Tempus Resource
by ProSymmetry

The State of Resource Management

2022

French Caldwell and Donna Fitzgerald

prosymmetry.com 877-880-8788 info@prosymmetry.com

Table of Contents

Introduction

Where did all the people go? With the Covid-19 pandemic, this question is more than just top-of-mind for project management leaders and resource managers; it is a systemic risk. Some project and resource management (RM) professionals may hope that a return to normal is around the next bend, but demographical and economic trends noted by experts at The Analyst Syndicate caution against that. For instance, in a recent Insight note by Dan Miklovic,[1] he identified the skills gap challenges businesses will face as they pursue more automation.

Shortages of critical skills have been highlighted over the last two years as a consequence of the Covid-19 pandemic. Unfortunately, relief is not on the horizon, even if the world adjusts to Covid-19 as an endemic viral disease.

Overall, lower birth rates in the United States, Europe, and many other industrial and post-industrial economies portend decades of ongoing shortages of skilled labor. In 2019, the United States recorded its lowest birth rate ever – until 2020, that is, when the Covid-19 pandemic contributed to an even lower birth rate.

Skills shortages are further exacerbated by supply chain shortages that aren't likely to be relieved in future years. When shortages lead to projects being redesigned or shut down due to lack of availability of critical components, we end up with skills shortages and surpluses.

To understand how companies are coping with skills shortages, The Analyst Syndicate partnered on a RM research project with ProSymmetry, a strategic portfolio management (SPM) and resource management solution software. We surveyed over 100 corporate, government, audit, consulting, and IT professionals who rely on effective resource management for the success of their projects. All survey participants were involved in a project within 18 months prior to the survey.

Introduction

Before we go any further in our exploration of resource management, we must highlight that resource management classically has consisted of three main components, with an emerging fourth.

1. Resource capacity planning, which is primarily focused on ensuring that any given portfolio of work can be executed

2. Resource allocation, which is designed to match high-level skills to planned work at the aggregate level

3. Resource assignment, which entails assigning a specific human being to a specific project, product, or audit

The fourth component that has arisen recently is one we are calling People Capability Management. Covid-19 revealed that people have been unhappy with the way things have been going at work for a long time. In the past, this discontent has been blamed primarily on bad bosses.[2] However, as we will discuss in this research, a large part of the problem is burnout related to either overwork or the stress of being over-committed.

Key Findings

In this report, we are highlighting three major findings:

1. There is an ongoing trend toward the centralization of project-related resource management

2. There is a clear demand for greater focus on skills management, and the HR department is increasingly involved in project resource management for that reason

3. Resource managers are reliant on technology to align people and their skills to demand from project and business leaders

These findings are interrelated and focus on the advantages of centralization in terms of both processes and tools. Centralized enterprise resource management can be organized within an enterprise project management office (EPMO) or within the human resources (HR) organization. The Resource Management Institute (RMI) (the professional association for resource managers) advocates for a standalone Resource Management Office, but none of our survey participants had set one up.

Regardless of location, project leaders need centralization to ensure they can draw from pools of critical skills across the enterprise. Leaving resource management with the business units—or, worse, with individual project managers—limits the visibility into the availability or lack of skills to execute on projects.

Introduction

A centralized resource management function positions a project, product, business unit, or HR leader to communicate and collaborate on skills priorities.

To manage through an ongoing environment of skill and labor shortages requires identifying and forecasting skill needs and prioritizing how they are gained, either through hiring, upskilling, cross-skilling, or acquiring another business. This cannot be done effectively in mid-to-large organizations without a degree of centralization. But centralization is not always easy or practical. Today's resource management technology enables the centralization of resource management data without forcing the centralization of administration. Based on our previous work with a large consulting group, we've seen the hybrid approach of decentralized resource management with the centralized **governance** of skill management work effectively in support of an organization with 8500 resources.

Responsibility and ownership of resource management

Who uses resource management

Overall, there was solid representation from those most likely to be involved in the implementation of systems and the execution of project-based tasks.[3] This includes auditors, consultants, the PMO, IT, and others (Figure 1).

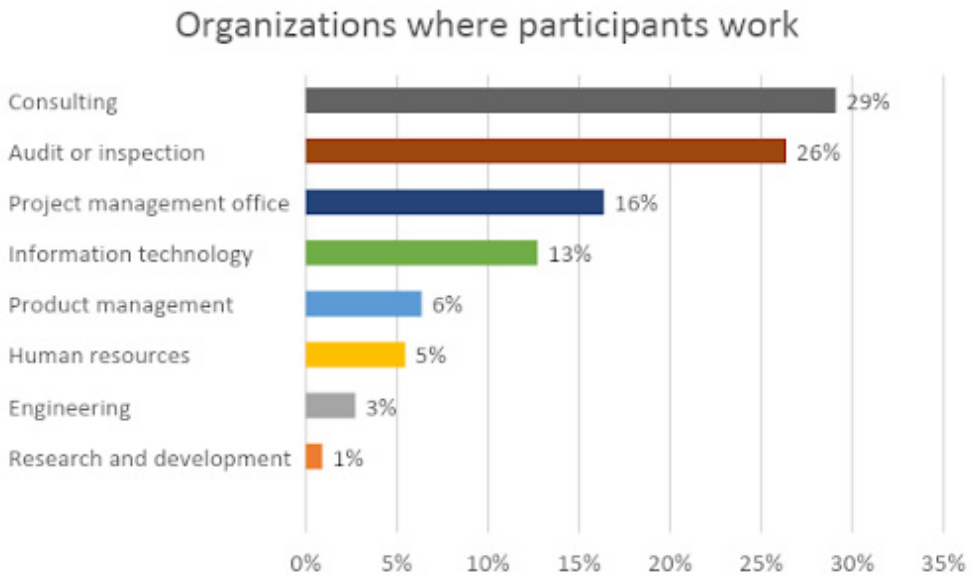

Figure 1 Organizations where participants work

The high response rate from consultants (29%) and auditors (26%) came as no surprise. Since consulting companies earn their money by ensuring people are available to deliver the services their clients are paying for, resource management is a mandatory application. Most of the original resource management software systems were written by consulting companies solely for internal use.

Internal audit in large enterprises increasingly applies resource management as a key component of ensuring audit teams get their work done on time. As risk-based auditing has advanced, the resulting variability in audit plans means that internal audit must have an increased emphasis on planning for skills availability. Balancing internal audit skills availability with risk-based audit plans can require rapid up-skilling of the expertise of internal auditors while contracting for supplemental skills.

The second group of responses comes from individuals running Project/Portfolio Management Offices (16%) and individuals identifying as IT (13%). We can be sure of two things about this group: first, they are internal company functions, and second, they primarily support project work.

IT has had a troubled relationship with resource management for years, and apparently, the fault lies in the efficacy of the early resource management tools. To put it kindly, the general consensus is that the integrated resource management functionality embedded in PPM products was not easy to use. This useability shortcoming left organizations in a bind. They had justified the investment in an expensive

Responsibility and ownership of resource management

project management system partially based on the fact that resource management was a core capability. When that didn't pan out, most organizations decided that the PMO could replace the resource management function by keeping a spreadsheet. The problem with this solution is it doesn't scale, especially not when the need for multiple skills is added into the mix. It's also very difficult to provide leadership with an organizational-wide view of what everyone is doing.

The product management function's 6% adoption of resource management could be a start toward a positive trend.

In the software world, Agile claims that all teams should be fixed teams composed of cross-discipline resources. Since no company has enough resources with all the required skills to support that number of teams, even under Agile, some teams operate as a shared service. Any time the words "shared service" appear, there will be bottleneck issues and squeaky-wheel reprioritization. The fact that product management is beginning to see the need for RM is an important indicator that employee disengagement issues due to overwork and excessive task switching are starting to bubble up.

The 5% of respondents that work in HR was a surprise, albeit a welcome one. HR tends to get involved when skills become a priority. Based on our research over the past two years, there is a possibility that HR plus learning and development will begin partnering more often with project-oriented communities in the future. As enterprises migrate toward centralized resource management, a dedicated function allows HR to coordinate skills development and skills management expertise. In a highly distributed resource management model, it is difficult for HR to coordinate with resource managers since skills needs are not visible.

When it comes to centralization and adoption of resource management in most organizations, the value proposition for centralization vs. decentralization is straightforward. This had not been historically true with resource management.

When asked whether resource management is centralized or dispersed in their enterprises, 38% of participants reported that it is centralized and 56% said dispersed (Figure 2). Several participants who chose "Other" noted that they have a hybrid approach with a centralized system for visibility of people and their skills, but individual departments and divisions make the actual personnel assignment.

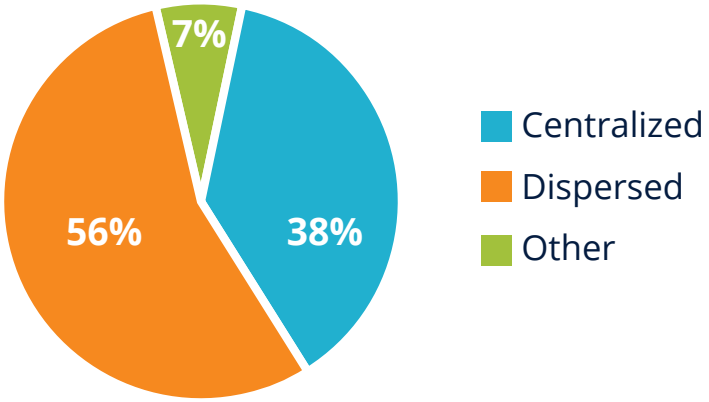

Figure 2: Centralized or dispersed RM

Responsibility and ownership of resource management

The traditional definition of centralized resources usually means the existence of a single resource management system long before it means the existence of a single coordinating function (like a Resource Management Office).

When organizations assumed they could schedule people the same way they scheduled machines or conference rooms, the underlying belief was that resources were generic within a category. At the level of resource capacity planning, this assumption has some basis, like assuming all power supply engineers are the same, as are all JavaScript programmers. In some cases, organizations designate two classes of experience level, but it's rare (at the portfolio level) to see organizations using more refinement than that.

The classic resource capacity planning process is pictured below (Figure 3). Step 1 is generally done only once when a resource management system is set up and then updated as new roles are created. Step 2 will need annual updating (at the least.) Steps 3-5 will be repeated every time the portfolio is updated.

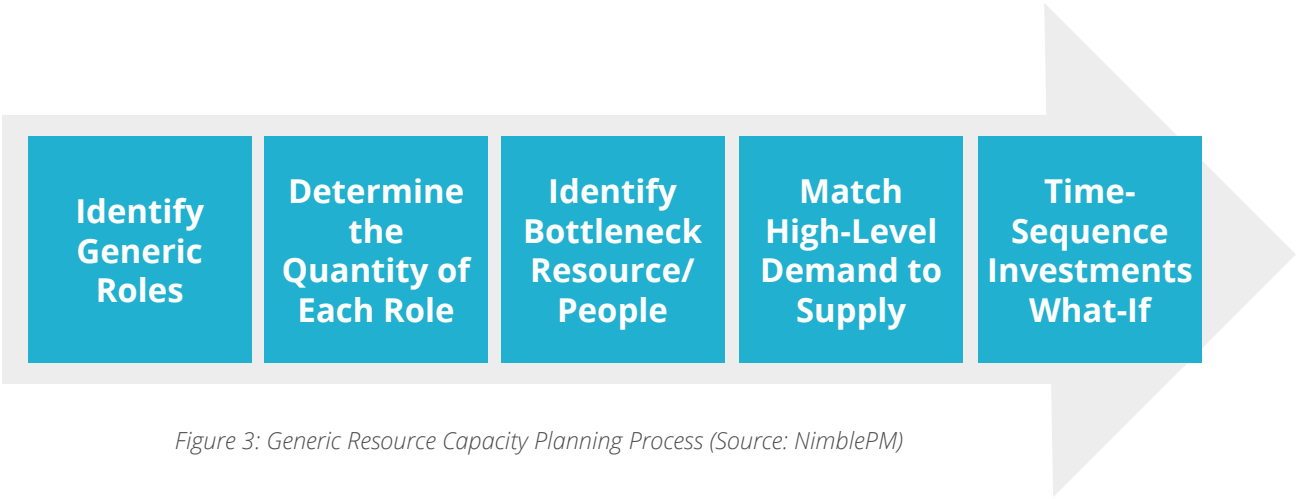

Figure 3: Generic Resource Capacity Planning Process (Source: NimblePM)

Completing the activities called out in boxes 2 through 5 of the resource capacity planning process will be difficult the first time an organization attempts the effort. Twenty years ago, when resource management systems paired with portfolio capabilities were still in their infancy, organizations found themselves faced with either repeating this massive effort every year or simply abandoning it. Most companies took the latter route and focused their resource management efforts solely on resource assignment.

Today, the technology exists to support all five outlined processes in an almost effortless manner. And yet, organizations have still been slow to adopt a centralized system — according to our survey, a mere 38% have done so.

While only 7% of the respondents discussed taking a hybrid approach to resource management, we have found that many organizations take a hybrid approach to their software. There is increased adoption of standalone scenario planning "what-if" software for organizations with a large investment in legacy PPM tools. Organizations are finding value in analyzing a portfolio of proposed projects including the associated skilled resources and then dynamically modeling the optimum time for scheduling the planned work (step 5 in Figure 4 above).

Responsibility and ownership of resource management

Who is responsible for resource management

Projects cut across many organizations in an enterprise. When resource management is dispersed, the organizations responsible for it are many. Hence, when asked which organizations have responsibility, survey participants could select all that apply (Figure 4).

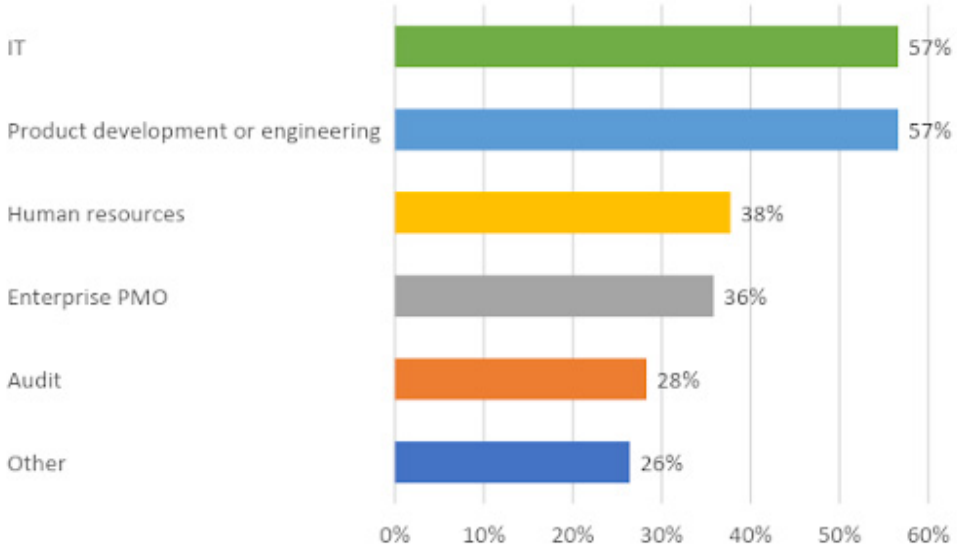

Figure 4: Organizations responsible for RM when dispersed

Participants responded with project-heavy organizations like IT (57%) and product development or engineering (57%) in the lead. Respondents selecting “Other” specified finance, operations, marketing, and other business units.

Many organizations with distributed resource management are taking an autonomous approach to account for the difference between resource assignment needs, portfolio needs, and skills-related needs.

Responsibility and ownership of resource management

The primary practitioners of resource management in corporations, as opposed to professional services, are IT and Product Development. The difference between these two product-based functions is that product development is ultimately a direct revenue driver and, unless the company has begun to develop a list of digital products, IT is regarded as an operational support function. To ensure ongoing oversight of non-external product-based spending, 36% of the surveyed organizations have established an enterprise project management office to connect strategic projects with the resources and funds that go into them.

For instance, when resource management was distributed, 53% of participants who selected IT as responsible for resource management also selected HR, and 37% of those who selected IT also selected the enterprise PMO. The 53% of respondents who identified HR as having a shared responsibility are evidence of an emerging trend: that of focusing on an employee as someone who has both a past, based on experience gained on the job, as well as a future with their current company.

Enterprise PMOs have waxed and waned in terms of their perceived value to the enterprise since one of the first was established by NYNEX in 1995. Back then, the term meant Enterprise Program Management Office. Newer EPMOs that have focused primarily on methods and processes to support project execution have had short tenures in organizations. On the other hand, those that take or share responsibility with finance for the enterprise strategic investment portfolio offer a unique advantage to companies, if for no other reason than they can drive the company toward a single strategy execution platform that includes resource management.

The situation with product development is slightly different from IT. While no company is willing to give product development a blank check, there is an assumption that money spent will ultimately return to the company in terms of product revenue. What is critical is ensuring they have enough skilled people to do the work.

HR (38%) and the EPMO (36%) were also common answers for where resource management resides when it is dispersed (Figure 4). This indicates that many organizations with dispersed resource management are taking an autonomous approach with centralized support for resource managers across the enterprise. Of participants who worked in product development, 40% also selected HR and 37% the EPMO.

Responsibility and ownership of resource management

Number of FTEs engaged in resource management

When asked about the number of full-time-equivalent employees engaged in project-related resource management, there was a wide range of answers, from 1 to thousands (Table 1). The median for small enterprises (<1000 employees) was six resource managers; mid-sized enterprises (1001 to 10,000 employees) was 15; and large-sized enterprises (> 10,000 employees) was 275.

Enterprise Size

	Small	Medium	Large
RM FTEs	6	15	275

Table 1: Median FTEs doing project RM by enterprise size

Centralization and the role of resource management

When centralized, HR or the enterprise PMO are most likely to lead resource management.

This answer offers the clearest indication that the role of resource management is changing in organizations. The practice has traditionally been about getting the right people to the right work at the right time. Until recently, HR has primarily been interested in ensuring that the right people work at the company (talent acquisition).

According to a March 2021 survey conducted by LinkedIn learning, 62% of surveyed global CEOs responded that continuous learning by employees was important to their organizations. Another survey by Clutch found that 84% of employees felt their company should help them build their skills.

Responsibility and ownership of resource management

Participants who responded that resource management was centralized in their enterprise were asked which organization is responsible for it (Figure 5). HR was cited by 41%, followed by EPMO at 31%, audit at 13%, IT at 10%, and product management or engineering at 5%.

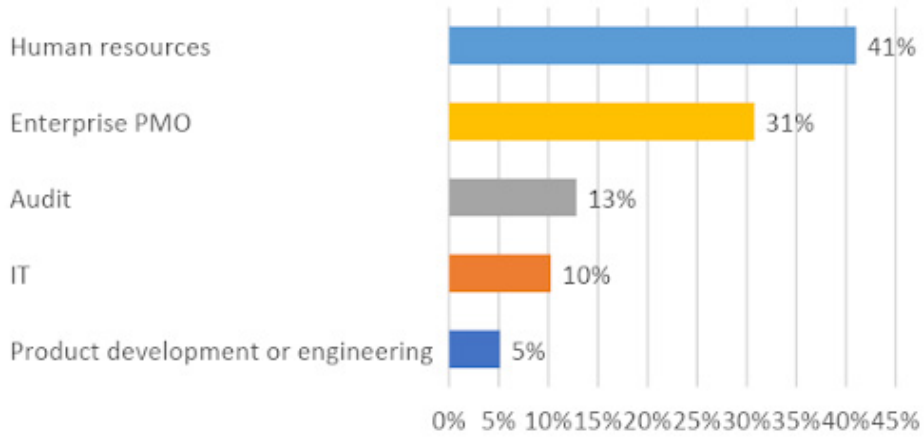

Figure 5: Organization responsible for resource management when centralized

The emerging role of HR in resource management

Participants were asked about the role of HR in resource management. The most common role was "skills development and learning" (42%). That was followed by working with various members of the organization to ensure the proper skills were available, specifically:

Working with individuals to identify their personal development plans (36%)

Working with resource managers to match skills to assignments (32%)

Working with business unit or functional project portfolio managers to identify skills needs (30%)

Notably, HR is significantly more likely to be involved when resource management is centralized than when it is dispersed.

Participants perceive HR as playing a greater role in helping individuals acquire skills than aligning skills to projects. In the centralized model, HR is almost three times more likely to be responsible for the "assignment of resources to projects" than in the dispersed model.

Allocation of people to projects

Most respondents cited availability and skills as the criteria for assigning people to projects. Some participants gave more detailed answers, as noted below:

- "We use a capacity sheet to monitor availability. When a new request comes in, the Resource Manager reviews the capacity tracker and finds the best options to staff each request."

- "Depending on the strategic outcome required, most of our projects are arranged to be cross-functionally supported. The reason being is most clients that onboard with our company are touched by multiple departments."

- "Departments manage resource allocation, and at times during intense needs, senior leadership may redeploy a few staff to other roles temporarily. This doesn't happen often, as most departments are understaffed and have expertise that doesn't translate to other departments. Obviously, a financial aid expert can't help the clinical intake group, and a web developer usually doesn't have content development skills. I have seen a big change in atomization or 'expertization' in many areas. [This] limits the ability for an employee to go beyond their narrow scope. [This specialization is in response to] the demands of our evolving work world, yet it limits growth [and] the ability for a company to be nimble with HR."

- "There is a dedicated team within Corporate Audit that is responsible for allocation of auditors to projects based on availability and specific needs. This team engages with the project managers to determine who is the best fit for each project, both from a team-lead and support-resource perspective."

- "Consultants complete a skills and qualifications survey, and resource management will reach out to the resource with those matching skills. Utilization of consultants is also a factor — if people are maxing-out on utilization, they shouldn't but often may get staffed on projects. If people are specialized, project leaders or teams may have preassigned a pool of resources they draw on regularly."

- "Project portfolio management committee will decide with the primary project manager on how to allocate people to projects. The primary project manager will work with the relevant resource managers to agree which of their people will be assigned to which projects."

- "A central team of managers review project forecasting to determine resource availability and project requirements, and this allows effective resource assignment. This also provides necessary metrics for resource skillset development for project assignments."

Resource management challenges

Participants were asked to identify the most significant resource management challenges for senior management today and to rate executive awareness of said challenges (Figure 6). At the top of the challenges list for executive awareness were "availability of funding" and "visibility into availability of resources." While "visibility into availability of resources" ranked second with 41% of survey participants citing it as a significant challenge, "availability of funding" rated as the number one challenge with respect to executive awareness but was just the fourth most significant challenge for survey participants.

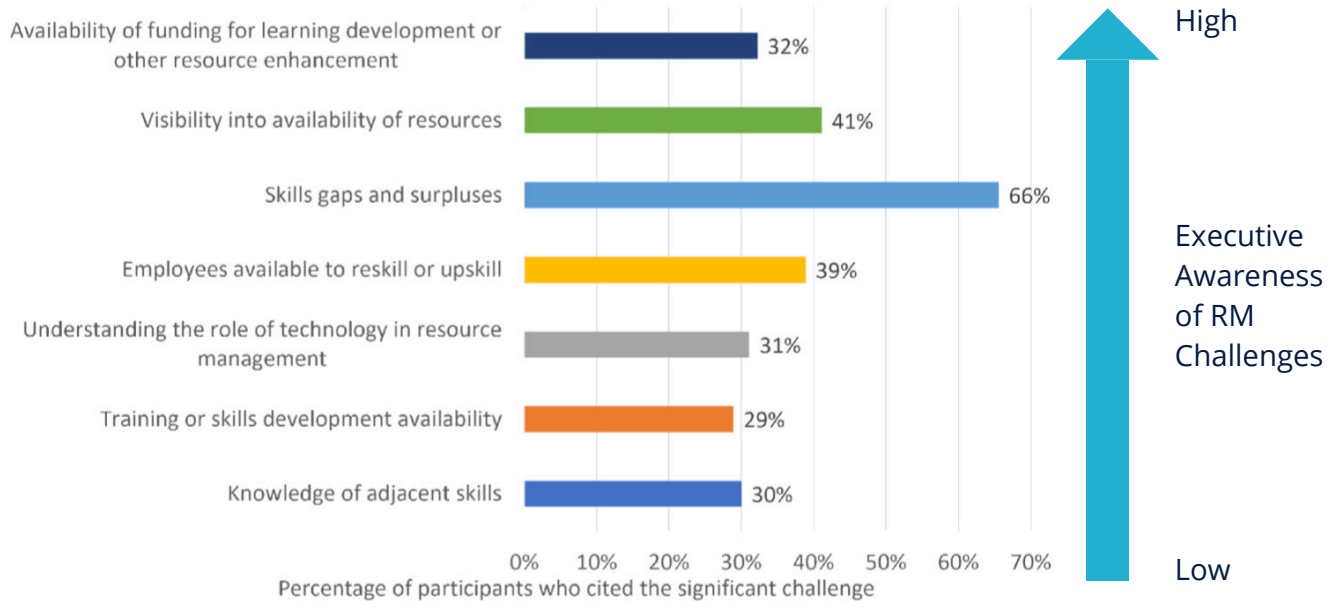

Figure 6: Significant resource management challenges and executive awareness

Resource management maturity improvements

Overall, a large majority of participants stated that resource maturity over the past three years has improved across several categories: technology (77%), organization (65%), process (64%), governance (62%), skills management (60%), and financial management (57%) (Table 2).

	Increase in maturity over last three years	RM-Specific software or tools with RM built-in	PPM or PSA only
Technology	77%	81%	69%
Organization	65%	69%	64%
Process	64%	70%	73%
Overall Governance	62%	69%	68%
Skills Management	60%	61%	66%
Financial Management	57%	54%	50%

4% higher or more

4% lower or more

<4% difference

Figure 6: Significant resource management challenges and executive awareness

Impact of technology on maturity

Since in Table 2, technology maturity was rated as having improved the most, it made sense to analyze the impact of technology on maturity. Notably, those enterprises using resource management-specific software or tools with resource management built-to-task, such as audit management, showed increases in maturity that were 4% or more higher than the overall average in four out of six maturity categories. They had none significantly lower, (i.e., less than 4%) than the overall.

Resource Management Operations

Those enterprises only using project portfolio management (PPM) or professional services automation (PSA) for resource management showed increases in maturity 4% or more higher than the overall average in three out of six maturity categories – process, overall governance, and skills management. They had two maturity categories, technology maturity and financial management, which were significantly lower than the overall

Those who have invested in resource management-specific technology have seen above-average improvements in most maturity categories.

Resource management-specific tools correlate to greater maturity in organization, process, and governance. PPM and PSA reported greater maturity in process, governance, and skills management. Based on this data, a complete resource management tech stack would seem to call for a platform with resource planning-specific capabilities integrated with other PPM or PSA capabilities.

Technology Investment

With technology maturity increasing over the last three years (Table 2), the technology that participants' organizations are using should indicate a significant investment in resource management-related tools. And, in fact, the survey found that there are a significant number of organizations using resource management specific software (23%); tools that have it built-in, like audit management (30%); PPM (24%); and PSA (9%). When combined, 56% of participants' enterprises use one or more related tools (Figure 7).

56% of participants' enterprises use one or more resource management-related tools.

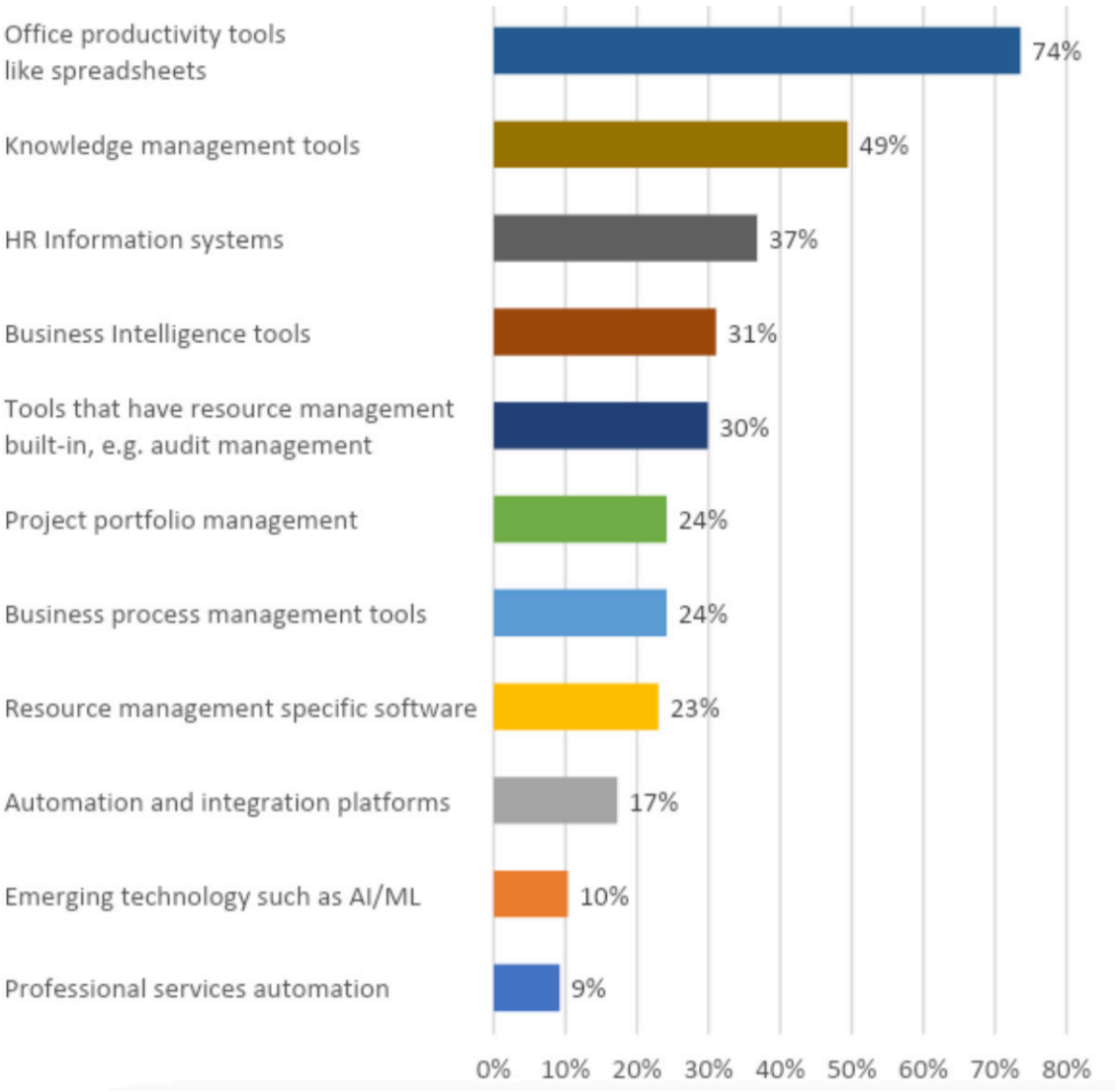

Figure 7: Percentage of organizations using this technology for resource management

Resource management technology satisfaction

When asked to rate their satisfaction with various technologies based on capabilities, best-of-breed resource management software rated significantly higher than PPM, PSA, and task-specific tools with resource management built-in. Furthermore, 1 in 3 users of PPM, PSA, or task-specific tools reported that they also use resource management software (Figure 8).

79% of those using resource management specific software reported being satisfied or highly satisfied.

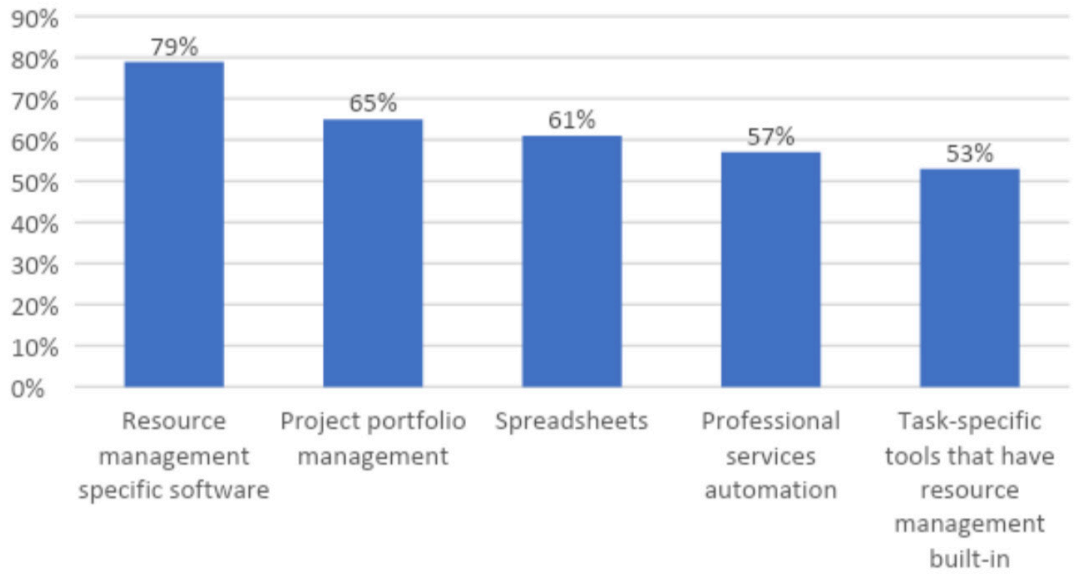

Figure 8: Satisfaction with the technology used for resource management

Looking ahead to the next generation of resource management technology

Participants foresee that the most value will come from advanced resource management capabilities that provide decision support for resource managers and project planners while enabling employee self-service.

Participants were asked to rate the value of several advanced technology capabilities. The following capabilities were all rated highly (Figure 9):

1. "Ability of individuals to update their own skills" (62%)
2. "Automated forecasting of skills gaps" (62%)
3. "Ability of individuals to compete for project assignments" (56%)
4. "Automated recommendations for project assignments" (51%)
5. "Ability of individuals to set their dates and times of availability" (50%)

It was no surprise to see that the ability to update one's skills came in as the most popular feature. Employees want more control of their careers and want to ensure they are recognized for the skills and experience they might have gained at other companies during their careers.

Resource Management Operations

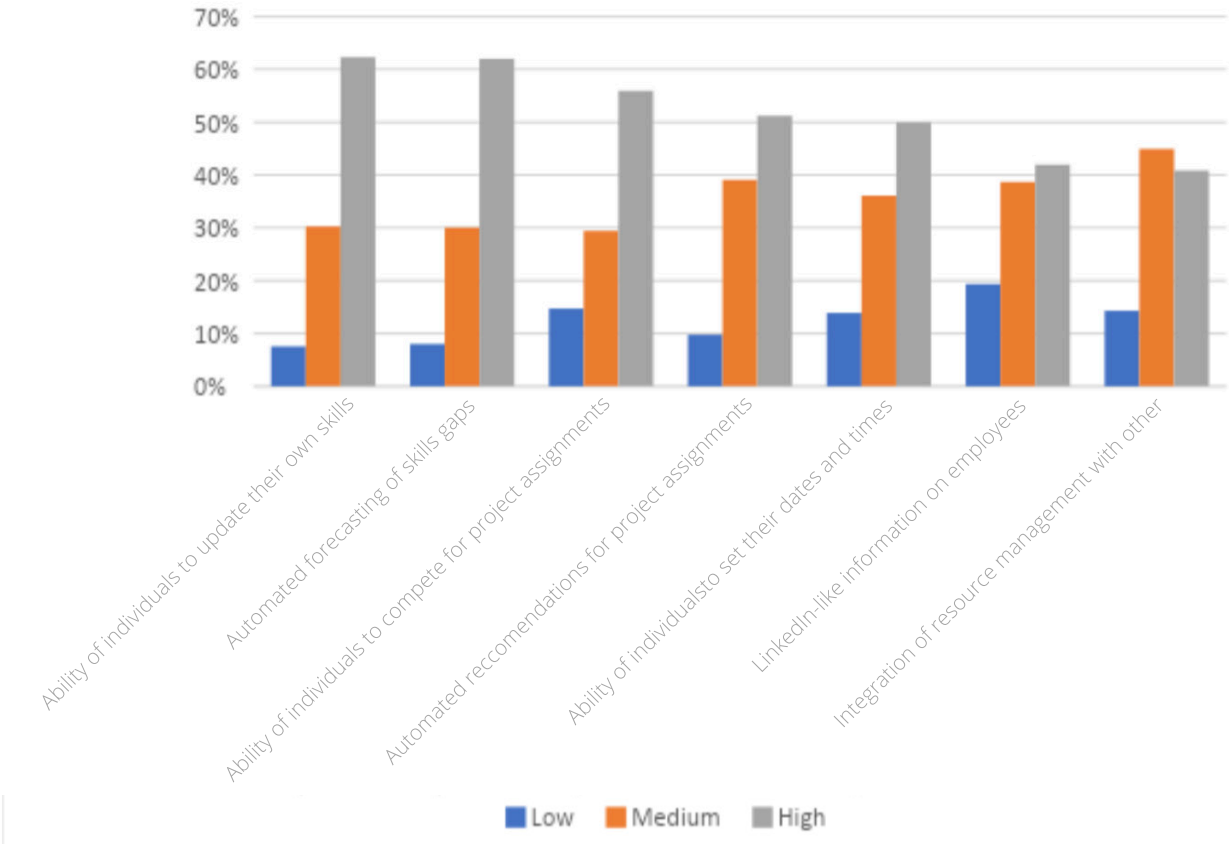

Figure 9: Value of advanced resource management capabilities

Automated forecasting of skill gaps is a feature we know organizations have requested for years. The most common use case is that of preparedness for emerging technology. If the strategic plan requires adopting new technology, having software that would automatically identify which employees might have the shortest learning curve and then allowing employees to request training or to be assigned to the next "new thing" would be extremely useful for planning purposes. Rated by a majority as just medium- or low-value were "LinkedIn-like information on employees" (58%) and "integration of resource management with other relevant technology" (59%).

The Business Value of Resource Management

The core business value proposition of effective resource management is to mitigate the risk associated with shortfalls of people and skills assigned to projects. According to 66% of participants, the global pandemic has contributed significantly to shortfalls leading to significant project delays for many enterprises (Figure 10). Those organizations that had a centralized resource management function in place did deliver more of their projects on time, but nothing could mitigate the impact internally — 35% of centralized functions had less than 25% of their projects delayed as opposed to only 5% of distributed organizations.

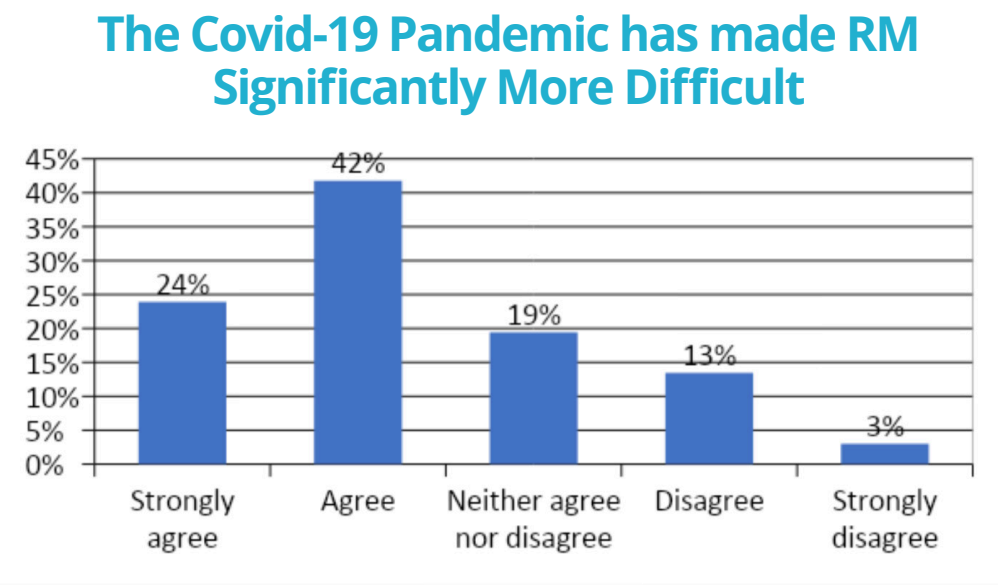

Figure 10: Impact of the pandemic on resource management

Covid impacted on-time project delivery, but it wasn't the only factor. Participants ranked resource management-related issues based on their impact on project delays (Table 3). Overall, availability issues ranked higher than skills shortage. Understanding the nuances of these answers requires knowing how project managers think. Every project manager suffers equally from overcommitted resources (usually >125% of utilization.) Every project manager suffers equally because of the "30% task switching" that extracts a roughly 30% inefficiency factor[6]. People with the wrong skills and underfunding tend to impact only certain projects.

People being overcommitted and assigned to too many projects is the greatest cause of project delays.

Rank in order of project completion delays

People are overcommitted in terms of time	1
People assigned to too many projects	2
Lack of availability of people	3
Poor planning	4
People with wrong skills	5
Underfunded	6

Table 3: Contributors to project delays

When asked to rank technology features that could help support more effective planning, participants ranked insights into project inter-dependencies, forecasting, and project sequencing the highest (Table 4).

Rank in order of project completion delays

Project Inter-dependencies	1
Forecasting	2
Project Sequencing	3
Roadmapping	4
Change review and approval workflow	5
Project review and approval workflow	6
Ideation	7

Table 3: Contributors to project delays

Conclusion

The survey revealed that having a centralized resource management function correlates to significantly fewer project delays. Regardless of whether resource management is centralized, dispersed, or a hybrid model, project and resource managers, as well as HR professionals across the enterprise, can benefit from a common system for visibility of people and their skills. A common source of the truth can turn a dispersed system into a centralized system, retaining authority at the local level while benefitting from cross-enterprise visibility and the engagement of skills management expertise from HR.

Despite increased emphasis on workforce and skills shortages aggravated by the pandemic, executive awareness of how those shortages impact projects in the enterprise fall short of what is needed. Several participants shared verbatim details of how resource management should be organized, emphasizing availability and senior management involvement. The key findings from their experiences suggest that:

1. A centralized function for tracking skills and assignments is necessary.

2. Good governance of resource management requires looking ahead at upcoming projects and forecasting the availability of skills and people.

3. Managing specialization requires careful attention by senior management and resource managers. Senior management intervention may be needed at times to ensure priorities are clear.

The survey revealed clearly that technology has a net positive impact as a lever to advance resource management's maturity and improve resource availability across the enterprise and with executives. Resource management and project management professionals should determine which aspects of resource management maturity they want to improve, then align their technology roadmap accordingly.

An analysis of the reasons for project delays revealed that skills gaps are most often due to an overall lack of available people rather than having people with the wrong skills. As enterprises recover from the pandemic, the pools of skilled individuals will not increase at a rate fast enough to make up those shortfalls.

As economic activity increases, personnel and skills shortfalls are likely to grow. Enterprises will need to make the most out of available skilled people. Resource management centralization with technology that enables better decision support for project planners and resource managers as well as self-service capabilities for employees will be key.

Appendix A – Desired Characteristics of a State-Of-The-Art Resource Management System

There are four primary use cases for a resource management tool:

- Resource assignment and time reporting
- Skilled resource assignment
- Portfolio resource capacity planning
- People capability management

Resource Assignment and Time Reporting

The use case for resource assignment management is that a functional manager is responsible for assigning someone on their team to do the work required by a specific project. Under this scenario, the timing of the request is based on priority order. This process often leaves the functional manager struggling to find any capacity among a team of people who are already fully committed to other work. The most common tool used by most organizations is a simple spreadsheet.

This manual system works well enough for co-located organizations under about 50 people where conflicts and shortages can be negotiated directly between parties. Most organizations quickly add some form of time capture, visible to both resource and project managers, to help clarify where resources are spending their time and help resolve bottlenecks.

Over 50 people, an automated system becomes enormously useful because it's difficult to know where they spend their time. In a perfect world, people's days go according to plan. In the real world, people get interrupted by emergency meetings, new problems only they can fix, or the annoying reality that the solution or approach they'd planned to take to complete an activity simply isn't going to work. It should be common sense that time allocations that don't leave slack will always be wrong, but that lesson seems impossible for organizations to learn.

A good time reporting system forces an organization to deal directly with the real world by:

- Capturing all time spent working on planned projects and admin activities as well as unplanned activities
- Reporting the actual time spent on a project vs. the planned allocation (with forced task switching because of too many simultaneous assignments, this number is often up to 30% higher[7])
- Offering automated time reporting solutions can reduce the time spent on time capture activities by as much as 40%

- Enabling users to view current assignments and self-assign outside of current project assignments
- Allowing back-channel problem escalation through the use of the comment field on the timesheet

The last benefit in the list is rarely mentioned on any vendor product sheet, but according to a project manager we once worked with, it was the primary benefit of the system. In his company, the IT controller read through the comments submitted on the timesheet every week to ensure problems directly affecting the staff weren't accidentally overlooked or swept under the rug. While this only works in companies whose cultures are oriented toward quickly solving problems, it might make sense to make it a routine activity in today's tumultuous labor environment.

Skilled Resource Assignment

For an organization with more than 200 people working on projects, assigning the right people to the right work is more important now than ever before. The definition of the right person is the individual whose combination of skills and knowledge allows them to get the work on the project done in the shortest amount of time.

The 'great resignation' created an environment where people are asking for jobs that allow them to grow and develop in their careers. Meeting this desire will require companies to recognize and treat people as individuals, which can't happen if work is assigned based on the job title of 'Program Analyst 3'. Traditionally, organizations have been slow to adopt skills and competencies tracking as a primary part of resource management. In discussion with a VP responsible for a large PMO, she shared that while HR had some skills data in the HR system, she was only allowed access to the skills of the people who reported directly to her. Going to LinkedIn to find the skills and background of the people in your organization seems a little silly, which is finally leading companies to look for tools that can support their current extended use case (see example below)

Competency Gap Analysis/Assessment

Name	Adaptability	Business Acumen	Collaboration/ Synergy	Decisiveness	Design Thinking	Diversity Mindset	Digital Dexterity	Growth Mindset
Employee 1	-	=	+	+	=	-	+	=
Employee 2	=	+	-	-	-	=	-	-
Employee 3	+	=	=	=	+	-	=	=
Employee 4	+	+	+	+	+	=	+	+
Exceeds	2	3	3	3	0	1	3	3
Meets	2	2	1	1	3	3	1	1
Below	1	0	1	1	2	1	1	1
Meets or Exceeds %	80%	100%	80%	80%	60%	80%	80%	80%
Below %	20%	0	20%	20%	40%	20%	20%	20%
Goal	80%	80%	100%	80%	100%	100%	100%	80%
Difference	0	20%	-20%	0	-40%	-20%	-20%	0

Figure 10 Example of a Competency Gap Report (provided by Prosymmetry)

Portfolio Resource Capacity Planning

No matter how talented and capable the people in an organization are, something will break if they are assigned more work than they can do in a reasonable number of hours. Again, prompted by the Covid-19 pandemic and the recognition that their people were reporting burnout at record levels, organizations are starting to realize that they need to do a better job at sequencing the work they prioritized based on the availability of their staff members. This concept isn't new, but it takes a sophisticated software system to do it easily. What's required is a "what-if" resource capacity planning capability that allows you to model and prioritize projects against resource availability.

Most companies consider their portfolio process complete once they have prioritized their projects. From a strategy execution standpoint, companies are missing the final step. Once the initial prioritizations have been completed, resources must be assigned to the projects. Unfortunately, experience has shown that there are never enough people to do all the work a company wants to do in the order they wish to do it; this creates a need for "second-order" prioritization. What-if forecasting offers the ability to take a select group of projects with immediate start dates and resource them. Tempus Resource includes a What-If Scenario Planning feature that gives you a sandbox to plan your projects and see the impact to resources as scenarios change. Progressively lower-urgency projects can also be added to that group until all the resources are gone. While this will disappoint managers whose projects had been tentatively funded but not staffed, it frees everyone to get more work done faster.

Another advantage that companies gain from using this capability is making changes more rapidly. The Analyst Syndicate recommends companies increase their planning reviews to at least once a quarter. This capability allows management to decide which projects to delay and which to speed up to ensure that resources are being used most effectively. This desire to move to more real-time decision-making has advanced the concept of a strategic roadmap into a necessary supporting tool for resource management. Even though it's been possible for decades to show a list of projects against a timeline in Gantt format, people mentally process a roadmap as being inherently more sequential. With a roadmap, A must come before B. If B needs to be delayed, then it is renumbered, and another project or product becomes the second project in the sequence (B).

To support making the best decisions about where to invest people and money on an ongoing basis, organizations also need advanced reporting. Most resource management tools have reporting capabilities, but very few of them are "fit for executive reporting." A well-designed tool should allow executives to see results when they need them and not have to wait for someone to prepare them in a separate reporting tool.

People Capability Management

It should be no surprise that the Covid-19 pandemic has changed the paradigm of what and how people expect to relate to their job. While HR has concentrated on helping people deal with the stress of being mismanaged, the emerging discipline of people capability management focuses on removing those sources of stress and replacing them with the positives of job-related growth and personal development.

People Capacity Planning: Obtain demand forecasts, obtain supply information, match staffing requirements with planned work, manage staffing allocation, manage in-process conflicts to ensure timely delivery

Skill Development of Existing Staff: Forecast required skills, identify current skills, evaluate skill health, recruit skilled individuals, develop internal training programs

Team Development: Stop assigning random people to projects and concentrate on building high-performance teams. These high performing teams foster a results orientation and support interpersonal relationships, stakeholder commitment, conflict tolerance, discipline, risk orientation, and interdependence

Create a People-Friendly Culture: Align people to the right work, optimize career goals, create opportunities, foster personal mastery, encourage agility, and increase independent thinking and action

Develop Cultural Agility: Cultivate resilience, respect, adaptiveness, awareness, and tolerance in work relationships. Support cultural intelligence & global mindset

Where people capability management is heading in the future

Human Resources and Resource Management will eventually need to learn to work together. HR is utilizing AI to develop skill ontologies, which is a nice idea, BUT still based on the assumption that working with human beings to find out where and how **they** want to build their careers is unnecessary. HR is also doing some very good work on the talent marketplace. Again, the only problem is that they focus on filling new positions rather than on career progression for existing staff. The 'Great Resignation' proved one thing. If you aren't giving employees what they need to be fulfilled in their work, they will look for their sense of purpose somewhere else.

The talent marketplace graphic (as shown below) is the best idea we've seen to give employees the options they desire with their current marketplace.

Appendix A – Desired Characteristics of a State-Of-The-Art Resource Management System

A decision to adopt a talent marketplace approach forces an organization to embrace a philosophy of continuous learning, allowing the employee to plan their own career through a next-assignment request process and agreed-upon planned rotations. A talent marketplace also recognizes that the gig economy is here to stay and that some contractors would like to establish a longer-term relationship with a select group of companies.

Case Study: Manhattan Construction Company

With projects spanning eight geographic regions, Manhattan Construction Company (Manhattan) desired enhanced visibility into their entire workforce. To gain the visibility they needed, Manhattan turned to Tempus Resource and its purpose-built resource planning features.

Manhattan's preconstruction department was looking to improve resource utilization related to the estimating workforce. "Operations does projects that last six months to three years or more. But the team in preconstruction may work on a bid pursuit for a week or a couple of days," explains Justin Bell, Senior Project Controls Manager. "So, the preconstruction workforce schedule and assignments have a much more rapid turnaround."

As a result, the team was interested in tracking preconstruction team members' availability, getting a full picture of each team member's workload, and capturing accurate timesheet data.

Before moving to Tempus, the operations group used Excel as its portfolio management system, which worked well but siloed the department's information. To enhance its workload view, Manhattan selected Tempus Resource for a project portfolio management (PPM) solution.

Selecting Tempus Resource

For Manhattan, Tempus Resource stood out as the best PPM alternative.

"Most of the software I've worked with in the past has a database type structure," explains Justin. "Tempus Resource is different. It's engineered very well. The basic architecture of it is extremely solid. It just makes sense. And it's easy to customize it and get data and reports out of it very easily."
-Justin Bell, Manhattan Construction Company

According to Justin, other platforms focus on things like the web interface or some particular piece of functionality. They were built to handle simple matters such as assigning carpenters to a specific project. Tempus Resource, on the other hand, gives users a stronger foundation. It's flexible enough to handle complex projects.

"Once we took a look at Tempus Resource, we had a high level of confidence that it was an excellent fit for our needs," says Justin.

Implementing Tempus Resource

Implementation of a new software platform is often a hurdle for organizations. That wasn't the case at Manhattan.

"Implementation was very easy," shares Justin. "One of the real advantages of Tempus Resource is you can add it to your enterprise system without creating a massive amount of maintenance and customization. It's quite easy to stand up."

Case Study: Manhattan Construction Company

Gaining National Visibility During a Pandemic

Things happened fast when the COVID-19 pandemic struck in early 2020. “Projects popped up faster than normal and needed to be completed faster than normal,” shares Justin. “So, we had an increased need for knowing who was available and what the immediate needs were on an inter-regional level.”

For instance, Manhattan needed to move people who were working in Texas up to Oklahoma to complete a project on schedule. Then there were projects that were about ready to start but were paused.

“This all was sort of a stress test for resource planning that normally wouldn’t have been there,” confesses Justin. When it came to available personnel, Tempus Resource created visibility so Manhattan could see who is available or what is needed.

With that visibility, managers could have internal discussions about which team member should be assigned to which region. Essentially, Tempus Resource allowed users across all regions to manage resources that were not inherently theirs to manage.

“It all works smoothly within Tempus Resource,” says Justin. “When we run the reports, it’s easy to see issues such as when someone is not assigned to anything or when someone is over-allocated.”

Displaying the Best-Case and Worst-Case Scenarios

Tempus Resource empowers Manhattan to produce a best-case and worst-case report. They assign to each new project a probability of winning it. So, when the data is exported, it is easy to forecast their resource needs. Then, managers can have discussions that validate and balance those needs to develop the most accurate forecast possible.

One report is company-wide but broken down into eight regions. It shows the maximum and the minimum number of people needed day by day projected out for an entire year. This helps Manhattan determine its staffing needs over time. Then, there is a report that is a list of projects and what the resource needs and timeframes are for those projects.

“These reports make us much more effective at resource planning on a national level,” confirms Justin. “In the past, if you needed somebody, you had to guess whom to call or email. Now, there’s something to prompt you for it. The information is right at your fingertips.”

Case Study: Manhattan Construction Company

The Bottom Line

Justin is pleased with the impact that Tempus Resource has had on the organization's project visibility. "I think it's great, and I would definitely recommend Tempus Resource," shares Justin.

"I've looked at other options in this market space. And if I had to pick again, I'd come right back to Tempus Resource."

About Manhattan Construction Company

Founded in 1896, Manhattan Construction Company is a fifth-generation family-owned company that provides preconstruction, construction management, program management, general building, and design-build services throughout the United States, Mexico, Central America, and the Caribbean. Manhattan's portfolio of work includes sports, mission-critical, healthcare, government, education, laboratory, aviation, transportation, convention, casino, hospitality, warehouse, and distribution facilities. Manhattan is a 15-time Associated Builders and Contractors (ABC) Accredited Quality Contractor (AQC), an ABC 2019, 2020, and 2021 Top Performing Contractor, a nine-time STEP Diamond Safety Award Winner, and a 2019 National Safety Excellence Award winner.

ManhattanConstruction.com

Survey Authors

Dr. French Caldwell, DLP

French has three decades of experience in thought leadership roles. He is a co-founder and managing partner of The Analyst Syndicate. He was Gartner's research leader of research communities for technology and public policy; governance, risk and compliance; and legal IT, and a Gartner Fellow researching impacts of disruptive trends and technology on public policy. He is also a retired nuclear submarine officer.

Donna Fitzgerald

Donna has been a thought-leading author in Program, Portfolio, and Resource management for over two decades. She spent ten years as a Gartner Analyst, where she started Gartner's resource management research efforts. Her resource management experience includes acting as a product manager for Oracle's first resource management product. She currently serves as the Chief Product Evangelist and Chief People Advocate at Prosymmetry, and she is a contributing analyst member of The Analyst Syndicate

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

For more information about Tempus Resource please contact:

P 877-880-8788
F 866-495-1734
info@prosymmetry.com
ProSymmetry.com

Address
2000 Auburn Dr,
Suite 460
Beachwood, OH 44122

About ProSymmetry

From its founding, ProSymmetry has been focused on providing the tools to allow companies to manage their staff as human beings and not just resources. Understanding that despite the common mantra that resource management software should be able to manage any type of resource, ProSymmetry has always understood the subtleties of managing people. Tempus Resources is "purpose-built" from the ground up to do resource management, which ensures the features and quality of the product are designed to get people to the right project and the right time.

Contact ProSymmetry to Schedule Your Free Demo

THE ANALYST SYNDICATE

The Analyst Syndicate is a community of independent analysts, analysts who are now working in the industry, and subject matter experts from technology firms and service providers; a community that delivers wide-ranging value to both technology buyers and sellers. We also gain and share insights within this broad community of analysts, technology and business executives, and technology and service providers subject matter experts. The Analyst Syndicate is disrupting the way industry analyst firms—and the analysts who drive them—serve our community, technology providers, and businesses. We gather and share insights from our community, and we distill them into their essence in various forms, including written work, podcasts, briefings, and advisory sessions. Our roster is filled with the most senior, well-respected analysts who built their reputations at the world's top analyst firms.

Bibliography

[1] Dan Miklovic, "Predictions 2022: Manufacturers Can't Count on Technology to Save Their Business," The Analyst Syndicate, December 1, 2021, https://thansyn.com/predictions-2022-manufacturers-cant-count-on-technology-to-save-their-business/.

[2] According to How Common are Bad Bosses? 13% of European workers are struggling with bad bosses, and 30% of employees in the US believe they have a bad boss

[3] Ultimately we believe resource management will be used for all functional areas of the business, but for the moment, until skill adoption becomes enterprisewide, it is primarily project focused.

[4] Beyond Burned Out HBR 2021

[5] ERP systems all provide some skill management capability for HR. The issue is the skills HR has been chartered with tracking, primarily soft skills that enhance promotability, are not the hard skills required to properly resource a project.

[6] Research shows that the penalty can be as low as 20% and has high as 80% based on multiple assignments (Gerald Weinberg). We chose to use an average of 30% for this research.