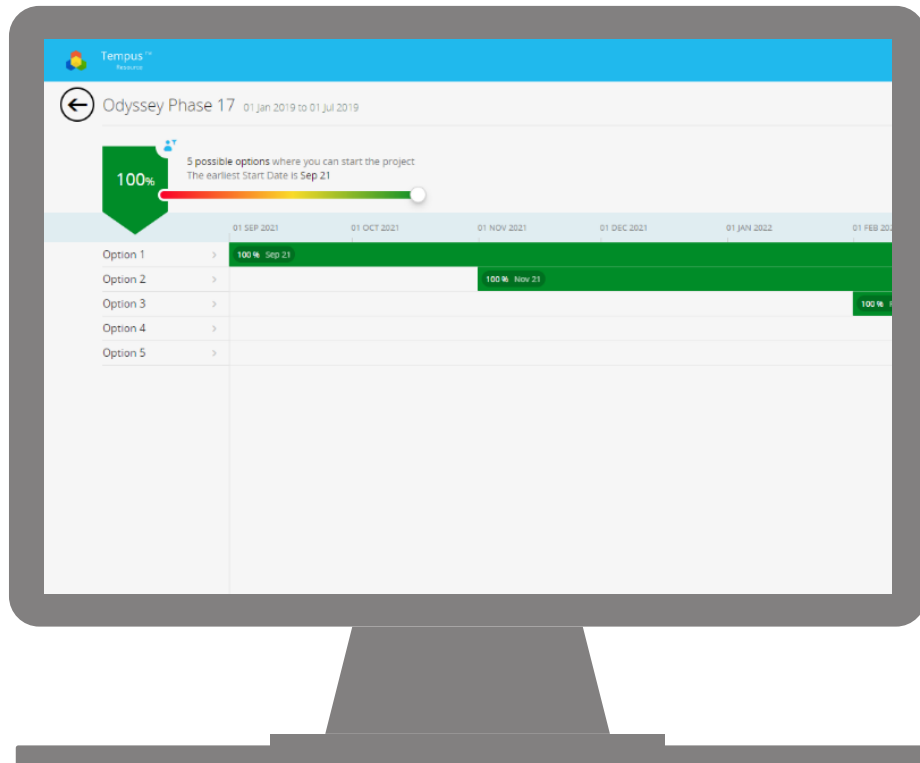
Not Tying Utilization Targets to Incentive Measures

Even though the RMI recommends "using appropriate incentives to drive utilization behavior in the right direction," utilization targets are used as part of employee goals in only 33% of organizations surveyed, and as part of determining employee compensation in merely 3% of organizations.[20]

"If the extrinsic and intrinsic rewards for your job don't match the amount of effort and time you put into them, then you're likely to feel like the investment is not worth the payoff."[21]

Unclear job expectations are the second leading cause of burnout,[22] but this problem can be proactively addressed by including measurable standards like utilization targets in performance goals, evaluations, and remuneration. Giving resources the ability to influence or even determine their goals will address the number one cause of burnout—a sense of lacking control over one's schedule, assignments, and workload.[23]

Not Setting Custom Utilization Targets Based on Roles

There is no one-size-fits all for setting utilization targets. Some senior positions may include mentoring duties. Others may require travel time or networking. Additionally, time might be needed to improve the work environment or enhance their skills with additional training.[24] A resource's 80% utilization rate must include these kinds of essential but non-billable activities that still contribute to profitability, organizational growth, and success. Doing so will avoid yet another leading cause of burnout, an unmanageable workload. When resources feel overwhelmed, their performance and their confidence plummet.[25]

> *"When you have a workload that matches your capacity, you can effectively get your work done, have opportunities for rest and recovery, and find time for professional growth and development. When you chronically feel overloaded, these opportunities to restore balance don't exist."[26]*

Not Using Purpose-Built Resource Management Tools

While 67% of enterprise organizations say that resource management tools "help with measuring and reporting utilization results," many are still relying on spreadsheets that don't offer the advanced functions needed to turn utilization data into actionable insights.[27] The most often cited inhibitor to effective resource management is lacking automation tools to support RM processes. When organizations do employ improper RM tools, they often report that such tools:

- **Lack one or more needed resource management features**
- **Are poorly configured for the organization's processes**
- **Can't be integrated into other systems**

- **Lack dashboard and reporting capabilities**
- **Lack data analytics**
- **Cannot generate "what-if" scenarios**[28]

> *"The key to Tempus Resource for us was the modeling. The real-time what-if scenarios that did not affect the data was huge. Other tools could not do it. So, we went for it and Tempus was a great decision."*

Increase Productivity and Reduce Burnout with Utilization Rate Data in Your Scenario Planning

When asked how they envision improving their organization's resource management, respondents cited better processes and tools for:

• Managing skills inventory
• Forecasting and capacity planning
• Project staffing
• Skills and development sourcing
• Governance of RM processes[29]

Additionally, enterprise respondents cited the overall need for more skilled and dedicated resource managers.[30] Organizations cannot address their resources' wellbeing or optimize utilization without the right tools built specifically for the complexities of resource management.

Part 4

Leveraging Utilization Rate Data in Scenario Planning

Planning for the Future with Utilization Rates

Real-time utilization data can show you when to adjust workloads or reallocate resources; however, when that data is used to build multiple "what if" scenarios, organizations are truly empowered to make major strategic decisions with confidence.

To fully leverage utilization rate data, organizations need to engage in scenario building and scenario planning. Scenarios are "internally coherent pictures of possible futures . . . They can dramatize trends and alternatives; explore the impacts and implications of decisions, choices, and strategies; and provide insights into cause-and-effect sequencing."[31] Scenario building involves "envisaging a few different possible future outcomes for the situation under scrutiny," while scenario planning means "integrating scenarios permanently in the company's planning process."[32]

Increase Productivity and Reduce Burnout with Utilization Rate Data in Your Scenario Planning

Scenarios both simple and complex can be built with your own utilization data, helping you answer a variety of "what if" questions regarding your resources' workload. For example, you can see the potential shifts in utilization rates upon cancelling a project, moving a project, extending a deadline, losing or adding any number of resources, and many more changes in conditions. Put simply, the only way to be sure about your capacity for a new project is to simulate its initiation and see exactly how it will impact your resources, departments, or entire portfolio.

Scenario Planning with Visual Data

Robust resource management tools should not only run such simulations but also help you visualize the real impact of many different scenarios. Heatmapping is one way to get quick, at-a-glance visual feedback on your utilization, letting you know which resources may have availability or which might be approaching overcapacity. Forecasting capacity in this way, especially with multiple outputs like individuals or percentage of time, can be invaluable for decision-making.

Ideally, your resource management tool can use the scenario conditions you enter to not only show the shifts in your utilization heatmap but also consider your resource attributes, timeframes, interdependencies, and conflicts.

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Additionally, forecasting project parameters, conditions, and possible changes with generic roles may lend insight into whether an organization is well-staffed enough or needs to make some hiring decisions before launching a project. This kind of scenario analysis alone stands to save time, avoid burnout, and prevent costly missed deadlines due to understaffing.

Utilization Rate Data for Strategic Flexibility

Carefully and consistently tracking utilization rates across your entire portfolio will provide real-time flexibility to adapt and pivot in response to internal and external changes, helping you make quick and reliable decisions about your resources. Moreover, utilization rates can keep you poised to make the best strategic moves in the near and distant future, with confidence based on real data. With utilization rate-based scenario planning, organizations can actively create a culture that strives for productivity and wellbeing—helping resources thrive rather than burn out. Amid economic and global uncertainty, these scenarios will be key to understanding how to best steward and use an organization's resources and make sound, informed, strategic decisions.

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More Information

Tempus Resource allows users to:

- Run powerful "what-if?" scenarios in real time

- Quickly gauge over and under-allocations of resources

- Create fast, intuitive infographic data

- View the full project portfolio in one place

- Work stand-alone or synchronize with PPM/HCM/HRIS systems

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About Prosymmetry

ProSymmetry was founded in 2007 by passionate resource management experts who continue to solve the resource management challenges that slow down, damage, and overwhelm organizations. We do this through our flagship product, Tempus Resource, which is a purpose-built resource forecasting and capacity planning solution, helping you simplify data capture, improve project visibility, and break down even the most complex of project plans and data sets to assist in making more informed decisions with less effort. Tempus Resource is used by Fortune 500 companies, was praised a "resource management solution accessible to the masses," and was named a 2016 Cool Vendor by Gartner.

To schedule your free demo, contact Prosymmetry today.