

RESOURCE MANAGEMENT AND CAPACITY PLANNING BENCHMARK STUDY 2013

Commissioned by Planview® conducted by Appleseed Partners and OpenSky Research

When it comes to resource management and capacity planning, organizations, regardless of size, scope, or activity face critical challenges that they must address to optimize their resources and thus mitigate project delivery delays and overruns, quality issues, and, in the long term, negative bottom line impact.

Key findings of this comprehensive benchmark study include:

Pain

The impact of constant change, lacking visibility into capacity and incoming demand, and an inability to effectively prioritize demand.

Business Risk

Lost revenue and increased costs due to missed market windows, staying forever in crisis mode, and resources wasted on the wrong projects.

Opportunity

Increase maturity level of resource management and capacity planning to enhance productivity, visibility, and prioritization of demand.

Executive Summary

The results of an in-depth study on resource management and capacity planning at project-based organizations are in. People are arguably the most valuable resources of any organization; as such, the results of this study shed light on vital information for any organization that commits human resources to deliver products, projects, and/or service engagements.

More than 600 executives and managers from around the globe and from a variety of functional areas including IT, Product Development, Services and enterprise PMOs participated in the survey, making it one of the most comprehensive bodies of research on the matter.

Key Findings

PAIN POINTS

By a wide margin, the top three pain points of resource management and capacity planning are: the impact of constant change; lack of visibility into capacity; and ineffective demand prioritization (Figure 1).

The report delves into the common causes of these pain points, details how they vary by maturity level (and do they ever!), and explores the best practices that mature organizations use to overcome them.

Additionally, 80% of study respondents indicated that they share resources across projects, teams, departments, and/or countries. This often results in those resources becoming overcommitted and misaligned, which can lead to project overruns, and resulting in revenue, cost, and quality issues.

BUSINESS RISKS

The top four equally rated risks identified by nearly half of all respondents were: *lost productivity due to poorly optimized resources; operating in crisis mode; not leveraging the best resources for the highest value projects; and delayed time to market.*

Top Pain Points Surrounding Resource Management and Capacity Planning

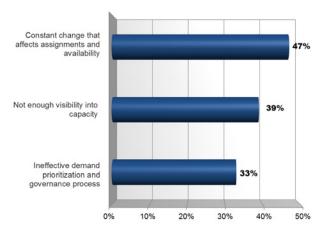


Figure 1. Top Pain Points

One-third to half of the participants also identified significant business risks, such as *limiting the ability to "connect the dots"* and *leading to a failure to act* of not addressing pain points with improved processes and the use of enterprise software.

MATURITY: MOVING FROM CHAOS TO CONTROL

In this survey, participants categorized their organizations by resource management and capacity planning maturity level. At the lowest maturity level, organizations are chaotically reacting without visibility into incoming demand; at the highest, they are exercising control in planning their resources strategically. By and large, those surveyed are early in their maturity: only one-third have achieved a high level of maturity when it comes to these activities and processes (Figure 2).

The survey shows a direct correlation between high resource management and capacity planning maturity levels and an organization's ability to plan, prioritize, and adapt to change. Not that high maturity should be mistaken for nirvana, while organizations at the higher maturity levels experience better visibility into capacity and demand, and therefore increased control over their resources, they do still feel pain – ironically, often arising from the enhanced insight they have achieved.

The report provides definitions of the maturity levels, insight into the characteristics of organizations at the various maturity levels, and the dangers and opportunities for those operating at the lower maturity levels.

The Six Characteristics of Mature Organizations

Organizations that have moved from chaos to control in their resource management and capacity planning processes:

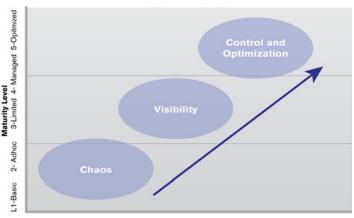
- 1. Have insight into what people are working on, can identify bottlenecks, and run scenarios on-demand to adapt to change
- 2. Meld top-down with bottom-up approaches to capacity planning and resource management
- 3. Have a dedicated function to run resource management and capacity planning activities
- 4. Agree on these top three best practices: prioritization; what-if analysis; executive buy-in
- 5. Estimate projects well and have good supporting processes in place
- 6. Use project portfolio management software to optimize their resources

Summary

If it wasn't clear before, this report reveals just how much risk businesses take on when they don't address resource management and capacity planning processes. "Do more with less" isn't just a bad punch line anymore: it defines the competitive edge where project-based organizations prove their worth by optimizing the capacity of their constrained resources.

But the outlook isn't all so bleak. The study also reveals that for those organizations who embrace the opportunity to improve their resource management and capacity planning capabilities, there is tremendous upside in increasing their maturity, using the proven technique of modeling themselves on those higher up the scale by leveraging best practices, the right technology, and improved processes.

Resource Management and Capacity Planning Maturity Spectrum



Resource Management and Capacity Planning State

Figure 2. Maturity Spectrum

Key Report Statistics

Of those organizations surveyed:

- Nearly 50% say that constant change is their top pain point followed by not enough visibility into capacity and ineffective demand prioritization (these vary by maturity level)
- 50% report that their top risk is lost productivity because resources are not optimized, followed by remaining in crisis mode (these vary by maturity level)
- One-third are operating at a low maturity level
- Only 5% operate at the highest maturity level
- Only 45% have specified a function to run resource management and capacity planning – a recognized best practice
- 80% share resources across projects, teams, departments, or countries leading to misutilization, misalignment, and cost and quality issues.
- The most mature organizations use project portfolio management solutions to handle these activities more than any other type of enterprise software

In this era of constrained resources – and have no doubt, it's here to stay – the benefits of increasing productivity, maximizing revenue, and cutting costs are worth the time and investment it takes to grow an organization's resource management and capacity planning maturity.

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I. Introduction

About the Resource Management and Capacity Planning Survey

Appleseed Partners and OpenSky Research, independent research firms, commissioned by Planview, conducted the first in-depth benchmark study on the state of resource management and capacity planning at project based organizations. The survey, run during November and December 2012, garnered participation from more than 600 global executives and managers responsible for the planning and utilization of human resources to deliver services, projects, and/or products for their organizations.

Use of the Survey

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Survey Objectives

The survey was conducted to further understand the state of resource management and capacity planning at large, complex, project-based companies and organizations. Executives at these organizations have expressed, through a variety of adjacent surveys and studies, that "having too many projects for their resources" is their number one pain point, leading to concerns about maximizing the productivity of their most precious resource: people.

To date, there has not been a study this comprehensive on the subject, one that covers global organizations and spans various facets of business including IT, Product Development, and Services Delivery. The objective of this survey was to delve into the disciplines of resource management and capacity planning and identify the maturity level of these organizations; the top pain points specifically for these areas; causes; risks; and other aspects of people, process, and technology. An additional goal was to understand the characteristics of the most mature, best performers in these areas and the best practices that they recommend.

Survey Participants and Methodology

The survey started by conducting phone interviews with executives and managers of large, project-based organizations. This served to develop the online survey conducted by Appleseed Partners and OpenSky Research. Participants were qualified as being part of their organization's resource management or capacity planning process.

The survey garnered worldwide participation as follows:

- · 51% identified as North American
- · 27% identified as European
- · 15% identified as global
- · 7% identified as rest of world

In terms of size by annual revenue, 54% had greater than \$500M USD in revenue and 14% of those were greater than \$10B USD in revenue. Forty percent of the participants were executives and leaders of their organizations' PMOs and lines of business. More details about revenue and titles may be found in the appendix, section IX.

Participants were asked what groups their resource management and capacity planning process covered, which in many cases covered more than one area. This broke down as:

- 281 participants (42%) for Product Development
- 260 participants (38%) for IT
- 154 participants (23%) in Services (contracting resources to external clients)
- 145 participants (21%) for their Enterprise PMO (EPMO).

Note that not all questions were required and that respondent numbers are provided for all graphs. Because of this, the total number of responses for any given question varies from the total number of survey respondents.

As the targets for the survey were larger companies, the total population was based on 3,000 global companies. The survey had 677 total respondents providing a confidence interval of +/- 3.3 at a 95% confidence level.

Please see IX. Appendix and Demographics for more details on demographics of the participants.

II. Maturity Level

A. Maturity Level in Resource Management and Capacity Planning

One goal for this survey was to establish measurable resource management and capacity planning performance benchmarks. Therefore, participants were asked to identify their maturity levels in these areas for the functional groups under their management such as IT, Product Development, Services, and EPMO.

Figure 3 shows the resulting ranking of participants rating their organizations from a Level 1-Basic to a Level 5-Optimized maturity level.

Those levels are described below:

Which of the following best describes the maturity level of your group(s)?

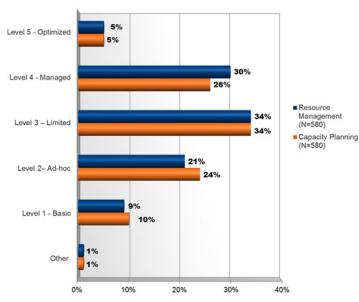


Figure 3. Maturity Level

Capacity Planning Maturity Levels			
Level 1-Basic	 Very limited understanding of capacity or demand No process for visibility 		
Level 2-Ad-hoc	 Visibility is limited and relies on ad-hoc processes Not feasible to consolidate resource visibility across the groups/projects 		
Level 3-Limited	 High-level visibility of how staff and contract resources align with demand Not a complete or repeatable process 		
Level 4-Managed	 Effective planning process with visibility of role-level demand before work is committed Can balance organization-wide capacity against prioritized pipeline Still difficult to adapt to changes and reprioritize 		
Level 5-Optimized	 Our planning is continually monitored based on up-to-date capacity and demand data Can run scenarios to manage change and prioritization Can apply our most valuable resources to the highest-value projects 		

Resource Management Maturity Levels				
Level 1-Basic	 Unable to view workload and activities from a resource perspective Basic understanding how resources are grouped by role (i.e. engineer, analyst) Assignments are made verbally, and resources are often overbooked or idle. No data to show resources' start/end dates, committed, etc. 			
Level 2-Ad-hoc	 Track high-level deliverables or key milestones against a project Informally coordinate availability and assignment mostly by generic role, process is manual 			
Level 3-Limited	 Project- or phase-level named resource assignment and simple role-based planning Visibility into the projects each person is working on / percent time allocated, no roll-off dates Actual time completed captured, little on upcoming assignments 			
Level 4-Managed	 Detailed project schedules with short-term named resource assignments Resource requests are at the role level Resource assignments are made at a task level for better visibility Global resource visibility, but difficult to adapt to changes and reprioritize Ability to select from low-cost resource pools/offshore resources 			
Level 5-Optimized	 Mature work and activity planning process. Detailed, task-level schedules, cost information Formal process to request and approve resources by role and skill, short/long term Adapt to change and iterate effectively Project managers ensure that resource assignments on projects are current and accurate, resources cam provide feedback 			

In broad strokes, organizations at the lower end of the scale tend to operate more chaotically, with little visibility into demand and capacity, and would be realistically described as reactive rather than optimized. Those towards the middle have gained visibility but still have opportunity in terms of asserting greater control over optimizing their resources. And organizations in the upper levels are concerned with more strategic issues as they continually reprioritize projects and people as change happens.

The fact that two-thirds of companies are operating at maturity Level 1-Basic to Level 3-Limited in resource management and capacity planning shows that there is a great deal of room for improvement. Only 5% of all organizations are optimized across both resource management and capacity planning, but it is encouraging that greater than 25% of participants have broken through to achieve the Level 4-Managed bracket of maturity and providing more than a simplistic level of visibility. These organizations have an effective planning process with visibility into role-level demand before work is committed, the ability to balance organization-wide capacity against demand, views into detailed project schedules, and the ability to make resource requests and assignments at the role/task level.

The maturity level breakdown into thirds was consistent for each of the functional groups for IT, Product Development, Services, and EPMOs but the underlying pain points and causes do shift by functional group. It is worth noting that smaller companies, those with less than \$500M USD in annual revenue, were slightly less mature than their larger counterparts but that overall the company size results did not show a significant measurable difference.

The report examines pain points, causes, business risks, best practices, and software use through the lens of maturity. This helps demonstrate how addressing resource management and capacity planning with the right people, process, and technology can deliver organizations from a condition of chaos into a state of control and optimization and the resulting business benefits.

Note: In the report, results are broken out by resource management and capacity planning group, and for certain cuts of the data where it was statistically valid and consistent, the maturity levels were combined and data was presented by the blended maturity across both processes.

When interviewed, here is what one respondent had to say about his organization's maturity level and journey:

"We are currently operating at a Level 3-Limited maturity: some parts of our company have an effective pipeline planning process; other parts are not yet as effective. We are working to achieve a Level 4 or 5 and intentionally plan to get there."

—Project and Resource Manager, Major Telecom Company

III. Resource Management and Capacity Planning Pain Points, Causes, and Risks

A. Pain Points

The top resource management and capacity planning pain point for organizations is *constant change that affects assignments and availability* by a 5–10% margin versus all other pain points, depending on maturity level.

Change is always hard, but particularly for organizations managing hundreds or thousands of shared resources, often in multi-country, dispersed departments. Nearly 50% of respondents have resources in multiple countries and 80% reported that they manage shared resources.

Figure 4 shows pain points by maturity level. Beyond constant change, mature companies rate their second and third pain points as *ineffective demand prioritization, and ineffective management of shared resources* respectively. These strategic pain points vary distinctly from the more acute demand and capacity visibility issues faced by organizations lower in the maturity matrix.

It is the Level-3 Limited maturity organizations that stand out with their sharp response to more strategic pain points than those operating at Level 1-Basic or Level 2-Ad-Hoc. It appears that now that they benefit from some visibility, they are more aware of their challenges around change, prioritization, and effective management of shared resources.

The data above echoes initial phone interview comments made by participants, in that frustrations around change,

Top Pain Points by Maturity Level

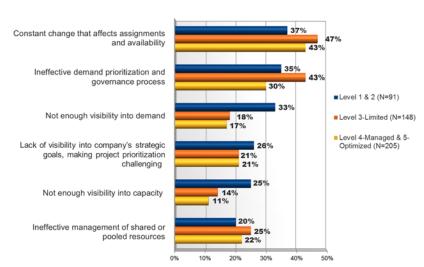


Figure 4. Top Pain Points by Maturity Level

prioritization, and effective resource management were consistent throughout this study. Respondents voiced tremendous concern that resources are assigned to projects without sufficient information and due consideration of priorities. Constant change also has implications on resource availability and bottlenecks. And without visibility into accurate demand and supply data, and lacking the ability to perform what-if analysis, organizations are making in-process changes without knowing their downstream effect. As a result, resources often are overcommitted or poorly leveraged, with direct impact on the business.

When interviewed, here is what several respondents had to say on the topic:

"It's a big challenge to get accurate information about our resources' skills, so we can match up to the right people with projects."

- PMO Manager, Information and Communications Technology Services

"Our biggest challenge is to react to changing demand, which is very important. It is ever changing and the average planner has to have the right tools to manage it."

- Program Manager, Large Clinical Research Organization

"When we started we had a huge problem with visualization of data. Now that we have software and processes, we are in much better shape and now we're working to mature beyond visibility."

— Program Manager, Consumer Goods Product Company

B. Pain Causes

One goal of the survey was to understand not just the pain points around resource management and capacity planning, but the perceived causes of the pain. By understanding underlying causes, organizations will be better able to address them effectively.

Figure 5 shows pain causes by maturity level.

Pain Causes for Mature Organizations

As compared with their less mature brethren, mature organizations, those in the Level 4-Managed and Level 5-Optimized groups, were 10-20% less likely to indicate lack of process maturity as a cause of pain. Yet 40% of these mature organizations indicated that challenges in estimating projects still plagues them. Even with processes in place and advanced use of software, many of them still find this a challenge. The high importance of project estimation is due in no small part to its serious downstream impact: when projects are misestimated, resources can end up allocated to new projects and products before their work on the misestimated project is complete. Mature organizations should examine this cause closely to understand and address it.

Causes of Resource Management and Capacity Planning Pain Points by Maturity Level

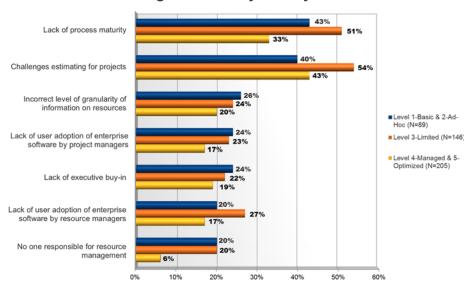


Figure 5. Pain Point Causes by Maturity Level

Pain Causes for Limited Maturity Organizations

More than half of Level 3-Limited maturity organizations indicate that the *lack of process maturity* and *challenges estimating projects* are pain causes, by about 10% or more than any other group. As organizations move up the continuum of maturity and gain more visibility, which these organizations have done, it appears that they see the causes more clearly and connect the dots that these issues are causing larger pain. This same group showed a similar phenomenon on their top pain points; percentage-wise they overwhelmingly indicated a higher awareness and concern about the top three to four pain points than all other groups. It is also possible that they are not as highly ranking some of the pain causes that, if addressed, could help them in the area of process maturity and project estimation. For example, with more executive buy-in, they might get more cross-organizational support for implementing process and addressing estimation problems.

This group also indicated a greater issue around *lack of adoption of enterprise software by resource managers* than other groups. As this group is more likely to have software now, it may reprioritize this issue upon realizing the impact of key people (resource and project managers) not using the software, which renders capacity and resource information inaccurate.

Pain Causes for Early Maturity Organizations

While Early Maturity organizations – Level 1-Basic and Level 2-Ad Hoc – showed some of the same top pain causes as the previous groups, what stands out for them is that their third pain cause is the *incorrect level of granularity of information on resources*. This ties back to their top pain point: a *lack of visibility*. The other groups are not running into this issue to the same degree.

A quarter of this group understands that their pain causes tie to a *lack of executive buy-in, lack of user adoption of software for resource and project managers*, and *no one responsible for resource management*. It is notable that only a quarter of these organizations realize this is a possible cause of their pain points. Ironically, addressing each of these pain causes would greatly assist with their top pain cause of *lack of process maturity* as it has so effectively at more mature organizations.

When interviewed on the subject of what causes pain points, here is what one respondent had to say on the topic:

"We're good at the demand side but not the capacity side: the assumptions simply aren't right. Right now our project managers can't see the availability, skill set, or weeks of effort. If the resource managers are not using the system to provide the needed visibility, even the best-laid project plan can't be properly resourced."

— Senior Manager PMO, Large Insurance Company

C. Business Risks

During the survey's initial phone interviews, one issue that surfaced is that many organizations, especially those in the lower reaches of the maturity matrix, lack executive buy-in to implement improved processes and invest in the software needed to address resource management and capacity planning challenges.

Figure 6 shows the top business risks of not leveraging improved processes and enterprise software to address resource management and capacity planning, as identified by respondents.

The takeaway here is that five critical business risks were selected by more than a third to half of participants across all maturity levels of not taking action to improve processes or using enterprise software to manage resource management and capacity planning activities:

- Lost productivity
- · Wasting high-value resources on low-value projects
- Delayed time to market
- · Misalignment leading to quality and cost issues
- Slow decision making

Business Risks of Not Addressing Resource Management and Capacity Planning with Improved Process and the Use of Enterprise Software

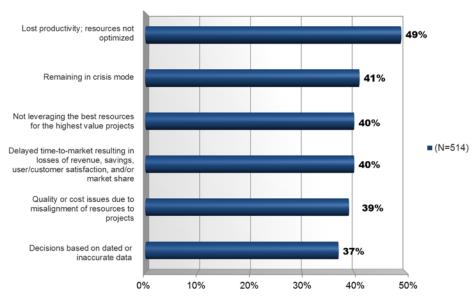


Figure 6. The Business Risks

The second-highest business risk is that of staying in crisis mode. This risk reduces by half or more as organizations move up the maturity spectrum and their visibility into demand and capacity increases.

All of these business risks can easily incur hits to the bottom line, be they revenue cuts or cost hikes. If executive buy-in for process and software adoption is lacking, it would appear that these executives haven't been made aware of the risks, or their potential impact.

When interviewed on the subject of business risks, here is what several respondents had to say on the topic:

"Our biggest risk is having different versions of the truth and schedule."
- Senior Project Manager, Semiconductor Products Company

"The risk of not addressing resource management and capacity planning is going from crisis to crisis and our resources being unclear on what to work on, which can lead to the risk of projects not getting done on time. We can work at a certain degree of risk but one key concern is quarterly planning meetings, at which projects are given the green light when we are not clear that we have the resources to support them. Another risk is overcommitting and overworking resources and losing the good people. If we have the right plan in the first place, this would not be a problem."

— Strategy and Planning Authority, Large Manufacturer of Communications Devices

IV. Best Practices, People and Processes

A. Best Practices

Organizations are very interested in the best practices of the top performers and most mature organizations in terms of resource management and capacity planning.

Mature organizations' top six best practices are:

- Performing what-if analysis on capacity plans to determine the best use of resources
- 2. Establishing the right degree of granularity for reporting
- 3. Better prioritization
- 4. Consistent training and education
- 5. Established and communicated processes
- Creating specific resource management and capacity planning roles

Best Practices - Reported by Maturity Level of Organization

Level 4 or 5	Level 3	Level 2 or 1
Performing what-if analysis on capacity plans to determine the best use of resources	Better prioritization	Better prioritization
Establishing the right level of granularity for reporting	Established and communicated processes	Establishing a vision and management buy-in
Better prioritization	Create specific resource management and capacity roles	Established and communicated processes
Consistent training and education	Establishing a vision and management buy-in	Create specific resource management and capacity roles

Figure 7. Best Practices by Maturity Level

Contrast that with four best practices of lower maturity organizations, illustrated in Figure 7, and the struggle with basic blocking and tackling of prioritization and the need for management buyin is evident. Mature companies already have a vision for their resource management and capacity planning strategy, executive buy-in, and established processes and are focused on optimizing resources and productivity. While it did not make the top four best practices, the runner-up for mature companies is having a dedicated function for managing resource management and capacity planning activities in their organizations. It is a positive sign that organizations in the Limited maturity bracket recognize that *creating specific resource management and capacity planning roles* as an important practice to address.

Organizations were also asked what type of approach they use for resource management and capacity planning: 1) bottom-up resource management on projects; 2) top-down capacity or FTE planning; or 3) a combination of the two. The most mature companies used a combined approach that allows everyone in the organization to share responsibility tor resource management, making this a strongly recommended best practice.

With a foundation of consistent processes and the right software in place, the benefits of the best practices that Level 4-Managed and Level 5-Optimized organizations employ are clear and their impact on an organization's financials would be tangible. Leveraging these practices as earlier-maturity organizations make the shift up the maturity matrix should result in similarly enhanced resource optimization, improved degrees of control and visibility, and potential bottom line impacts.

When interviewed on the subject of best practices, here is what several respondents had to say on the topic:

"To do estimates, you need a baseline. Try to do it without the right software and then show others how a solution can be beneficial. You need to figure out how to capture your demand. It doesn't have to be perfect, just start somewhere."

— Program Manager, Consumer Goods Product Company

B. Function for Resource Management and Capacity Planning

The study shows that 67% of higher maturity companies have a specific role in place for resource management and capacity planning, contrasted by only 26% of lower maturity organizations. Establishing these roles was a top-rated best practice and one that Level 3-Limited maturity organizations placed as their third-highest.

For some organizations, this may be a chicken and egg scenario. They need to get vision and management buy-in to create these positions, but it is these very roles that are often the champions who gain that buy-in. It is encouraging that 40% of Level 3-Limited maturity organizations have this role in place, and it will help them drive other best practices such as effectively implementing processes, driving consistent enterprise software use, and addressing bottlenecks and problems.

In terms of where this function reports, this is split by function. For capacity planning, the function reports to:

PMOs: 37%

Executives: 26%

· Line Managers: 23%

For resource management, the function reports to:

Line Managers: 39%

PMOs: 29%

Executives: 26%

V. Technology: Enterprise Software Usage and Plans

A. Primary Software in Use Today

For the purpose of this survey, enterprise software (ESW) is software purposebuilt to help organizations with resource management and capacity planning. The survey broke enterprise software into project portfolio management (PPM) solutions, product lifecycle management (PLM) solutions. enterprise resource planning (ERP) solutions, and other ESW. Many organizations continue to use basic spreadsheets and project management tools for their resource management and capacity planning efforts.

As shown in Figure 8, more mature companies are using enterprise software and in particular PPM solutions, and fewer mature companies rely on spreadsheets and project management tools.

Primary Software in Use by Maturity Level

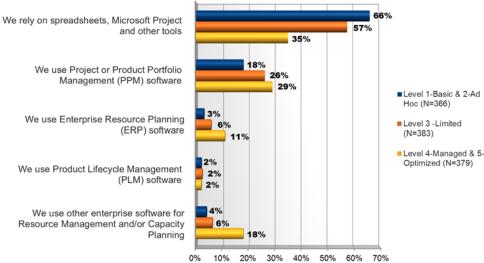


Figure 8. Software used by Mature Companies

By contrast, nearly 70% of less mature companies are using spreadsheets and project tools as their primary tool for resource management and capacity planning. As illustrated in previous sections of this report, these organizations face many difficulties resulting from lack of visibility and reporting and an inability to adapt to change. The Limited-Level 3 companies stand out the most in their reliance upon spreadsheets and basic project tools and the pain points and risks identified previously in this report shine a light on this limitation for them. When considering that 80% of all organizations manage shared resources across dispersed organizations and/or geographies, the use of unintegrated, siloed spreadsheets and stand-alone project management software enables only dim visibility into what these resources are working on, let alone support of resource optimization goals.

As noted previously, mature organizations' number one best practice is performing what-if analysis on capacity plans to determine the best use of resources. This is virtually impossible to do with spreadsheets on anything but the simplest of project plans. Organizations need software with underlying relational databases of actual demand and capacity information, on-demand analytics, and dashboards to make sense of ever-increasing amounts of data.

Of course, simply buying software is not the answer. Twenty-six percent of Level 3-Limited maturity companies have implemented ESW, but without the amount of commitment, management buy-in, processes, and training support of their more mature counterparts, they can't leverage the software to enable their move further up the maturity matrix. As for those more mature organizations, it is highly encouraging that 70% of them only had their ESW for six months to two years before achieving their mature status, indicating that organizations can look for a achieve a relatively guick time to value if the commitment, processes, and buy-in are in place.

When interviewed on the subject of enterprise software, here is what several respondents had to say on the topic:

"Our epiphany moment (about using enterprise software for resource management and capacity planning) came when we could make an adjustment to an entire portfolio and actually get to the data quickly. It used to take us a really long time to get to the information we need. Now we have faith in the data, and we can get it in a matter of minutes and that means data-driven success for us."

— Process Engineer in IT, Large Insurance Provider

"When we decided to put in enterprise software (for resource management and capacity planning) we had way too many projects for the number of people we have. We were using spreadsheets and a widely dispersed team. We needed a better idea looking forward on what projects they needed to work on. Our goal now is to automate return analysis into our financial systems and roll the cost back to groups. Once we do that, we consider our organization at an Optimized maturity level."

-Senior Project Manager, Semiconductor Products Company

B. Software Usage Related to Pain Points

As reviewed above, one characteristic of mature companies is a more prevalent use of enterprise software for resource management and capacity planning. In Figure 9, the pain points are shown contrasted by organizations that have ESW versus organizations that do not and that rely instead on basic project tools and/or spreadsheets to do the job.

Organizations with ESW are challenged with more strategic issues of prioritization and management of shared resources, whereas those without ESW suffer from more acute issues of basic visibility into demand or capacity.

C. Plans to Invest

Figure 10 shows the plans organizations have to invest in enterprise software for resource management and capacity planning in the next 12 months. A quarter of participants are planning to invest in software.

The lack of more plans to implement software in this area seems out of line with the pains and risks to which organizations are laying claim. It is possible that the quarter of organizations that replied "I don't know" may be lacking the management buy-in that's necessary for these plans.

VI. Summary

A. Takeaways

1. Follow the leader: Leverage the best practices of the most mature to speed resource optimization capabilities

The research shows that organizations should address several best practices to follow their mature counterparts in improving the

Top Pain Points with and without Enterprise Software

	No Enterprise Software	After Enterprise Software
Pain 1	Constant change that affects resource assignments and availability	Constant change that affects resource assignments and availability
Pain 2	Not enough visibility into demand	Ineffective demand prioritization and governance process
Pain 3	Ineffective demand prioritization and governance process	Ineffective management of shared resources
Pain 4	Not enough visibility into capacity	Lack of visibility into strategic goals, making project prioritization challenging

Figure 9. Top Pain Points without Enterprise Software

Plans to Invest in Enterprise Software for Resource Management and Capacity Planning in Next 12 Months

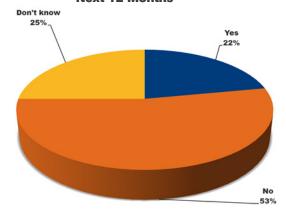


Figure 10. Plans to Invest in Enterprise Software

effectiveness of their resource management and capacity planning processes. By using the key characteristics of mature, optimized companies that are in better control and are maximizing the productivity of their resources as guidance, companies can get out of chaos, achieve visibility, and get into a position to ensure that resources are working on the right work that will deliver the greatest returns. For organizations that have enterprise software in place, continuing to focus on process improvement, communication and training, establishing functions for resource management and capacity planning, and merging both top-down and bottom-up approaches to planning will help them get more out of their investment and more productivity out of their resources.

2. Hope isn't a strategy: Business imperatives and the risk of no action

Organizations that do not have buy-in to address the ongoing pain points and challenges of resource management and capacity planning must consider carefully the business risks of lost productivity, not leveraging resources for high-value projects, losing time to market and basing decisions on bad data. These are executive concerns that deserve consideration. Continuing the status quo, simply hoping that the organization can somehow make do with inadequate processes and tools isn't a strategy for success. Not addressing overcommitted resources and productivity issues in complex, shared resource organizations can and will have direct implications in terms of lost revenue, higher costs, attrition, and lower margins.

3. From chaos to control: Making room for improvement

Most organizations have room for improvement; the good news is that it is addressable and achievable. A quarter of organizations in this study are breaking through and are solving more strategic problems than their counterparts facing chaos and basic visibility challenges. There are clear business practices, purpose-built enterprise software solutions, and proven processes that, when applied consistently and proactively, make a difference for demand and supply planning and management.

B. Recommendations

1. Establish a roadmap to move up the maturity matrix

Objectively place the organization today on the maturity model matrix, and put timelines in place for growth into the next higher bracket: realistic goals and stretch goals. Determine which best practices can be put in place immediately. Develop a roadmap of key milestones to keep things on track. If at all possible, install a function to help lead this effort and measure its success. And, as several leaders of the most mature organizations in this survey said: Just do it: start somewhere, create simple successes, build from there, and, whatever you do, don't try to boil the ocean.

2. Get executive commitment and buy-in

Show executives the business risk of not addressing resource management and capacity planning, and the business benefits of doing so. The key is using their language: management must understand the impact to the bottom line, customer satisfaction, quality, cost, and other executive concerns. Learn how others have gained management trust by networking with colleagues who have gained that buyin to get what they need to increase their organization's maturity level. Without management support, getting the process adoption and software your organization requires will be an uphill battle.

3. Put Resource Management and Capacity Planning functions in place

These functions should report to the management team and establish a vision and plan to intentionally move up the maturity model matrix. Choose a senior resource manager or planner with strong communication and leadership skills, one who understands the value of implementing process and the benefits of a centralized software solution. Having the ear of executives is key for this role.

4. Get enterprise software, stop relying on spreadsheets alone

As illustrated earlier in this report, spreadsheets and basic project management tools are not sufficient to support sophisticated resource management and capacity planning activities. Enterprise software is the only way to provide a single source of the truth and accurate information. Do the research: it's not one-size-fits-all. Has anything been used in the past? Talk to colleagues, both inside and outside the organization. What do analysts and reviewers recommend? Once the decision has been made, get the executive mandate that resource and project managers use the software consistently. Not only will the entire organization experience a profound improvement in visibility and have access to the right level of information, but managers and executives can be presented with critical what-if scenarios and accurate data for better prioritization and decision-making.

5. Novel idea: Use historical data to estimate

As discussed previously, a top cause of pain points is challenges in estimating projects. A primary way to improve project estimation is to leverage historical data from similar projects to make more informed and accurate estimates. This will not only cut cycle times from the estimation process itself, it will ensure better resource allocation downstream, with all its associated benefits. Enterprise software combined with best practices and processes are key to mitigating this issue and improving this common challenge.

C. Next Steps

If you would like to learn more about more effectively optimizing your resources, please take advantage of the following resources:

- Check out the podcast, The Capacity Quadrant: 4 Keys to Demystifying Resource Management. Listen to top-selling author Jerry
 Manas and managing editor of Enterprise Technology magazine Ali Klaver as they reveal the four distinct dynamics that can greatly
 improve success and help an organization become proactive instead of reactive with resource management.
 Listen now at Planview.com/Capacity-Quadrant.
- Download the white paper Un-Common Sense Planning: 11 Tips that will help you start fresh and abandon the practices that lead to inefficiencies and chaos to maximize your valuable resources.
 Get it today at Planview.com/11Tips.
- 3. See the video *Right Resources*, *Right Projects*, *Right Time* to gain an understanding of how PPM software can be part of solution that moves your organization up the maturity model matrix.

 See it at Planview.com/Right-Resources.
- 4. Read *Planview Enterprise for Resource Management* to find out how Planview Enterprise can help you plan capacity and keep projects on track by balancing change and demand against your most valuable resources.

 Download it at Planview.com/RM-Solution.

VII. About the Chief Researcher

Maureen Carlson is a partner at Appleseed Partners, an independent marketing consulting and research firm. Maureen has 20 years of experience in high technology, business-to-business marketing, research, and consulting. She has focused on product marketing for hardware, software, and professional services and has deep experience across various market segments including Manufacturing and Healthcare. She is the researcher and author of three benchmark studies with Planview focused on Product Portfolio Management. Follow Maureen on Twitter: @mocarlson.

VIII. About the Sponsor

This study was sponsored by Planview, a leading provider of portfolio management software, with hundreds of enterprise customers around the world. Planview helps organizations maximize business opportunities by optimizing the capacity of their finite people and financial resources. The company's comprehensive solutions successfully manage a wide range of portfolios spanning product development, IT, services, and corporate finance. The result is an enterprise-wide, analytics-driven view of resources against demand.

IX. Appendix - Demographics

A. Responses by Industry

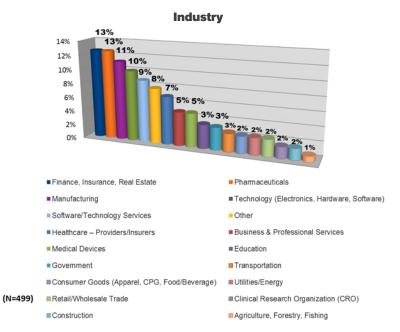


Figure 11. Participating Industries

B. Responses by Annual Revenue – Revenue

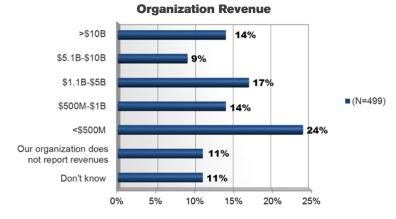


Figure 12. Responses by Annual Reveneue

C. Region

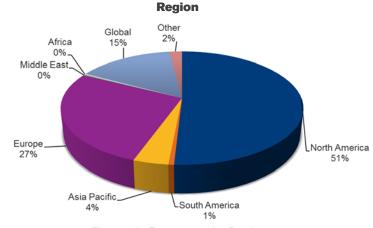


Figure 13. Responses by Region

D. Role

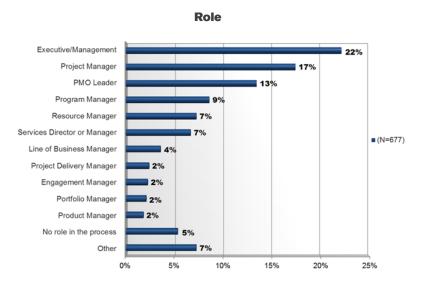


Figure 14. Participating Roles

E. Groups Covered

Functional Group(s) that Resource Management and **Capacity Planning Process Cover**

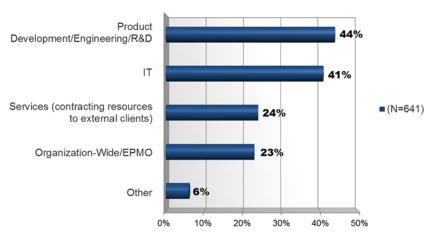


Figure 15. Functional Group/Department

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