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YOUR PROJECT EXPERTS



TPG eBook

Tactical Resource Planning

Your Road to Successful Coordination between Project and Line Managers



TPG eBook Tactical Resource Planning

Chapter 1: Challenges of Tactical Resource Planning



CONTENTS

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CHAPTER 1

THE CHALLENGES OF TACTICAL RESOURCE PLANNING

INTRODUCTION

Resource management has become very important in recent years. One reason is often more people are required than are available. Another is that the required qualifications change ever quicker.

Hence, most innovative companies need a professional solution to achieve optimal employment of their existing resources, timely identification of new positions, and qualifications and adequate staffing of these positions.

Often, companies try to resolve these challenges with **methods and tools from project and portfolio management**. This seems natural, as innovations are made in the context of projects. Plus, resource management is an essential component of project management. Unfortunately this often does not work out as intended, or it can take a very long time before successes in resource management are seen.

The reason for this is that only a fraction of companies work in a pure project organization. In such a case, project managers can put together their project teams at their own discretion.

The team members of the project would have no responsibilities outside of projects. However, most companies work in line, matrix or hybrid organizations. And, in such environments, the huge challenges of tactical resource planning become apparent.

Note: The focus of this eBook is on tactical resource planning. By this planning, we mean the formation of teams for projects with suitable staff as well as the coordination of resource use between team leader and project manager. Due to the nature of their roles, team leader and project manager do not always pursue the same objectives. This makes tactical resource planning one of a company's most challenging tasks.

Unfortunately, there is no SINGLE right way to establish a system for project and resource management. In this eBook, you will benefit from our many years of experience.

With this knowledge, you will be able to develop your own ideas and your own road to a suitable solution for tactical resource planning.

Also: Throughout this eBook, the terms resource management and resource planning are interchangeable.

Before turning to the contents of the first chapter, let us distinguish the different terms.



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OVERVIEW OF THE DIFFERENT AREAS OF RESOURCE MANAGEMENT

Resource management is a broad field. In the context of project management, it can be divided into three areas.

We define them as follows:

Strategic resource planning

This encompasses the long-term planning of staff qualifications and capacities. Its aim is to master current and future projects in line with the company's strategic focus. The question is:

Which, and how many resources

- Will be necessary for the upcoming projects and operations?
- Will need to be obtained or trained?

In most cases, portfolio managers take on this task. From the project managers, they need the current requirements at the level of skills / capabilities. The team leaders have to provide the available staff with the required qualifications. We will not elaborate upon strategic resource planning in this eBook.

Tactical resource planning

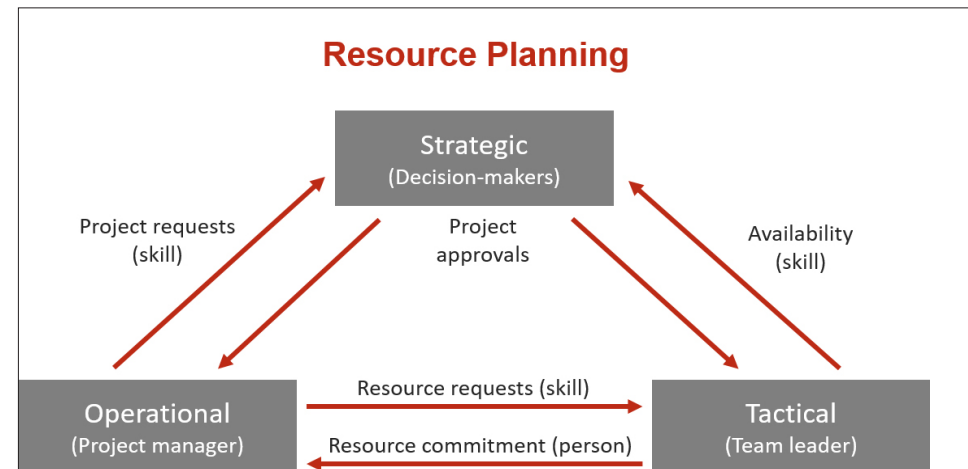
By this, we mean the medium-term formation of project teams. It includes the ongoing coordination between project manager and team leader for the employment of staff in projects and operations.

The team leaders commit resources with the corresponding qualifications at project level to the project managers as requested.

This eBook focuses on the field of tactical resource planning.

Operational resource planning

This we define as the project managers' ongoing detailed task planning for the assigned resources in the individual projects at task level. We will discuss operational resource planning in this eBook.



The correlation between the three types of resource planning

This eBook will look only at the **tactical aspect of resource planning**. The first chapter will introduce you to specific challenges of tactical resource planning. It will also deal with its dependency on the company's form of organization and the differences between the responsibilities of team leaders and project managers.

DIFFERENT PERSPECTIVES FOR TEAM LEADER AND PROJECT MANAGER

Project managers plan by assigning resources to the tasks of their projects. They hope to actually obtain those resources in the end.

Ultimately, though, the team leaders decide which projects the resources are assigned to. Only they are responsible for the resources. For both, resource planning is anything but easy because:

- Efforts may not have been calculated as required.
- Staff members are not as interchangeable as imagined.
- Project scope and delivery dates may not remain as planned.
- Staff absences may come unexpectedly.

What's more, project managers and team leaders are looking at the same staff members from different perspectives.

- **The project managers** want to be as flexible as possible in assigning people to the detailed tasks of their projects. It is their goal to meet delivery dates under changing conditions.
- **The team leaders** aim to organize the employment of their team members in such a way as to achieve the right workload at all times. They want to avoid overload. Aside from activities for projects, they need to consider absences and operations, too. Often, project managers lack this insight. And team leaders have to master this task again and again.

DIFFERENT FORMS OF ORGANIZATION – DIFFERENT ISSUES

Depending on the form of organization at the company, the planning of team leaders and project managers will differ.

The two forms are either line organizations or matrix organizations.

- In the **line organization**, the teams deliver results to project managers.
- In the **matrix organization**, staff members from the teams are made available to the project managers.

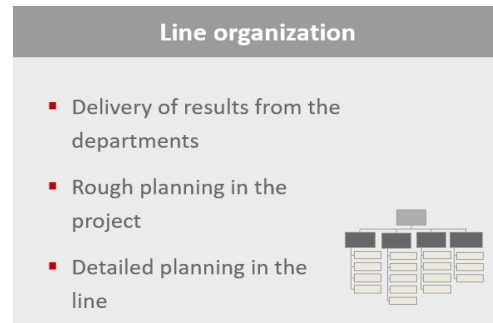
Of Book, there are **hybrids** of the two organizations. For instance, components can be provided in the line. But the integration leading to the final result happens in a matrix with representatives of all component teams.

In both forms of organization, both team leaders and project managers plan from their respective perspectives.

Obviously, they do not plan twice to the same extent. Rather, their plans complement each other or are compared with each other at the appropriate level.

LINE ORGANIZATION – WHAT TO DELIVER WHEN?

In the line organization, the project manager receives results from the teams. For this purpose, he or she specifies rough work packages. The team leaders plan these work packages in detail and manage their implementation.



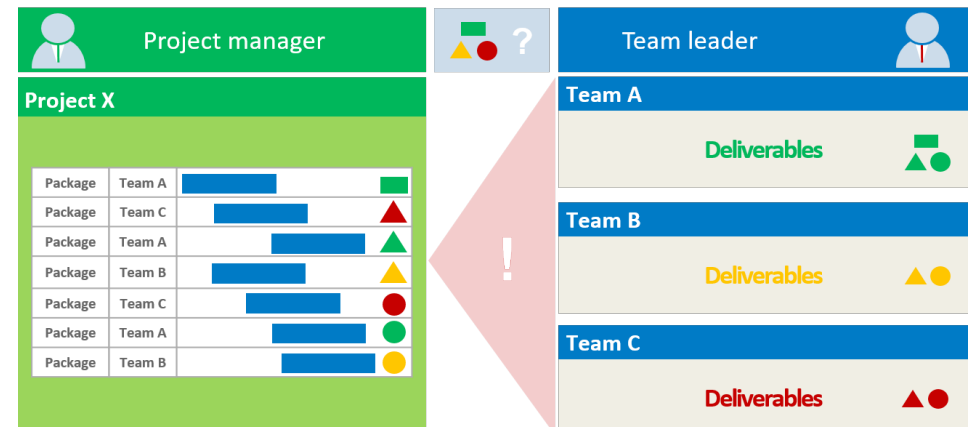
Which person is working on what task does not tend to matter to project managers. However, most project managers do want to co-determine who will be working on the requested delivery.

In the line organization, project managers and team leaders

usually agree on requested deliverables for appointed delivery dates. Gratifying the project managers' requests for particular staff members is certainly conducive to a good working atmosphere.

In this case, resource planning remains with the team leaders for the most part. This can be seen as the **advantage** of this form of organization, as project managers are exempted from this activity.

On the other hand, it is a disadvantage that project managers lack direct access to the resources. In the worst case, they could be dissatisfied with the quality of the delivery as a consequence.



Staff planning in the line organization – team leaders deliver results to the projects

The responsibilities of the project manager in the line organization are mainly:

- Scheduling
- Agreeing with the team leaders on the results to be delivered

The team leader is also the resource planner planning the details at task level. This allows team leaders to coordinate delivery dates and efforts with the project managers. In this case, using a project-planning tool tends to work well for the team leader. But this is on the condition that the tool supports the comfortable alignment of tasks and milestones between projects and sub-projects.

As a project manager in a line organization, you need to pay close attention to the structuring of the project plans. A neat project structure fosters the coordination with the team leaders.

Controlling plans with inappropriate structures entails additional effort. This can be avoided. Moreover, there is a risk in that you may not be able to identify undesirable schedule developments in good time due to lack of clarity.

Our tip: In a line organization, you need to pay close attention to the structuring of the project plans. In the Book of the coordination, it is important to compare, or even link, deliverables to be produced by the teams with the team leaders' planning. A neat project structure benefits the coordination and increases clarity.

MATRIX ORGANIZATION – WHO IS EMPLOYED IN WHICH PROJECT? AND WHEN?

In the matrix organization, staff members from different teams are committed to project managers. To this end, project managers assign the desired staff members, or even only skills / capabilities to the detailed tasks in their projects.



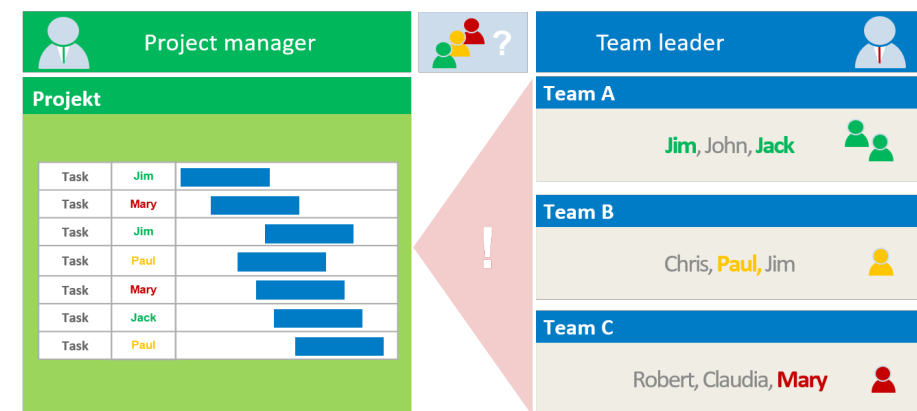
At project level, the sums of the assignments per person or skill are sent to the team leaders as requests. The team leaders require their own rough planning to be able to select and commit the requested resources.

After checking and selecting available and suitable team members, the team leaders commit them to the project managers. They enter the committed time periods roughly into their own planning per person and project.

The matrix organization has a drawback for the project managers. They can only select the staff members for their project only to a limited extent. As long as the qualifications are adequate, this should be a secondary problem.

The **benefit** for the project managers is that they can employ the team members freely in their project within the committed scope. When rescheduling, further alignments are unnecessary, as long as the agreed timeframe is not exceeded.

Team leaders also **benefit** from the matrix organization. They are better able to look after the qualification and supervision of their team members. After all, they do not have to devote themselves to the detailed planning of the work packages.



Staff planning in the matrix organization – project managers request resources from line managers

In this form of organization, project managers are thus occupied with the classic planning of tasks and resources. They have to coordinate the assignments of the latter with the team leaders at project level.

To be able to select and commit team members, team leaders need an appropriate overview of their own. But among the tools for project management they are unlikely to find this. Therefore, the necessary coordination often takes place only verbally, by email or via Excel.

This is the reason for the bulk of **coordination problems**. Team leaders have to handle many requests. Plus, the requests often change.

Hence, the following applies: As long as the team leaders lack a rough planning tool of their own, resource planning in the matrix organization will not succeed.

In a matrix organization, adequate coordination processes are essential due to the high effort for coordination. The same goes for the tools that project managers and team leaders have to work with on a daily basis.

Both the coordination processes and the tools are indispensable ingredients for this form of organization and will be the subject of the following chapters.

Our tip: Due to the large efforts needed to coordinate, be sure to establish adequate coordination processes in a matrix organization. Provide the right tools, too – for the project managers as well as for the team leaders.

SUMMARY

This chapter has introduced you to the particular challenges of tactical resource planning. Team leaders and project managers have different tasks and look at the same people from different angles. The team leader wants to see the members of the team well occupied and trained. The project manager, on the other hand, wants to complete the project on schedule and in the necessary quality. The two do not always see eye-to-eye: The project manager does not always get the desired staff members with the best qualifications.

The challenge of tactical resource planning is to reconcile the two perspectives. Depending on the form of organization, the planning of team leaders and project managers will differ, too. In the line organization, the project managers receive results from the teams. In the matrix organization, staff members from the teams are made available to the project managers.

Team leaders in the matrix organization have to handle many requests from the projects. And these requests often change. Resulting in most of the coordination problems. In this case, team leaders require their own rough planning. The eBook goes into particulars about this in Chapter 3, where we address some of the process requirements.

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1

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Chapter 2: Checklist for Tactical Resource Planning

CHAPTER 2

CHECKLIST FOR TACTICAL RESOURCE PLANNING

In chapter 1 of this eBook, you learned about the particular challenges of tactical resource planning. These challenges depend on the company's form of organization. We looked at how resource planning by team leaders and project managers differs between line and matrix organizations.

This second chapter provides you with a checklist that will allow you to capture the status quo of tactical resource planning at your company. In the subsequent chapters of this eBook, we will elaborate on the topics addressed here.

With the checklist below, you will get an initial overview of where you might find potential for improvement.

To recap: By tactical resource planning, we mean the coordination between project and line managers. It depends on the company's form or organization (matrix or line). The goal is to meet the requirements for resources with the necessary skills for projects in a timely manner using staff from the line. This tends to be the team leaders' task.



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CHECKLIST

YES NO UNCLEAR

1 Prerequisites

1.1 Do you have a central resource pool?

(Benefit: Everyone accesses the same list of staff members, which is kept up to date as much as possible.)

Your notes:

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1.2 Do you have up-to-date information on the capacities of the staff members, e.g. by recording all working time models?

(Benefit: Only based on the correct capacities, will you be able to schedule your staff members correctly.)

Your notes:

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1.3 Are the team leaders involved in the planning process, and do they maintain their own planning?

(Benefit: Resource planning can only succeed if team leaders and project managers are both involved in the planning.)

Your notes:

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YES NO UNCLEAR

1.4 Do you have an agreement with your staff council / employee organization which entitles you to process the staff members' data accordingly?

(Benefit: It makes sense to involve the employee organization in plans for a digital solution at an early stage. This will make for an adequate result according to the circumstances.)

Your notes:

2 Planning process

2.1 In resource planning, do you consider the absences of your staff?

(Benefit: You will get a realistic picture of the actual availability. This will enable you to plan better.)

Your notes:

2.2 Do you really maintain all projects in your central resource planning?

(Benefit: You will get a realistic picture of the actual availability for projects. This will enable you to plan better.)

Your notes:

YES	NO	UNCLEAR
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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YES NO UNCLEAR

2.4 Do you initially plan future project tasks based on skills / generic resources?

(Benefit: You might have to replan several times before anyone sets out to perform the tasks. In such a case, you will have to make fewer changes if you do not assign a named individual from the beginning.)

Your notes:

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3 Processes

3.1 Are all your projects prioritized? And are these priorities – including recent updates – always known to the project managers and team leaders?

(Benefit: All project participants know what is important and urgent. This is an important basis for solving resource conflicts as they arise.)

Your notes:

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3.2 Is your resource planning between project and line managers cyclical? And do your agreements remain in force for at least the current cycle and the one after that?

(Benefit: Cycles for the consolidated planning make the process calm, which is an essential success factor.)

Your notes:

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YES NO UNCLEAR

3.3 Have you established criteria and methods for escalation in the case of resource conflicts?

(Benefit: The processes become smoother and faster once everyone knows what the next step towards problem solution will be, and who is responsible.)

Your notes:

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3.4 Do your project managers take care to update their resource requests every time before coordinating with the team leaders?

(Benefit: Making quick and well-founded decisions is only possible based on current data.)

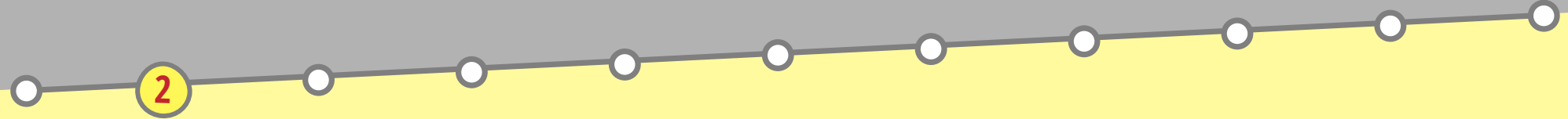
Your notes:

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SUMMARY

This checklist gives you an idea of the state of your tactical resource planning concerning present conditions, planning and processes. Some of the questions relate to topics which will only be addressed in subsequent chapters of this eBook. These are, for instance, the requirements for the processes of resource planning, the subject of the next chapter (Chapter 3).

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Chapter 3: Requirements for the Processes

CHAPTER 3

REQUIREMENTS FOR THE PROCESSES

In Chapter 1 of this eBook, you learned about the particular challenges of tactical resource planning. These challenges depend on the company's form of organization. We looked at how resource planning by team leaders and project managers differs between line and matrix organizations.

Chapter 2 was a checklist. It enabled you to get an idea of the state of your tactical resource planning concerning present conditions, planning and processes. This chapter focuses on the processes you should establish for tactical resource planning. They are determined by your company's form of organization.

To recap: By tactical resource planning, we mean the coordination between project and line managers. It depends on the company's form or organization (matrix or line). The goal is to meet the requirements for resources with the necessary skills for projects in a timely manner using staff from the line. This tends to be the team leaders' task.

REQUIREMENTS FOR THE COORDINATION PROCESS BETWEEN PROJECT AND LINE MANAGERS

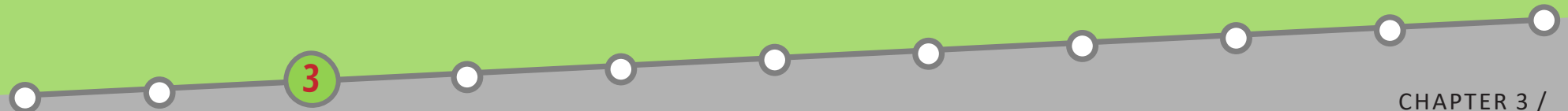
On the one hand, project managers want resource commitments from the line managers as fast as possible. For the commitments enable them to plan their projects. On the other hand, these commitments ought to be truly reliable.

Against this backdrop, the following problems emerge for team leaders:

- Multiple project managers will send repeated requests to the same team leaders at different times.
- Therefore, the team leaders cannot be said to have a stable basis for their decisions.
- Yesterday's coordination may be obsolete as early as today due to a new incoming request.
- Team members are often assigned responsibilities outside of projects. This affects productivity in projects.



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THE SOLUTION: A SUITABLE PLANNING CYCLE

The key to success is to agree on a planning cycle. This can be a very important contribution to smoothing the planning process.

Length and duration of the cycle should be defined in accordance with the lifespan of projects at your company. The organizational effort for planning and coordination needs to remain within reasonable limits over the long term.

What is important: The longer the cycle, the more stable the system. However, too long also means too rigid. Cycles between one and four weeks are customary and useful.

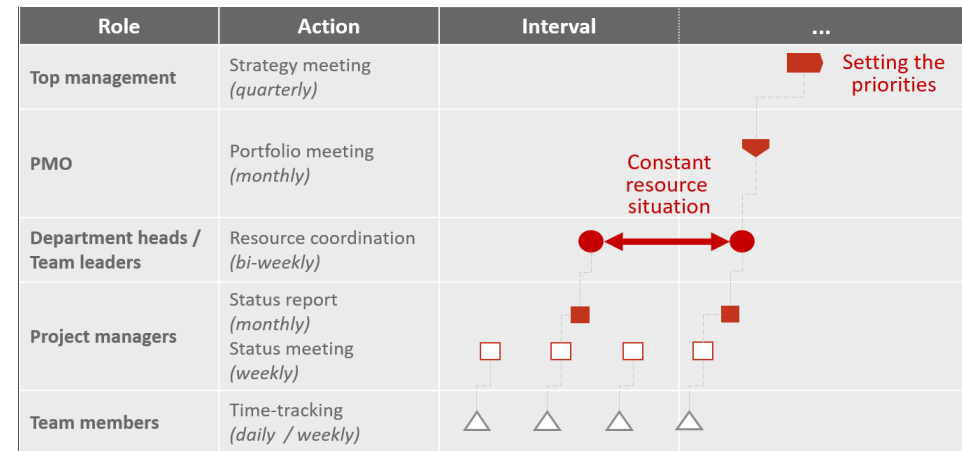
We recommend starting with a monthly cycle. This will ensure acceptance without overwhelming the organization. Only shorten the cycle once the system works and if the dynamics require it.

Our tip: Start with a monthly planning cycle. This will ensure acceptance without overwhelming the organization. Shorten the cycle to 3-2 weeks once the system works and if the dynamics require it.

And here is what you should pay attention to:

Come to an agreement with all involved that resource planning for the current and the upcoming cycle can be changed only in exceptional cases. The employment of resources should only ever be rescheduled for the cycles after that. This will save the company a lot of coordination effort. You avoid ongoing modification. Instead, rescheduling only happens at fixed intervals.

This approach obliges all participants to coordinate better. Ad-hoc changes only happen as a last resort. This fosters efficiency in execution, as each member of staff is able to work free of interference for a longer period of time. The figure below shows a process cycle of this kind across the levels of the roles involved.



Example of a process cycle across the decision-making levels

This is a practical example (see figure above):

1. First, the team members need to do their time tracking by Friday.
2. The project managers have to accept these by Monday night and reschedule the resulting remaining effort.
3. This may result in resource conflicts that only become apparent on Tuesday when all project managers have updated their planning (red square).
4. The conflicts can be resolved with the team leaders until Tuesday night or Wednesday (red circle). It is of particular importance that priorities are set according to the strategy. Again, the strategy needs to be known so that it can be considered here.
5. Finally – depending on the competencies of the PMO – there will be a meeting with a steering group / top management. This is where the resolutions are passed for all remaining decisions resulting from conflicts.

Below you will find out how the planning processes differ between line and matrix organizations.

Our tip: Agree with all involved that resource planning for the current and the upcoming cycle can be changed solely in exceptional cases. Only for the subsequent cycle may the employment of resources be rescheduled.

THE PLANNING PROCESS IN THE LINE ORGANIZATION

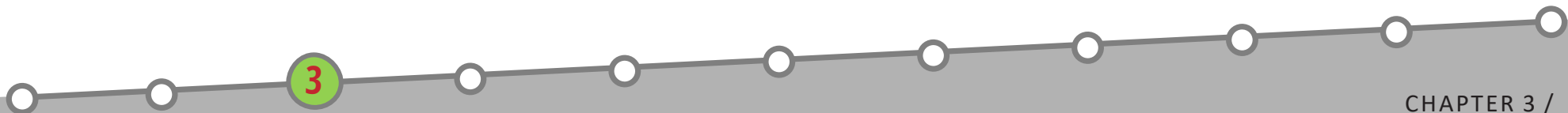
In the line organization, the negotiations are not about people but about dates for deliverables. The project managers plan which deliverables they need by what date. They pass these requirements onto the team leaders.

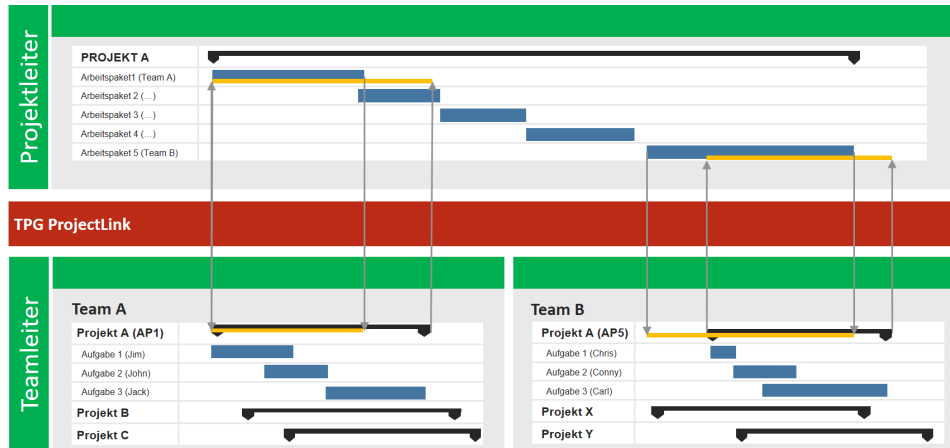
The detailed planning is done by the line managers. The project manager is not involved in resource planning at the people level.

Project managers in the line organization are mainly involved in the scheduling coordination of projects and sub-projects or work packages. Resource coordination takes place within line departments / teams. The team leader is responsible for this.

In this environment, stable process cycles and **classic PM tools** enable a transparent multi-project administration and can bring about very good results.

In a line organization, team leaders can also work with PM tools. After all, they have to plan the details, such as tasks and times including absences, for their team themselves.





Coordination process at the level of work packages in the line organization

Besides project tasks, it is also possible to manage operations in the project plan for the team. This means the team leader has to maintain only one plan, which contains all tasks of the team: Tasks from projects, absences, general and individual operations.

THE COORDINATION PROCESS IN THE LINE ORGANIZATION

The coordination process in a line organization looks roughly like this:

1. The project managers plan rough work packages – without their details and without resources but with planned efforts / budgets.
2. The project managers hand over their rough planning / milestones to the team leaders.

3. The team leaders transfer this rough planning / these milestones to their own planning.
4. The team leaders break down the work packages into tasks in their own plans. Then, they assign these solely to people from their own team or to external resources.
5. The team leaders' planning can be checked against the project managers' at the level of work packages with regard to scheduling and efforts (see yellow bar on the left in Figure 2).
6. The variances are visible on both sides. These variances provide a valid basis for personal discussions in which to coordinate and remove them.

It is important that both project manager and team leader work in their own plans. In a separate step, the two are checked against each other.

Our tip: Make sure that neither role is able to change the data of the other! In this way, project managers and team leader can plan independently. Nonetheless, there should be a technical connection between the team leader's and the project manager's planning. This will enable a data exchange for reciprocal information. The latter can serve as a basis for resource coordination.

THE PLANNING PROCESS IN THE MATRIX ORGANIZATION

The matrix organization is a different thing altogether. Traditionally, project managers plan their projects with detailed tasks. These they assign to people or skills (generic resources).

But the team leaders or the respective teams are the ones who decide which people are committed to them and to what extent. The team leaders have to consider all requests from different project managers, as well as absences and operations, to explore the possible commitments. However, it usually makes little sense to make these commitments at individual task level. As a rule, team leaders do not need to know which tasks their team members are assigned to. They are more concerned with which team member is working on what projects, and when. For this, coordination with the project managers at project level is sufficient.

Team leaders in a matrix organization have the unpleasant task of attending to the commitment of the required resources for different projects. In most cases, this cannot be done adequately with the classic tools for project management. This has a particular reason. The team leaders' commitments are not maintained as an individual data pool. Usually, they are only marked as the status of the project or task.

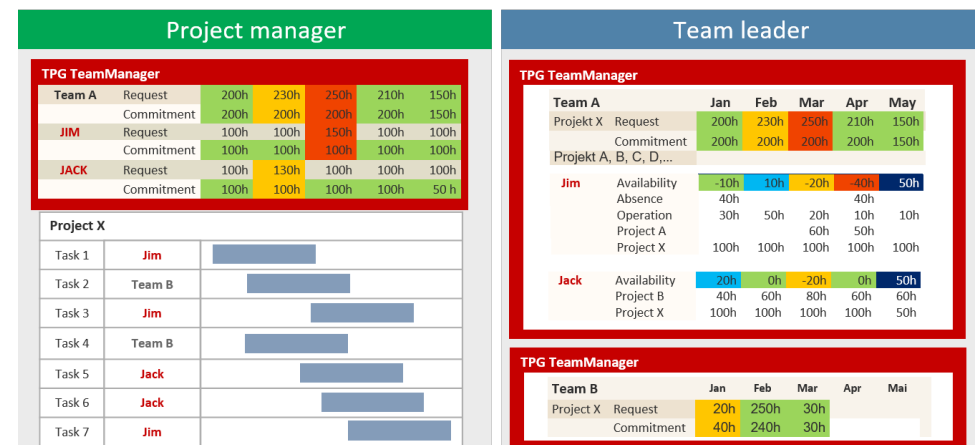
The inherent problem: There can be postponements in a project. In such a case, the staff commitments (only provided with a status) are simply postponed along with the tasks. But team leaders only ever make commitments for designated periods of time.

After all, the same resources also need to work on other projects. This is why postponements usually bring about resource conflicts which sparks new discussion (and coordination).

For the coordination, it is necessary that **project manager and team leader maintain their own planning data at the level of the projects.** These will need to be compared (see figure below).

Where there is only the project managers' planning, the team leaders are completely "at the project managers' mercy", at least in terms of the data. They can work out their own suggestions for resolving the conflicts, but this will not change the project managers' planning. Neither can they negotiate with all project managers at once.

To be able to make commitments to the projects, team leaders need to plan the absences and operations first. They can only determine the real project availability of a team member on this basis. Therefore, the team leaders need their own separate planning.



Coordination process between project manager and team leader about required resources

THE COORDINATION PROCESS IN THE MATRIX ORGANIZATION

This is what the process in the matrix organization looks like:

1. The project managers plan their projects in detail at task level.
2. The project managers assign either people or skills to the tasks.
3. The team leaders determine the project availability of their team members from capacity minus absences and operations.
4. The team leaders analyze the resource requests from the different projects. They commit their team members for free periods of time.

5. The project managers transfer these commitments (as time frames) at project level. Within these time frames, the project managers have flexibility in planning the tasks.
6. By comparing both roles' planning, variances will become visible. This provides a good basis on which new coordination can take place through personal discussion.

Our tip: Ensure team leaders in a matrix organization have their own planning in which they also manage absences and operations. It is only through this basis that true project availability is realized, and project managers will be able to confidently rely on the resource commitments.

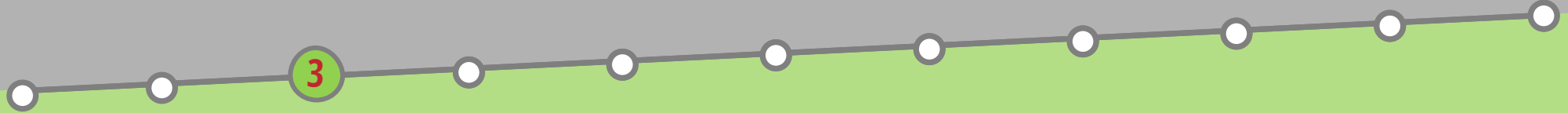
SUMMARY

This chapter has described the processes required for tactical resource planning, and, shown how these processes are shaped by the form of organization. Furthermore, we have presented examples of the coordination processes in the line and the matrix organization.

For both forms of organization, you should make sure to establish adequate process cycles, as your team leaders cannot respond to resource requests for the coming week several times a day. You need to gather requests for the cycle after next, as well as subsequent cycles, over the period of the current cycle. Responses to the requests are only required by the due date.

Ensure that the commitments for the current cycle remain as stable as possible. Changes should only be permitted in exceptional cases. This approach makes resource coordination reliable for all involved. Besides, it fosters efficiency in execution, as each member of staff is able to work free of interference for a longer period of time.

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Chapter 4: Specificity in Resource Planning

CHAPTER 4

SPECIFICITY IN RESOURCE PLANNING

In Chapter 3 of this eBook, you received recommendations for processes for tactical resource planning. These should be considered according to the form of organization.

Chapter 4 is concerned with the specificity and completeness of tactical resource planning. You learn which role these two aspects play. This will help you accomplish valid planning.

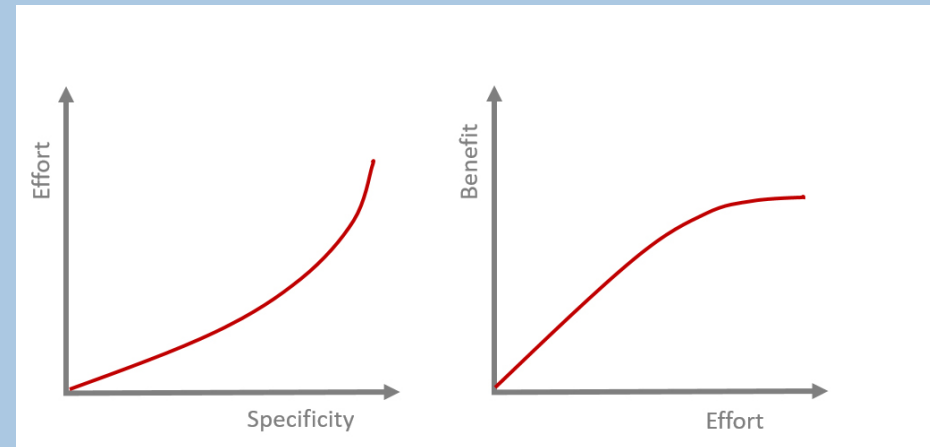
To recap: By tactical resource planning, we mean the coordination between project and line managers. It depends on the company's form or organization (matrix or line). The goal is to meet the requirements for resources with the necessary skills for projects in a timely manner using staff from the line. This tends to be the team leaders' task.

WHAT IS SPECIFICITY IN PLANNING?

On the one hand, specificity is concerned with the level of detail of planned activities. On the other hand, it is about overall currency of planning, i.e. how often it is updated.

The more detailed and frequent your planning, the more time-consuming it becomes.

If you adopt the approach that more specific planning is also better planning, you run a risk. You may be investing too much. Plus, you may not be able to sustain this planning effort over the long term.



With increasing planning specificity, the effort increases.

The benefit does not increase in proportion.



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Is it actually useful to know every day on an hourly basis what each resource is working on? Or is planning on a weekly or monthly basis sufficient for you at the level of projects or work packages respectively?

What is your optimum ratio of effort to benefit providing you with sufficient information to make necessary decisions?

Specificity in planning always needs to serve sensible requirements. This is the only way you can justify the effort.

In a **matrix organization**, team leaders do not need to commit their resources to every individual project task. It should be enough to know who is working on which project. And when. The project managers are the ones who plan the details.

Conversely, project managers in a **line organization** do not need to know each task necessary for delivery. In this case, the team leaders are the ones who plan the details.

Accordingly, everyone plans that, for which he or she is responsible. Not twice, but there will be overlaps at the appropriate level. These overlaps will serve for comparison and coordination.

Our tip: Ask yourself: “Is it actually useful to know every day on an hourly basis what each resource is working on? Or is planning on a weekly or monthly basis sufficient for me at the level of projects or work packages respectively?”

WHAT AFFECTS THE SPECIFICITY?

The decision on the necessary and sustainable specificity of your resource planning is affected by the following factors:

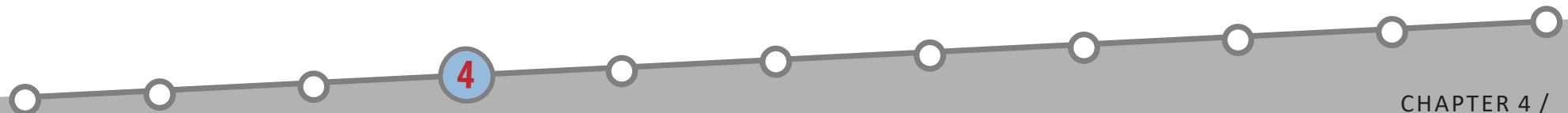
- number of resources and projects
- duration of the projects and their activities
- efforts in the projects
- complexity of the schedules
- changing work sites
- personal responsibility of the team members
- frequency of interferences

In addition, what specificity makes sense depends on the types of projects in your portfolio. There are substantial differences between, for example: small-scale IT projects; the development of vehicle components; or pharmaceutical products and plant manufacturing.

Ultimately, your task is this: Find the granularity for your resource planning, which is sustainable and proportionate to the benefit.

In our experience, you will succeed by the approximation from rough to fine. Presuppose complete planning. It is THE prerequisite for any benefit.

Our tip: Find a sustainable granularity for your resource planning, which is proportionate to the desired benefit. Go from the rough to the fine and work with a COMPLETE planning at all events!



COMPLETENESS IN RESOURCE PLANNING

As long as your resource planning rests on an incomplete basis of information, you will very likely not succeed. It must take all activities of the staff members into consideration. All activities which do not appear in your planning indicate an error in planning.

Planning errors due to **misestimations** will become smaller with increasing experience and care. Besides, such errors can usually be contained. And as a rule, stakeholders will be sympathetic about miscalculations from lack of experience.

You can also indicate minimum, probable and maximum effort in estimations. This makes it possible to determine ranges.

If, however, projects and activities do not appear in your planning, although they are carried out, you are dealing with **inestimable planning errors**. These are definitely worse. But you can, and should, avoid this kind of error at all costs. For other stakeholders will not be sympathetic about it.

Reasons for incompleteness in resource planning often are:

- Some project managers use resources in their projects without previously checking their availability. Or they are not using the right tool. As a result, the overall resource utilization does not become visible.
- Some team leaders will do all they can to make sure nobody gets an insight into their internal activities. They wish to continue their undisturbed quiet life on their little island. Thus, they undermine all efforts for transparency.

If you make statements about availabilities of staff, which are not based on complete information, you will run into difficulties sooner or later. These difficulties could show themselves as:

- unpredictable resources conflicts
- severe overload for preferred staff members
- insufficient workload for some other resources
- lack of profitability

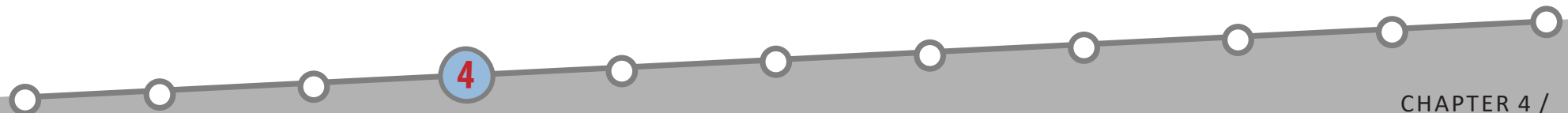
Our tip: Make sure that team leaders record all activities of the resources on their teams without fail. Otherwise, you will not be able to avoid resource conflicts.

If you do not ensure this, the information on the availability of the team will be distorted. As a result, staff members with no remaining availability will be scheduled for projects. Hence, resource conflicts are inevitable.

LEARNING TO LIVE WITH IMPRECISION IN PLANNING

The premise in planning is always the same and accordingly:

Our tip: Better to be complete and slightly unspecific in planning, than partly specific and incomplete.



As ever, resource planning is subject to frequent changes due to the dynamic environment. Examples of this can be:

- the unexpected absence of an important team member
- change requests
- the miscalculation of the effort

To optimize the effort and benefit of planning, the general rule is: Accept that you must live with imprecision in planning.

When **planning is too detailed**, it is impossible to keep it up to date in the long run. It will lag behind relatively soon. It is impossible to plan everything very specifically, as it takes too long and parts of planning will be superseded by reality. Therefore, you should be as rough as possible and as detailed as necessary in your planning.

Our tip: Live with imprecision in your planning. When planning is too detailed, it is out of date quickly and therefore ceases to be useful. Be as rough as possible and as detailed as necessary in your planning.

Thus, begin with complete planning. In the beginning, it should be updated only once a month. However, it should include all projects and activities.

There are good examples of planning projects only roughly at first. In such a case, you do not initially assign resources to tasks but to phases or even only to projects. At this stage, resources may not be individuals but teams, i.e. two developers rather than Miller and Meyer.

Once your planning runs smoothly at this level, you can begin to update it more frequently and plan in more detail.

Our tip: Small steps! Experience has shown that you should not overwhelm your organization at the beginning. This greatly reduces the risk of failure when introducing tactical resource planning.

GET THE TEAM LEADERS ON BOARD

At best, projects managers have knowledge of the workload of staff members from their project management tool. But this information is usually incomplete.

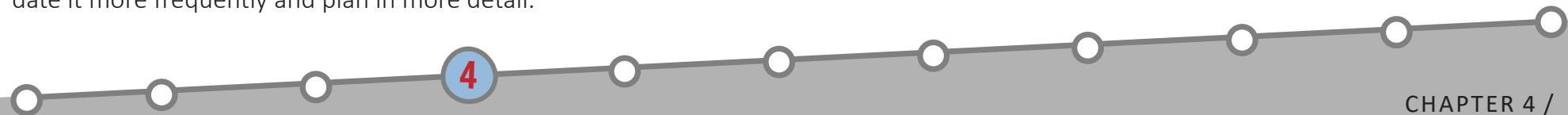
Hence, it is advisable to get the team leaders on board from the outset when planning as they are the best informed about the workload of their team. And they should be acquainted with all their team members' project assignments and other activities.

Ideally, team leaders plan from their own perspective and for their own benefit. This is to be regarded as complementary to the project planning by the project managers.

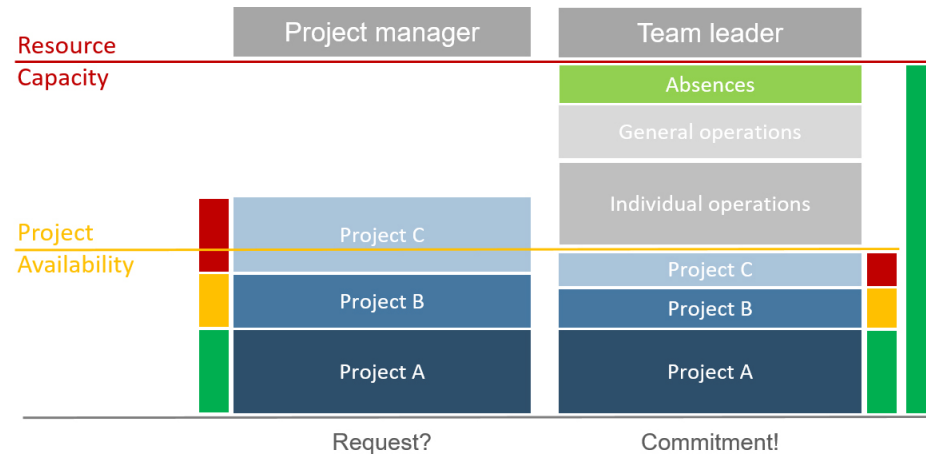
Both roles have their own planning but are using the same basis. The appropriate tool will enable a comparison between the two in order to determine the availability for projects. And here is how it works:

The team leaders specify the **project availability** of their team. It is calculated as follows (see figure next page):

- Resource capacity
- minus absences (sick days, vacation or training)
- minus the general and individual operations
- equals project availability



The following figure represents the differences in project availability as calculated by the team leader (right) and the requests from projects (left). The result is different, so Project B and C cannot be committed fully.



The deviation of the request from the actual project availability

Depending on the form of organization, the team leaders can plan or commit the time available for projects:

- In the **line organization**, team leaders can plan the project availability for requested deliverables themselves.
- In the **matrix organization**, team leaders commit their team members to projects, which requested resources from them.

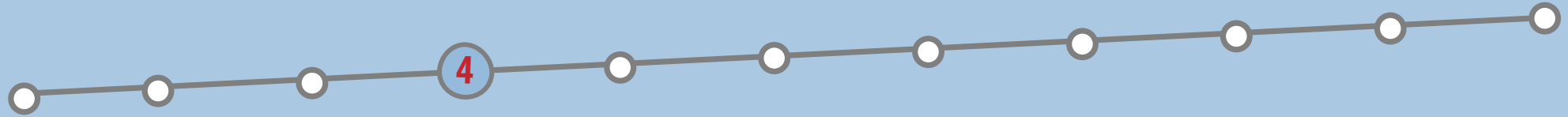
SUMMARY

This chapter has introduced you to the roles of specificity and completeness in resource planning. You have learned that it is more important to be complete and slightly unspecific in your resource planning than very specific but incomplete.

You should also get used to living with imprecision in your planning. Planning which is too detailed may not be sustainable, quickly outdated and as a consequence no longer useful. Be as rough as possible and as detailed as necessary in your planning.

The team leaders must consider all activities of each resource on their team in determining utilization. On this basis, they can determine the remaining project availability flawlessly. The team leaders' role is particularly central to making tactical resource planning work.

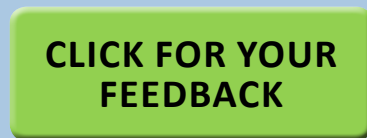
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TPG eBook Tactical Resource Planning

Chapter 5: Skills Management

CHAPTER 5

SKILLS MANAGEMENT

Chapter 4 introduced you to the roles specificity and completeness play in tactical resource planning. You now know: It is more important to be complete and perhaps slightly unspecific in your resource planning than very specific but incomplete.

You are also aware that all activities of every schedulable resource have to be considered in the utilization. This is the only way to determine the remaining project availability fairly.

The team leader plays a particularly important role in this. This Chapter in your eBook, addresses the topic of skills management.

To recap: By tactical resource planning, we mean the coordination between project and line managers. It depends on the company's form or organization (matrix or line). The goal is to meet the requirements for resources with the necessary skills for projects in a timely manner using staff from the line. This tends to be the team leaders' task.

WHAT IS SKILLS MANAGEMENT?

Skills management is a powerful tool for using resources efficiently in projects. It has a strategic, a tactical and an operational aspect.

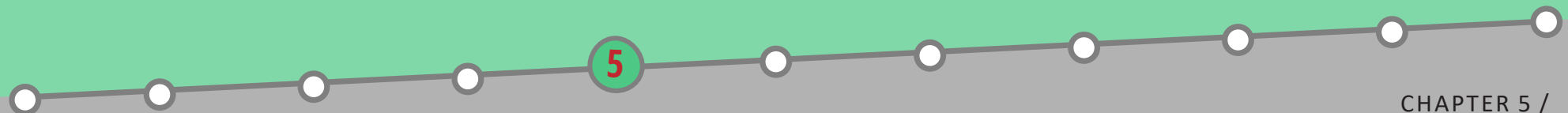
Strategic: From a strategic perspective, skills management is a combination of knowledge and human resources (HR) management. The aim is to determine the different skills required and the corresponding capacity requirements. This must be based on a strategic focus. It is possible to set priorities in good time here to advance the desired long-term development of the workforce.

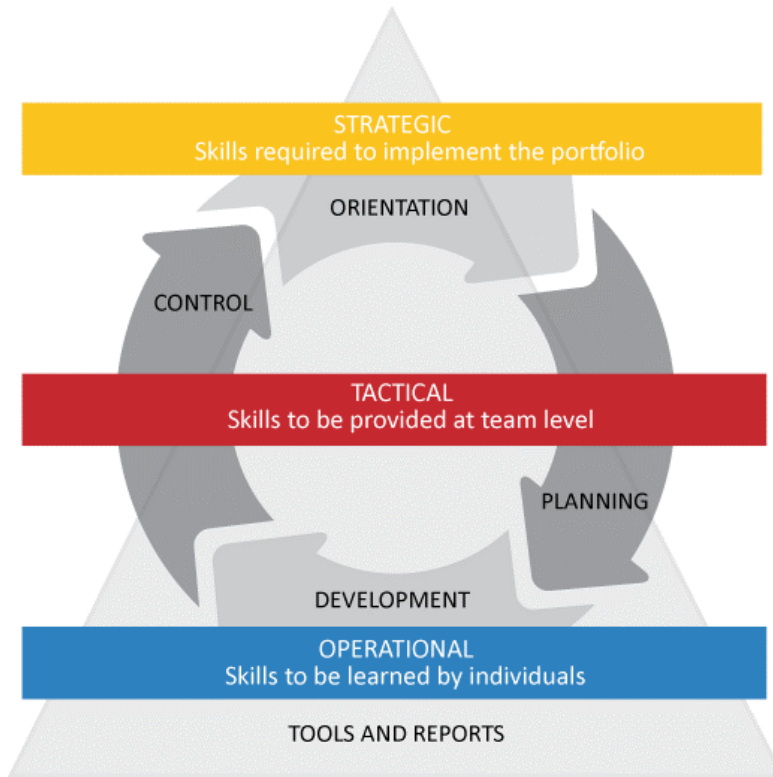
Tactical: Tactical skills management is a whole different story. Team leaders have to provide the right number of suitable staff for the required dates. In consultation with the HR department, they have to look after their training and induction.

Operational: As part of their career management, individuals receive training and development according to the requirements of their teams.



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Skills management has an influence on both strategic and tactical operational aspects

THE BENEFITS OF SKILLS MANAGEMENT

Skills are abilities possessed by a team member at the company. Usually, each team member will possess several skills. These can be software skills, product-specific knowledge, certifications (e.g. as a project manager) or languages.

From the project management perspective, skills management represents a more flexible management of resources. It makes it possible to define the resource requirements for the projects not as individuals but generically as skills.

Thus, it becomes faster to determine – in principle and before the project starts – whether a project can be carried out with the available capacities and skills. In subsequent weeks / months, the generic resources will be replaced by individuals bit-by-bit.

This approach carries an important benefit. With **generic resources**, you will can put less effort into rescheduling projects. After all, no individuals whose availability might change in the meantime are scheduled for activities further in the future.

This even permits a tool-based **automatic resource allocation**, if the skills of the staff are registered accordingly. However, this approach does not consider social aspects or other soft factors which are usually impossible to reproduce in **software**.

This is why such methods often do not produce optimal results. In such a case, software can make suggestions. Yet, it will not be able to replace fully good collaboration between project managers and team leaders.

The added value for the company is that deficits become visible. As a result, these can be specifically addressed. Therefore, you should always aim to have a team with predominantly evenly distributed knowledge.

This makes it easier to distribute the requested skills to all team members. The fewer differences existing between the team members' skills, the less complicated the planning and redistribution will be. Flexible personnel placement is also a key factor in strengthening competitiveness.

Our tip: Try to spread the knowledge as evenly as possible within the teams. The fewer differences existing between the team members' skills, the less complicated it is to plan and reallocate the requested activities.

CHALLENGES

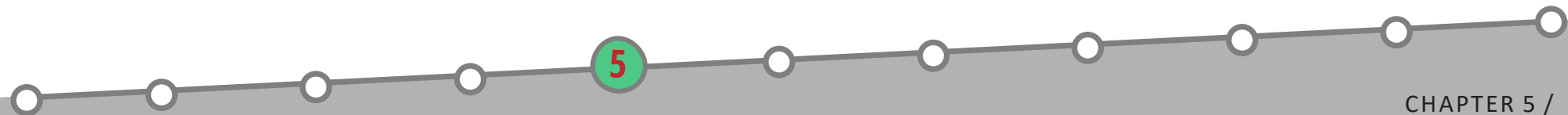
The most important prerequisite for making skills management work is this: the abilities of the staff members to be documented as fully as possible. In bigger companies, this will not be possible without the **approval of the employee organization.**

Gathering the employee-related data is one of the biggest challenges. For, once their skills become transparent, staff members often fear being disadvantaged by fellow colleagues (e.g. in personnel decisions such as promotions or lay-offs).

You will only be able to alleviate these **fears on the part of the staff**, if both sides derive real benefit from skills management. At any rate, you should ensure that the recording of skills is integrated in a consistent personnel development plan. It can include, for example, further training, incentive systems or the like.

This enables staff members to see a benefit for themselves. After all, they have improved opportunities to further develop their own skills and increase their value for the company. Once the staff see more advantages than disadvantages, you will be more likely to obtain the necessary acceptance for skills management.

Our tip: Alleviate the fears on the part of the staff and further the acceptance of skills management with a consistent personnel development plan. The collaboration with the responsible bodies is a vital prerequisite for this.



HOW TO INTRODUCE SKILLS MANAGEMENT

A good first step towards the introduction of skills management can be to record the **skills by teams** rather than individuals. In such a case, the team leader names the skills of his or her team in general.

But this makes the team leader the only one who can select individuals from the team according to their abilities. By and large, this rules out an automated selection.

On the one hand, this **anonymization of skills** will help you to reduce the fears of the staff (mentioned above). On the other hand, it may reduce the motivation in the teams, as there is a lack of personal incentives.

You would take a different approach if you wanted to plan the **individual skills** for each person. In this case, each member of staff should be requested at regular intervals to update his or her own data and to align them with the responsible team leader.

An even better system for skills management can be achieved if you also document the **level of the skills**. This gives you the details of how well certain skills are commanded by the respective team member. In the end, it is essential to know whether a newcomer can be assigned to a task or if it requires an expert.

However, this is also the most sensitive point for agreement with the employee organization. But as long as the staff members declare this themselves or a uniform qualification system exists, you should be able to overcome this hurdle, too.

SKILLS AND CAPACITIES

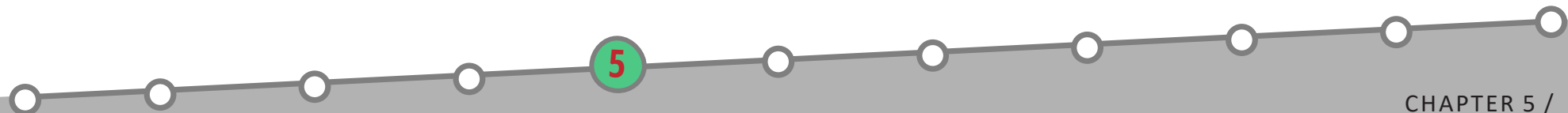
Each team member has an employment contract. From the capacity of weekly or monthly working hours, it is possible to calculate the project availability after subtracting vacation times and operations.

Ideally, you will have several **people with the same skills** on one team. In such a case, their availabilities can be added. For example, you may receive requests for three people of which you have ten on your team. You can respond to the requests easily by looking at these team members' remaining availability.

But what if your team members had different skills? Your ten engineers can handle five different technologies, but not each of them can handle all five. Some may be able to handle only one, while others may command all five.

The capacities and availabilities of the **team members with multiple skills** should be considered irrespective of the number of skills.

For example: If it is possible to have one team member, who is a project manager, software developer and database administrator, you still have one team member with three skills rather than three team members with one skill each. Therefore, you cannot state capacities per team member and skill in such a case, but only per team member.



Someone may ask about the available capacity for software developers or database administrators. The answer might be eight for the first case and five for the second. But you only have ten people on the team. Still, the answer would be correct as long as the requests do not come all at once.

After all, your individual team members cannot do everything at once. At times, they will only be able to do the one thing at a time.

For the **dilemma of the multiple skills**, the following suggestion exists: You allocate half the capacity for one skill to the respective person and the other half for another skill. But watch out: This would entail that an overload situation would appear in the case of an engagement of over 50 percent for an individual even though he or she still has remaining availability.

This is why we recommend the normal allocation of the capacity to the individuals, regardless of their skills. The skill allocation per person ensues step by step.

Our tip: Allocate the capacities to the individuals regardless of their skills at first. In a second step, perform the skill allocation per person.

SKILLS IN TACTICAL RESOURCE PLANNING

In the **line organization**, skills management at a tactical level is not very challenging. The project manager will forward the required work packages to the team leader. The latter knows the skills within his or her team. Thus, he is able to assign them optimally.

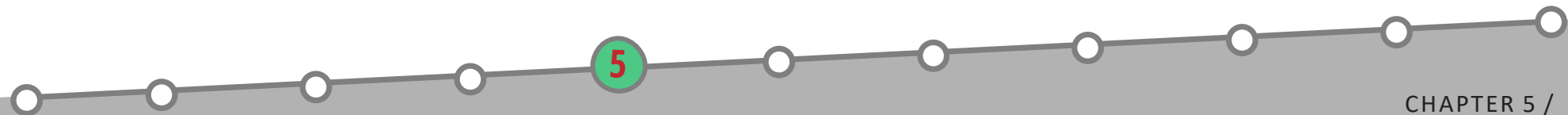
But with the **matrix organization** the project manager must define the requirements for the desired project staff members. These can be checked for accordance and availability against the available skills in the different teams. Good skills management can speed up this process considerably and therefore improve it. It will quickly become known which skills are required, who matches these at what site and how well. And who is also available besides.

A degree of **anonymization** will come with a growing number of people to assign and their dispersion across different sites. But this can actually be an advantage. It forces project managers to directly request skills rather than people, as they do not know the people.

Without skills management, they will only ever request the resources they are familiar with. Leading to specialism, which is doubly risky. The specialists are booked constantly and in cases overbooked, as alternative people for such tasks are “unknown”.

But this will not give the “known” people time to share their knowledge, nor will it benefit their health. And in worst cases the resources which are already scarce, become absent unexpectedly. This will be much more painful than maintaining a system for skills management.

What is more, **requesting skills rather than people** forces the project managers to formulate the requirements more precisely. This in turn enables the team leader to distribute the work more evenly among all suitable individuals.



Our tip: Rely on requesting skills rather than people. This allows the team leader to distribute the work more evenly among all suitable individuals.

LONG-TERM FOCUS WHEN ASSIGNING RESOURCES

When assigning resources to projects, you can distinguish between two approaches:

1. **You focus on the advantages for the project:** As a planner, you employ largely those team members that best meet the requirements. These individuals will carry out the tasks fastest and with high quality.
2. **You focus on the advantages for your company:** You rely more heavily on individuals who do not (fully) possess the required skills. These will develop over the course of the project and acquire the required know-how. This may take longer, the profit may be lower, but you create knowledge. The project will have disadvantages, but the company will profit.

Try to follow the second approach whenever possible. Ultimately, more people with frequently required skills become available this way. This makes future human resource planning more flexible.

In addition, you reduce the danger of **exclusive knowledge**. This decreases your company's dependence on individual people.

At the same time, the **motivation** of these knowledge bearers may increase if they get the opportunity to learn, become more important and can accomplish more than just routine jobs.

Our tip: As a team leader, rely more heavily on individuals who do not (fully) possess the required skills. This makes your future human resource planning more flexible, as you create knowledge in this way.

ORGANIZATIONAL CHANGES

When planning with staff skills, it is irrelevant for the project manager to know which organizational unit a resource belongs to. All he or she needs is a note as to whether there is sufficient capacity for the required skills at the required date.

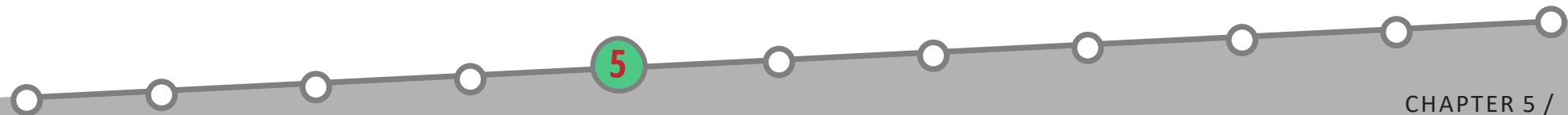
Ideally, the **software** used would suggest to the project manager which resources at the company possess the required skills. And he or she would learn whether the latter are available for the desired period.

If skills management is done consistently, the request from the projects will not be addressed to the team leader directly. The future coordination process of tactical resource planning will be possible e.g. via **central resource managers** or a **Project Management Office (PMO)**.

This becomes possible because the company organization structure changes accordingly. Certain resources could be allocated from a central and location-independent pool.

Ideally, you would have staff used **only in projects** on the one hand. These staff members would not have to carry out any operations except for team meetings.

On the other hand, you would have staff members **only carrying out operations** who would not be used in projects.



This further **increases the plannability** in the team. However, this is only possible where the tasks can be separated clearly. For this, the workload on both sides, i.e. for project activities and operations, must be stable enough to omit the necessity to change over and over again. Besides, you have to consider the acquisition of knowledge, which is often required on both sides.

THE STRATEGIC BENEFITS OF SKILLS MANAGEMENT

Let us briefly look at the strategic aspect of skills management once again. In project portfolios, it will show itself where and when **bottle-necks with capacities and skills** are expected.

It becomes possible to counteract these in good time. Targeted training, recruitment and cooperation are ways to prevent future bottlenecks.

But skills management is also beneficial in the opposite case: You learn early when you will no longer require what knowledge.

From a strategic perspective, it is essential to combine these approaches. This allows you to train people with skills that will be less sought-after in the future to meet new demands in good time.

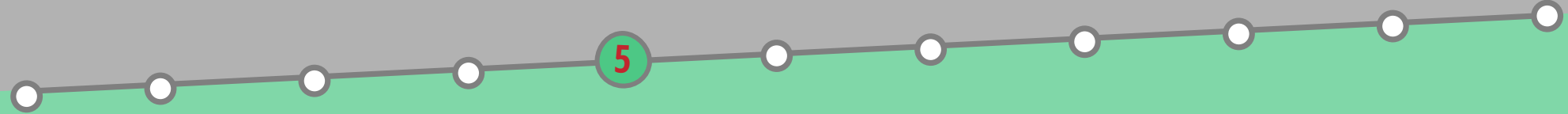
SUMMARY

This chapter has taught you that skills management is a very advanced form of resource management. You are now familiar with the most important benefits from a strategic and tactical operational point of view.

But it will not be easy to establish this approach. Reservations on part of the staff members who fear disadvantages for themselves are very common. It is possible to alleviate these if the large effort for recording the skills is tied in with concepts for personnel development.

And you know now that you should focus on requesting skills rather than individual people. This allows the team leaders or resource managers to distribute the work more evenly among all suitable individuals.

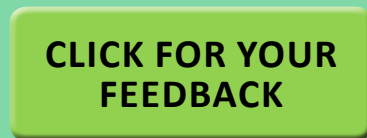
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TPG eBook Tactical Resource Planning

*Chapter 6: Software Tools for Tactical Resource Planning –
The Requirements*

CHAPTER 6

SOFTWARE TOOLS FOR RESOURCE PLANNING – THE REQUIREMENTS

Chapter 5 of this eBook series taught you that skill management is a very advanced form of resource management. You are now familiar with the most important benefits from a strategic and tactical operational points of view.

Chapter 6 is concerned with the frequent use of Excel. You will read about the benefits and limitations of this tool, which is widely used in tactical resource planning.

Subsequently, you will get to know the requirements a more suitable tool should fulfil, and you will learn what you should bear in mind when choosing a tool.

To recap: By tactical resource planning, we mean the coordination between project and line managers. It depends on the company's form or organization (matrix or line). The goal is to meet the requirements for resources with the necessary skills for projects in a timely manner using staff from the line. This tends to be the team leaders' task.



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WHY USE APPROPRIATE TOOLS?

Tools are no guarantee of success in themselves. But, you will not be able to manage without appropriate IT support once your company has reached a certain size.

Project managers can choose from a broad range of tools for project and portfolio management. But these are rarely suitable for team leaders.

These type of solutions work well for team leaders working in a **line organization**. After all, they have to plan the details for their teams themselves. Such details can be tasks and time schedules that include dependencies.

However, team leaders in a **matrix organization** need functions rarely offered by PM tools. Planning line activities and committing resources are two of these. This is why resource planning often happens in Excel. But without complex additional programming, Excel will reach its limits quickly when used in resource planning.

CHARACTERISTICS OF EXCEL SOLUTIONS

Up to a certain team size, planning in Excel for individual teams may make sense, even without additional programming.

But, it tends to get complicated with a large number of team members and likewise when planning for more than one team.

Other departments may also depend on the structured transfer of data from the teams. This poses the next challenge.

Below, you will find an overview of the advantages and disadvantages of Excel planning in tactical resource management.

Advantages of an Excel solution:

- Likely to be already available at the company, hence no additional licensing costs
- Quick setup of simple overviews
- Graphical analysis as desired
- Easy to use for the most part – anyone can “do” Excel
- Often high acceptance to begin with
- Usable offline
- printable
- programmable

If your Excel planning is well structured in the teams, this is an advantage. It can provide a good basis for a database-supported solution once your company has “outgrown” the Excel solution.

Disadvantages of an Excel Solution:

- Data in single files tend to give rise to versioning problems.
- Working with the same data, or rather sharing one file, requires a lot of effort.
- The possibility to make changes complicates a cross-team standard process.
- Individual adjustments in the table structure make it difficult to compare files.

- Solutions programmed in Excel can be kept up to date only with high effort.
- Consolidating teams in an overview is only possible if the tables of all teams are identical in structure.
- Due to the different structures, planning data can rarely be used beyond the teams.
- Data inquiry across teams is impossible.
- Access permissions are hard to enforce.

A central **database-supported tool** with an easy-to-use user interface would resolve the disadvantages mentioned above.

All the same, companies continue to work with an uncomfortable Excel solution and live with the disadvantages. This is because nobody at the company arranges for an alternative – a tool that is truly suited to tactical resource planning by the team leaders. Meanwhile, the market offers a wide variety of tools for team leaders.

PPM SOLUTIONS IN TACTICAL RESOURCE PLANNING

As mentioned above, tools for project and portfolio management (PPM) are optimized to the requirements of the project manager. The project manager plans tasks with dependencies and allocates desired or committed resources to the tasks.

Team leaders are often required to do their resource planning in the PPM tool, too. This makes sense with regard to the jointly-used data but not in terms of the functionality.



Not only does a team leader plan project activities, but also the operations and absences of team members. Hence, pure PPM tools are not the best solution. These days, there are tools able to represent both points of view – either within the same tool or as an extension to established PPM tools.

REQUIREMENTS FOR SOFTWARE TOOLS FOR RESOURCE PLANNING IN PROJECT AND LINE MANAGEMENT

A modern IT solution for tactical resource planning has to:

- Simplify the coordination process between project & line managers.
- Meet the different requirements of project managers and team leaders.
- Be easy to learn and use.

Please note: Such a solution can make direct communication between project managers and team leaders much more efficient. But it will never fully replace it.

Below, you will find a few important requirements a modern tool for tactical resource planning should meet:

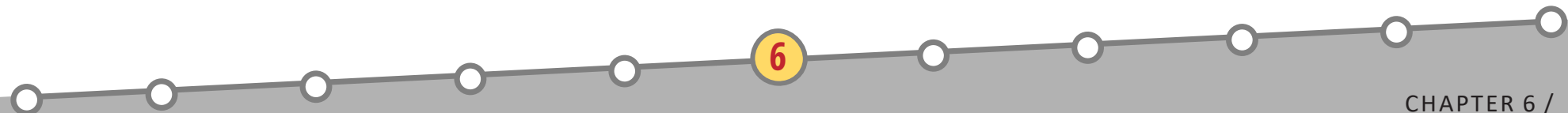
- Central, shared resource pool
- Planning with generic and named resources (skills / people)

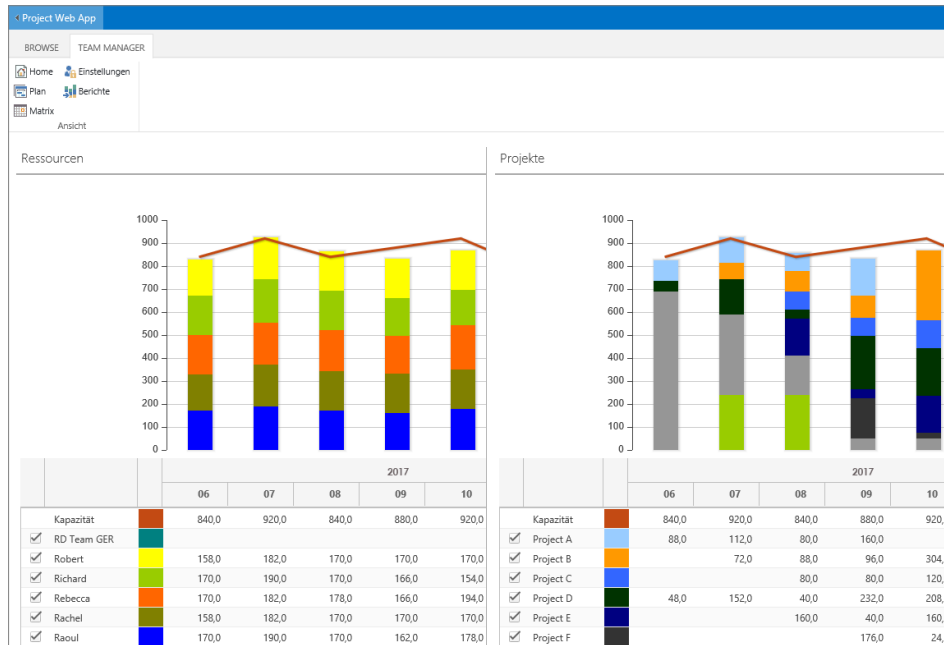
- Defining access permissions based on the user role
- Project planning with tasks, milestones and dependencies
- Team planning with project commitments, operations & absences
- Option to compare plans at project level for coordination in the matrix organization
- Option to compare plans at work-package level for coordination in the line organization
- No overwriting of each other's data for either role
- Workload overview per project, person and team
- Aggregation of teams at higher levels
- Drill-down from higher levels to teams and people

OVERVIEWS FOR THE TEAM LEADER: CAPACITY AND WORKLOAD

The following chart shows an optimal overview for the team leader. On the left, you can see the overall workload stacked per resource. On the right, it is stacked according to projects, operations and absences.

Both charts use the same column shapes and line markings to visualize the team capacity. On the left, you see who is working how much. On the right, you see what they are working on – all in the same view.





Optimal overview of the team's workload by person (left) & project (right)

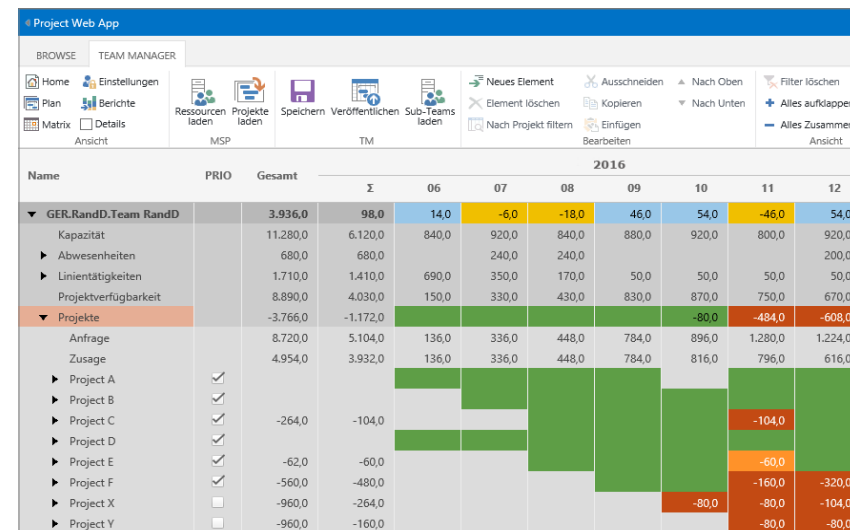
With a dynamic chart of this kind, team leaders can easily go through **scenarios** for the team or for individual team members. By selecting and deselecting requested projects, they can optimize the **team's workload** before making their commitments to the project managers.

This activity works best when resources and projects are displayed in the **same view**. Changing between different views would make it much more difficult.

OVERVIEWS FOR THE TEAM LEADER: REQUESTS FROM THE PROJECTS

Team leaders do not only have the option to accept or reject projects fully. They need a view in which they can edit commitments for the projects directly, according to the requirements and remaining availabilities, e.g. per month.

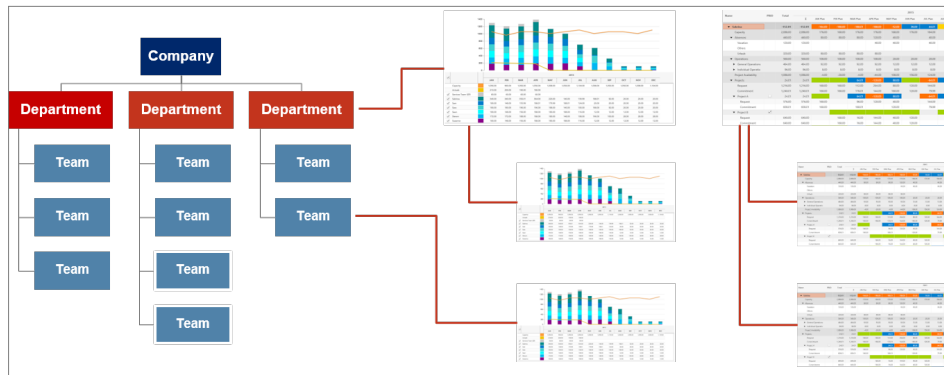
Another desirable feature is the option to view the statuses of project commitments and resource utilization with a **traffic light system** in **one view**. This should not only be possible for the sums but also along the timeline per week and per month.



Status of project requests and team workload in one view

OVERVIEWS FOR THE TEAM LEADER: REQUESTS FROM THE PROJECTS

It should be possible to retrieve both views depending on the organizational structure. You should ensure that the access rights of the respective levels in the organizational hierarchy are taken into account.



Respecting the access rights to the data in accordance with the role

Ideally, you aggregate the teams upwards according to the organizational structure. Conversely, single clicks will take you to the lower-level structures.

At the higher levels, only the sums of the teams should be available. Displaying all team members and activities in detail at the higher levels would not make for a clear overview. Besides the clarity, this could also be in conflict with the access rights.

The work values of operations and project commitments have to be available, too. Their transfer and export to PPM tools or other evaluations should be possible.

There is another important prerequisite for enterprise-wide use. Importing resources, absences, operations and project requests from other systems needs to be possible. The manual transfer of capacities, vacations, and internal orders cannot be expected.

SUMMARY

In this chapter, you have learned that – though widely used – Excel solutions have their limits when used for tactical resource planning. Now, you are familiar with those limits. You also know that the project managers' classical PPM tools are not optimal for the team leaders' work in a matrix organization.

You have found out the requirements for an optimal tool for resource planning by the team leaders. With such a tool, you can obtain the greatest possible support for the team leaders' task, and it will ensure the acceptance by all roles involved.

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TPG eBook Tactical Resource Planning

Chapter 7: Checklist Tools for Tactical Resource Planning

CHAPTER 7

CHECKLIST TOOLS FOR TACTICAL RESOURCE PLANNING

In Chapter 6, you have learned about using Excel for tactical resource planning. Though widely used, the tool has limitations. You are now familiar with these limitations. You also know that a PPM tool intended for project managers is not ideal for resource planning by team leaders in a matrix organization.

The requirements for an optimal tool for team planning have been established. With a tool meeting all these requirements, team leaders would have maximum support for their tasks. Acceptance would be ensured at the same time.

This chapter's checklist will help you to determine the current state of the tools for tactical resource planning at your company. Thus, you will obtain an overview and find out where there is potential for improvement.

To recap: By tactical resource planning, we mean the coordination between project and line managers. It depends on the company's form or organization (matrix / line). The most important goal is to meet the requirements for resources with the necessary skills for projects in a timely manner using staff from the line. This tends to be the team leaders' task.



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CHECKLIST

YES NO UNCLEAR

1. Do your team leaders use Excel spreadsheets for resource planning?

(Benefit: A solution for individual team leaders that allows more than planning on paper.)

Your notes:

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2. Do your team leaders use a tool for project managers?

(Benefit: The team leaders have direct access to the project data. But do the team leaders change the project managers' planning in the process of their planning?)

Your notes:

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3. Is there a central database for all resource planning data?

(Benefit: Other systems could access this data and process it.)

Your notes:

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4. Is the resource planning data historized in a central database?

(Benefit: This will allow you to follow the history and decisions, and develop trends for the future.)

Your notes:

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YES NO UNCLEAR

5. Do your team leaders have an overview such as a diagram of the individual team members and their tasks in relation to their capacity?

(Benefit: An overview of this kind makes it possible to identify overload and underload situations per week / month at a glance and to make optimizations at an early stage.)

Your notes:

6. Can the above diagrams be aggregated across teams to higher-level company units?

(Benefit: The utilization in the teams becomes apparent for higher management levels. If necessary, it can be optimized from the company perspective via the project portfolio. Or the other way around: Reports with drill-down functionality provide all the details directly whenever you wish to comprehend a consolidated number.)

Your notes:

7. Does the system distinguish between general and individual operations?

(Benefit: This gives team leaders a detailed view of the non-project activities and allows them to optimize the basic load.)

Your notes

YES	NO	UNCLEAR
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

YES NO UNCLEAR

8. Does your resource / project management system include rights management supporting the employee organizations' requirements for access rights?

(Benefit: You can set exactly which role can see and edit what information.)

Your notes:

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9. Are your team leaders able to transfer the project managers' requests automatically to the team planning tool?

(Benefit: The automation saves time and prevents transfer errors.)

Your notes:

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10. Do team leaders and project managers maintain their own planning data for project requests, which can be compared?

(Benefit: Each role has the sovereignty over its data. The other role cannot change it. In the case of planning changes, discrepancies become visible. As a consequence, the two roles involved have to discuss these discrepancies.)

Your notes:

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JA NEIN UNCLEAR

11. Do your team leaders have automatic access to updates regarding the capacities and master data of their staff?

(Benefit: The integration of systems does away with manual entries and improves the data quality. It also ensures that the data is always up to date.)

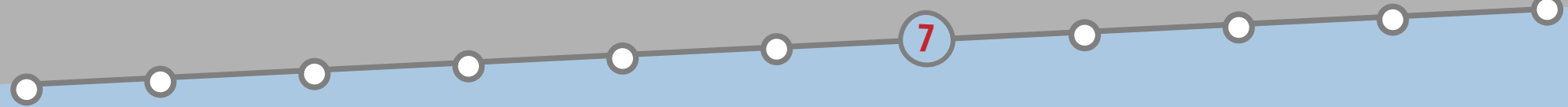
Your notes:

SUMMARY

This checklist has assessed very important points for a suitable tool for tactical resource planning and outlined their benefits. It has enabled you to get an idea of the potential you could exploit, if you had a truly suitable tool.

You have taken a critical look at your tools for tactical resource planning. It could help to take another look at Chapter 6 of this eBook. It outlined the requirements for an optimal tool for tactical resource planning in detail.

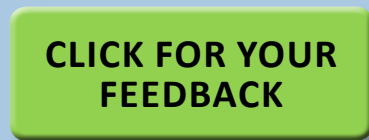
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TPG eBook Tactical Resource Planning

Chapter 8: How to Introduce Tactical Resource Planning Quickly

CHAPTER 8

HOW TO INTRODUCE TACTICAL RESOURCE PLANNING QUICKLY

With the preceding checklist, Chapter 7 has given you the opportunity to get an idea of the current status of your tools for tactical resource planning.

You might want to take another look at Chapter 6, which outlined the requirements for an optimal tool for tactical resource planning in detail.

Chapter 8 goes a step further, illustrating the fastest way to introduce good tactical resource planning at your company.

To recap: By tactical resource planning, we mean the coordination between project and line managers. It depends on the company's form or organization (matrix or line). The most important goal is to meet the requirements for resources with the necessary skills for projects in a timely manner using staff from the line. This tends to be the team leaders' task.



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ONLY 2 MONTHS TO ARRIVE AT A USEFUL SOLUTION

Companies introducing project management tend to focus on PM methods, PM processes and tools for the project managers. Resource planning tends to follow in a later step.

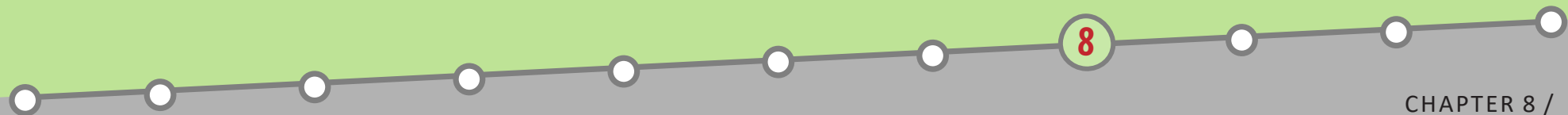
In most cases, they choose this approach, as they judge resource planning to be a difficult challenge. Moreover, the view is prevalent that companies need good project planning as a basis before they can address resource planning.

However, it depends on the benefit project management is expected to provide. It can actually make sense to **start directly with resource planning**. In this case, project management is only introduced in a second step.

Naturally, you will begin with project management, if detailed scheduling of projects has priority for you, and resource planning does not take center stage.

But you may be primarily looking for an overview of who works on what, and when. After all, only an overview of this kind allows you to assign projects and activities properly. In this case, we recommend the following approach: Attend to the team leaders first and to the project managers afterwards.

Our Tip: Do you require an overview of who works on what? And when? If you need this to be able to assign projects and activities properly, start with the solution for the team leaders. Then tackle the project managers next.



In our experience, the approach of focusing on the team leaders outlined below can be very fast. You may arrive at useful resource planning in **only two months**.

The figure below reveals the difference in time. You will reach your goal much faster with the overall planning of the resources by the team leaders. The detailed resource planning from the projects, albeit incomplete in total, takes considerably longer.



It is fastest to introduce complete resource planning via the team leaders

REASONS FOR THE DIFFERENCE IN TIME

What is the reason for this striking difference? These are the most important reasons:

1. When introducing project management, you will have to establish several processes and methods which are unnecessary for tactical resource management.
2. The number of project managers tends to be higher than that of team leaders. Thus, their training will take longer to begin with. What is more, they have to invest much more work into the detailed planning of their projects than team leaders into their overview.
3. Projects have a start and a finish date. Team planning occurs without start and finish date month after month.
4. It is not worth introducing a new system for projects that are almost completed. Hence, you transfer only long-running and new projects into the new system.

For these reasons, it will take many months to reach the desired situation. Eventually, you will get an overview of the resource utilization from the overall planning of many project managers. Yet, even this overall planning will only comprise project activities. **Activities outside of projects** are not taken into consideration.

This means that the resource utilization is still far from complete with the approach via the project managers. Yet, this is exactly what matters. **Only a complete resource overview is useful**, and this you can easily obtain from the team leaders.

Our Tip: A resource overview is only useful when it is complete. The team leaders can actually provide one easily.

You can start complete resource planning in your teams any time. Besides absences and operations, you should consider all projects at the highest level, at least roughly. Even without knowing the details at the level of tasks, you should be able to assign people to projects with a share of hours per month.

TEAM LEADERS SHOULD KNOW THEIR TEAM MEMBERS' RESPONSIBILITIES

As a rule, team leaders know what the members of their team are working on. At the very least, they know:

- in which projects they are involved
- when they are absent
- what other responsibilities they have

They may not always know the details, but their knowledge of the employees' activities is comprehensive.

Without an adequate overview, the team leader will not be able to explain the team's workload. For instance, he or she will struggle to clarify why a **new project request** will not fit into the team's current resource utilization. This is despite the fact that this case tends to be one of the most important reasons for introducing resource management in the first place.

To respond to **questions of availability**, team leaders do not need perfect and detailed planning. Chiefly, they require a complete overview of all resources and their respective activities. The team leader gains a lot by having more or less accurate answers to these questions. Definitely wrong answers are not advisable.

It is a mistake to make commitments which cannot be kept. The usual reason is that activities were neglected when calculating the workload.

Apart from that, the team leaders' planning almost always fluctuates except for vacations and a few regular meetings. After all, it is usually based on estimates.

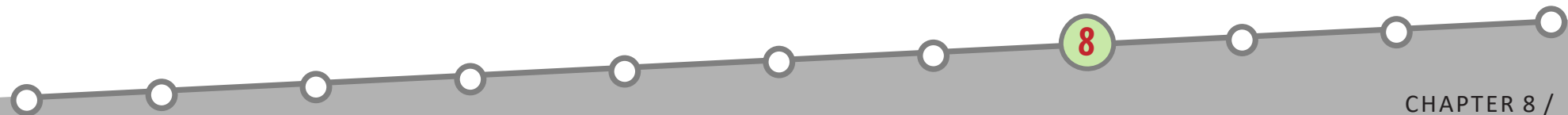
The significant difference lies in this: Are you surprised that team members do not have time?

- Is this because they are pursuing activities the team leaders are unacquainted with? That is bad.
- Or are known activities simply taking longer than assumed? This is easier to explain.

ONLY COMPLETE RESOURCE PLANNING IS USEFUL

Therefore, the primary objective is not necessarily perfect resource planning. No. What you need is complete resource planning. Resource planning only begins to be useful once it is complete. The initial complete plan can be improved in further steps.

Later, you can mainly improve one thing: the regular and increasingly more specific coordination with the project managers. The rest is the team leaders' responsibility anyway. And, soon it will also be available in the right system.



Our Tip: What you require first is complete resource planning. It only begins to be useful once it is complete. A lack of clarity you can remove in further steps.

Below, you will learn how to introduce resource planning via your team leaders.

STEP 1: PREACH THE BENEFITS

If you want to persuade the team leaders, you need to highlight the benefits of a central system for resource planning as follows:

- **Decision-makers** receive utilization overviews of all teams. As a rule, these are aggregated. However, the decision-makers have the option to “drill down” to every individual team. This provides them with all the necessary details for well-founded decisions.
- **Team leaders** obtain valid utilization overviews. These enable them to achieve optimal utilization of their team, without overload.
- **Project managers** obtain more reliable commitments regarding the availability of suitable resources (in matrix organizations) or the delivery dates of results (in line organizations).

Start marketing for the introduction of tactical resource management! And turn affected people into involved parties. But watch out: Be aware that you are also creating a transparency some team leaders may not be comfortable with.

Another important point is to reach an agreement with the **employee organization** at an early stage, as they might suspect the possibility of unwarranted monitoring of employees. However, this should not cause any real problems, since:

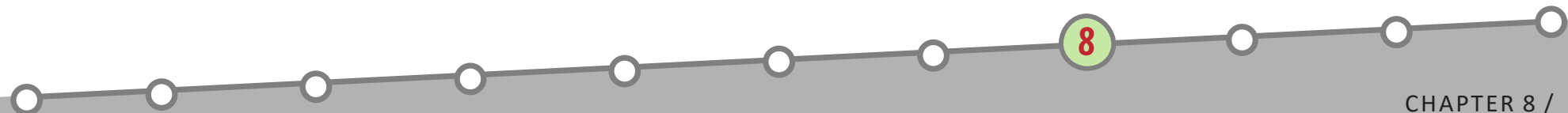
- The users of the planning data are the team leaders.
- These are the direct supervisors; and, for the benefit of their employees, they can now plan a better utilization.
- The aim is to avoid overload.

Our Tip: Turn affected people into proponents. Thus, they will support you in marketing for the introduction of a solution for tactical resource planning. Be aware that not all team leaders will appreciate the future transparency.

STEP 2: START BY PLANNING FOR A FIRST REPRESENTATIVE TEAM

If changes are due, consider first: What has worked well in which area so far? What have team leaders been planning to date? And with how much detail?

Find out the methods and data that have been tried and tested and adopt them.



Look for team leaders as proponents

Identify a known well-structured team. And make sure its team leader is willing to support your undertaking. You need a template by which all involved can be guided. Ideally, you will not start by creating this template in Excel. Instead, use the suitable team-leader tool of your choice. In this way, you point your colleagues in the right direction from the get-go.

Define the planning granularity

Define the planning granularity in weeks or months. Planning in quarters tends to be too rough; days are usually too detailed. This mostly depends on the duration of tasks and the planning intervals.

Should planning occur in hours, days or FTEs (Full Time Equivalents)? This is also determined by the scope of the tasks. It may be better to enter the number of days than several hundred hours.

On the other hand, hours are always without ambiguity. In the case of part-time employees, days can raise the question how these are to be understood. FTEs are an attempt to bypass this question. The concept needs to be explained all the same.

Record activities and assign categories

Define rows for **absences**. At best, these are vacation and other. As a rule, it is not permitted to enter illness. The employee organization is particularly vigilant in this respect.

Define rows for **general operations** per team that apply to the majority of team members. These can be activities such as team meetings, further training, presales, support, etc. Maintain these rows in the tool for all team members.

Identify the **individual operations** of each team member. In contrast to the general operations, these can change over time. And they must not concern the deliverables within projects.

Record all **projects** in which your team members are involved. Start with one row per project. You may not have any usable planning data from the projects. In such a case, begin by falling back on the team leader's and the team members' knowledge.

As repeatedly stated: Mind the **completeness of the activities** more than the specificity. It is more important to get an approximate overview specifying which projects are actually involved. It is problematic to plan individual tasks in detail for some projects while others are not considered at all, simply because some details are missing.

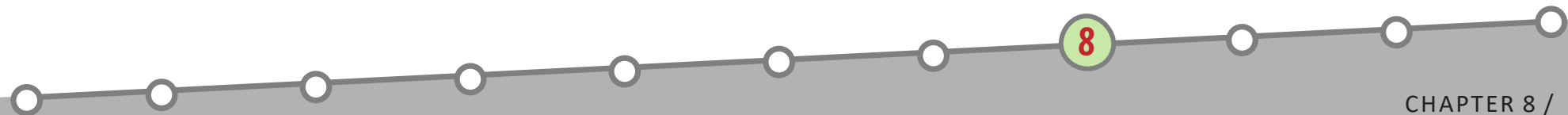
The point is to record everything to begin with. Thus, you obtain a complete picture, albeit your first draft.

Our Tip: Mind the completeness of the recorded activities more than the specificity of your planning. It is important to obtain a complete picture for a start. Otherwise, your planning will include an unknown quantity of error. This is not conducive to reliable resource planning.

Based on this, you can establish coordination processes with the project managers. Thus, they stand on a better footing from the outset.

Involve the project managers gradually

There is no need to involve all project managers at once. This can happen step by step.



Some projects are about to be completed. Planning them in detail is not worth the effort. Others may only start in a few months. In both cases, rough planning is sufficient. This can be because detailed planning may not be worth pursuing anymore or just yet.

But one thing is always wrong not planning something only because it cannot be as specific as you would like it to be.

Involve further team leaders and optimize the system together

Present the result to the other team leaders and integrate their feedback. After all, every team leader has to understand the structure and accept the granularity of the planning.

STEP 3: CONDUCT THE FIRST PLANNING SESSION

Before defining the processes, ensure that the team leaders involved become familiar with the tool and the planning effort. Of course, you can also define the planning intervals first. You can begin to populate the tool afterwards.

But in our experience, organizations tend to take on more than they can actually accomplish. That is why it often makes sense to let all team leaders gather experience with the initial planning for their team. Only then, do you define the intervals at which you update the planning.

A good system for this purpose has to be a **simple system**. Normally, a team leader should not need to spend more than two hours per week on team planning.

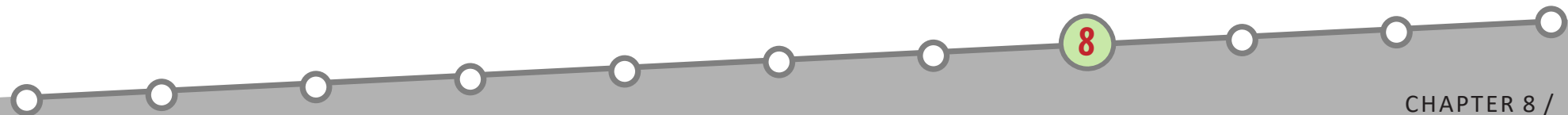
But the **initial planning** is bound to take longer, as the users have to familiarize themselves with the structures and need to get to know the tool. Additionally, various data will not be as readily available as hoped-for.

Good support of the team leaders is vital

Ensure the team leaders have good support. Planning has to be a positive experience for them from the start. Some will require more support than others will.

It is vital to convince as many team leaders as possible in the first round. They need to recognize the benefits of working with their own real data.

Our Tip: At any event, ensure good support for the team leaders in the first few weeks. Planning has to be a positive, smooth experience for them from the start. And never stop communicating the benefits of working with their own data.



Possible guidelines for data maintenance

Define steps to be completed when entering the data. The following entries are necessary:

- All team members and their capacities (ideally, the system will have been populated automatically for every team with the resources and their capacities; the data is derived from the working time models)
- Absences and general operations (import from other systems?)
- Individual operations of all team members
- All projects at team level (import from other systems?)
- All project requests for team members (import from other systems?)
- All project commitments for the coming (e.g. 3) months

Choose preliminary intervals between updates

Choose the update frequency that seems reasonable to you. Maybe you start with a weekly interval.

Thus, you might obtain an initial overview of all teams showing the current status consistently.

Naturally, it will include overload yet to be resolved. But this will **only work together and at the intervals you determine**.

Next, it is necessary to coordinate planning intervals. All involved have to be able to comply with them.

STEP 4: INTRODUCE A COORDINATION PROCESS WITH REGULAR PLANNING INTERVALS

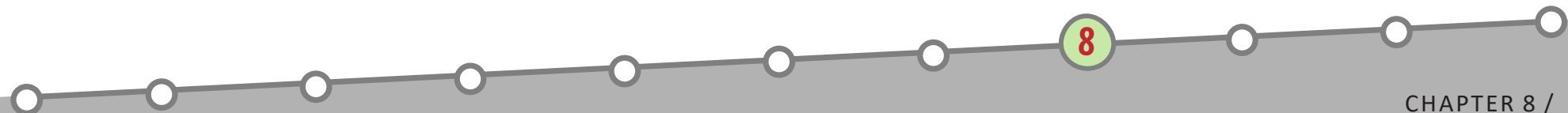
As mentioned above, we strongly advise you to introduce a regular process cycle at your company. And this has to be lived. For the requests from projects tend to change dynamically. However, the team leaders cannot reschedule their team planning every day.

Therefore, it is necessary for the **planning** to be **up to date by the due date**. In the case of resource conflicts, all team leaders and project managers involved have the same current basis for decisions.

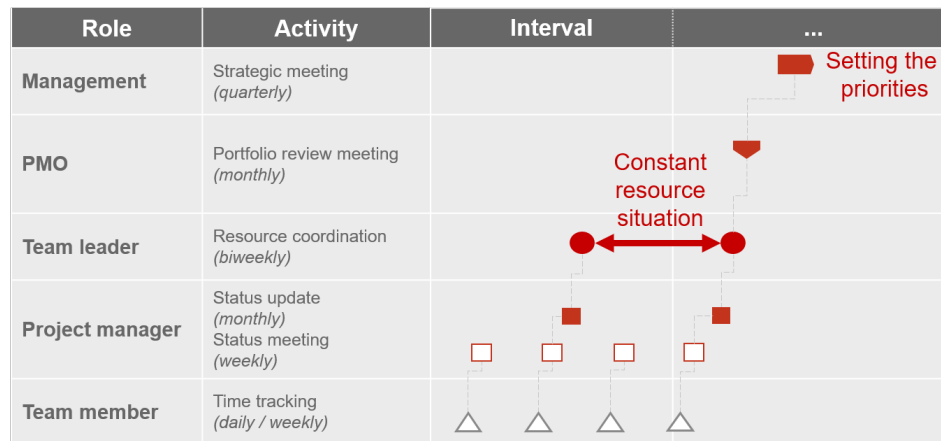
You should still get used to the fact that resource planning cannot always be 100 percent specific. External interferences often come sooner than you can adjust your planning.

How to approach the **introduction of regular planning intervals**:

1. Identify the parties involved in the process (project manager, team leader and the PMO).
2. Come to an agreement with them as to which intervals are appropriate for resource coordination at your company. If in doubt, begin with longer intervals. This will allow you to actually complete the update.
3. Ensure that the commitment of the resources is fixed for the current and the following interval. This is the only way to achieve a consistent resource utilization.



4. Support the project managers in updating their project plans in line with the agreed intervals. You always need the total current resource requirements for the same date.
5. Coordinate the resource deployment with the team leaders based on the current project planning.
6. Resolve resource conflicts project managers and team leaders cannot eliminate in a steering committee. This should be made up of the respective decision-makers.
7. In a multi-project environment, top management will first have to define the priorities in the course of strategic resource planning (also known as capacity planning).



Example of a process cycle across the levels of the roles involved

STEP 5: REGULAR OPERATIONS AND OPTIMIZING TEAM PLANNING

Run through the planning cycle a few times. Once it is more or less stable, you can start optimizing it.

- What is the situation at your company at this point in time?
- Have the promised benefits of the new resource planning materialized?
- Are team leaders, project managers and decision-makers working with better overviews? Can they use these as a basis for their decisions?
- Does everyone succeed in updating the plans on time?
- Are the coordination meetings successful?

It may be that in some areas your planning may have been too rough. In others, it was perhaps unnecessarily detailed.

The task at hand is to **reconcile effort and benefit and optimize them**. This can take several weeks or even months.

You may also have some technical interfaces realized. These would enable you to synchronize data regarding capacities and absences automatically from HR systems, or you may automate the interfaces between project planning and team planning.

STEP 6: INTRODUCING AND OPTIMIZING PROJECT PLANNING

Up to now you have advanced resource planning on the team leaders' side. This has allowed you to quickly achieve a complete overview.

Now you need to advance the processes, methods and tools for project planning, too. This article focuses on introducing team planning. Hence, we will not go further into the project planning side.

SUMMARY

In this article, you have learned how to introduce tactical resource management in 6 steps. A few weeks will suffice to complete this process. You are now familiar with the way in which you can reach the first goal of resource planning: a complete overview of all employees' capacities, workloads and exact occupations.

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8

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TPG eBook Tactical Resource Planning

Chapter 9: Arguments in Favor of an Optimal Tool Solution

CHAPTER 9

ARGUMENTS IN FAVOR OF AN OPTIMAL SOLUTION FOR TACTICAL RESOURCE PLANNING

In the previous chapter, the eBook introduced you to the requirements for successful tactical resource planning at your company.

If you like this approach and wish to adopt it, you will need to involve the following role players: decision-makers, team leaders and project managers.

Chapter 9 will provide you with the necessary arguments in favor of an optimal solution for tactical resource planning. At the end, you will find an outlook on the future of resource management.

To recap: By tactical resource planning, we mean the coordination between project and line managers. It depends on the company's form or organization (matrix or line). The goal is to meet the requirements for resources with the necessary skills for projects in a timely manner using staff from the line. This tends to be the team leaders' task.



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ARGUMENTS FOR TEAM LEADERS

Let us begin with the arguments for team leaders.

On the one hand, team leaders are positioned between their superiors and the project managers. On the other hand, they are responsible for managing their team members.

With their team, they are expected to complete as many line and project activities as possible. Ideally, the team members' utilization is always optimal, without overload.

Team leaders always need to be knowledgeable when confronted by decision-makers, project managers and team members. This applies to information regarding the utilization of their team or of individual team members.

What team leaders do best

A suitable and sophisticated system for tactical resource planning would allow team leaders to plan, demonstrate and argue better:

- What capacities / availabilities their team has.
- What capabilities / skills their team and its members have.
- On which projects their team is currently working.
- How much time they have scheduled for team meetings and general operations.
- What the team's basic load is and what it is composed of.
- Who can go on holiday at what time / who will stand in for them.

- Who will pursue advanced training, for how long, and in what areas.
- How good their team's utilization will be in 6, 12 or 18 months' time.
- Whether further tasks will have to be created or taken on.
- Which team member has which knowledge gap regarding the team knowledge.
- Who still requires what training to make it possible to distribute tasks better eventually.
- Which training or re-training has to be completed by what time in order to take on future tasks.
- Who can work on new projects; and when.

In addition, such a system would support the team leader in:

- Proving insights into which of the additional requests from the projects have to be rejected, as there are no free capacities in the team.
- Recognizing overload situations for the team or individual members.
- Figuring out how the overload of some team members can be remedied.
- Understanding which team members have comparable qualifications allowing for a replacement or reallocation.
- Realizing what effects project postponements would have on the team utilization and how to reschedule to mitigate the changes.

Plus, such a system would also provide the team leader with:

- Meaningful overviews of the utilization through project activities and operations.
- An overview of the project commitments in relation to the project requests.
- Simply, proof of the urgent need for further resources on the team.
- The possibility to enter data changes in the tool.
- The possibility to easily carry over data from the project managers' system and to transport their data for information purposes.
- Their own database for team planning without having to interfere with the project managers' planning.

ARGUMENTS FOR PROJECT MANAGERS

Project managers have responsibilities entirely different from team leaders. This is why the arguments for them turn out differently.

Project managers need to deliver results. Depending on the form of organization, they need to rely on the support from teams (line organization) or people on the teams (matrix organization).

In both cases, they depend on reliable commitments from the team leaders.

A sophisticated system for tactical resource planning would allow project managers to see better:

- Which teams have which qualifications.
- What team can take on what work package, and when.
- Which team can provide how many people with the required qualifications, and when.
- Why a specific employee does not have more time to spare for their project.
- Who stands in for the colleague committed during his or her vacation.
- How the commitments from the team can be compared to the current project planning.

How commitments from the teams have changed

A suitable tool supports the communication between project manager and team leader about required resources well. The tool should also provide good documentation of commitments.

What is more, a team leader cannot change the data in the project managers' planning. Provided the team leader does not have to work with the tool for project management. Ideally, each role works in a separate system. The team management software merely compares the content of the two systems.

ARGUMENTS FOR DECISION-MAKERS

Among other things, decision-makers have to ensure one thing: In the medium to long term, enough suitable staff needs to be available to implement initiatives and projects. To this end, they require an overview of all teams as well as their current and future utilization.

In many companies, this is not limited to one location. It may even be an international endeavor. And in such a case, it can only be handled by involving the team leaders and the project or portfolio managers.

A sophisticated system for tactical resource planning would allow decision-makers at the company to see better:

- The aggregated utilization across all teams in all areas.
- How fully engaged the teams in the different departments are; and what they are busy with.
- Which capabilities / skills are available in which locations and which are missing.
- What requirements for capabilities / skills are coming from the projects.
- Which projects it would not be possible to equip adequately with what capabilities / skills.
- Where staff with what specific capabilities will have to be hired, re-trained or reduced.

These are our lists of arguments for the three most important roles in a company's resource management. Now, let us look ahead. How is resource planning going to evolve?

RESOURCE PLANNING OF THE FUTURE

The maturity level of project management continues to increase. The same goes for the project management appreciation or rather acceptance.

The desire for **more autonomy** is on the rise among employees, especially from the younger generations. All of this combines to bring together aspects of the agile and the classic PM methods.

The combination of team management at project or rather sprint level and the independent detailed planning within sprints or phased work packages will lead to a **higher planning quality** in the future. Accordingly, the **reliability** of scheduling and result planning is going to increase.

For this, there will be **new tools or new features** in existing tools. These will prompt a significant increase of flexibility in planning and controlling. At the same time, resource planning will become easier.

The [use of integration products](#) can be a first step in this direction. These [connect classic PM tools with tools for planning to-dos or action items](#).

Such an integration can have the following beneficial effect. In the Gantt charts, you only plan the sprints for resource requests and the milestones for the deliveries.

The many detailed to-dos whose resource planning can drive the project manager to desperation disappear.

This is a possible scenario for the future: Less detailed project planning by the project manager is complemented by a matching detailed work planning. The latter is made by the team members and committed to their team leaders for the respective sprint.

Moreover, **digital transformation** finds its way into many new areas within companies. This requires the involvement of additional people in projects to implement this strategy.

Thus, **more people** will be **working on projects** in the future. There will be members of teams contributing to projects who have previously not done so. Their team leaders will have to meet similar requirements as their colleagues from the classic areas of project handling. They will have to commit team members or results to projects.

Consequently, it will become necessary for these team leaders, too, to **plan the team's internal activities more accurately**. Otherwise, they will not be able to organize the team members' engagement in projects.

Therefore, tactical resource planning will soon spill over into **almost all areas in companies of all industries**. No industry is exempt from digital transformation. There will be more IT projects everywhere and accordingly more requirements for resource planning, across all departments.

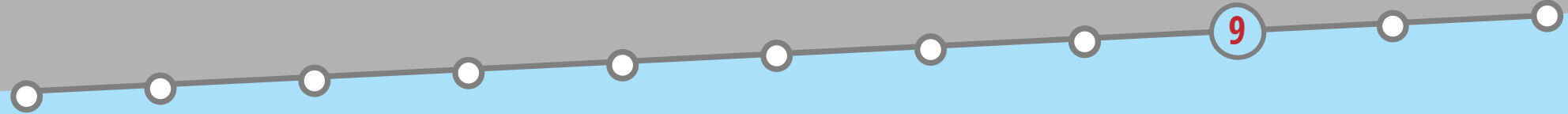
SUMMARY

This chapter has provided you with arguments for a solution for tactical resource planning. Use these in your discussions with stakeholders such as team leaders, project managers and decision-makers.

You have also gained an insight into the likely development of resource planning. In the course of digital transformation, more and more people will be working in projects who have previously not done so.

Their superiors will also have to plan for their teams now, both strategically and tactically. This is why the topic of resource planning is becoming more and more important.

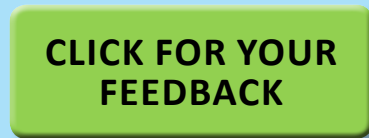
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Should you have any questions, please email Achim Schmidt-Sibeth (achims@theprojectgroup.com).

And one last request: If you like the eBook, please recommend this page in your network:

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TPG eBook Tactical Resource Planning

Chapter 10: Tactical Resource Planning with Microsoft Project

CHAPTER 10

WHAT MICROSOFT PROJECT 2016 PROVIDES FOR RESOURCE PLANNING BETWEEN PROJECT AND LINE MANAGERS

So far, you have learned about the requirements for tools for tactical resource planning in this eBook. Besides, you have become familiar with the recommended way of introducing resource planning between project and line managers at your company. And, you have picked up arguments for convincing the individual roles.

Now, we will look at the possibilities offered by Microsoft Project 2016 and Project Online (PWA): the new feature Resource Engagements. Find out what it is all about and how to use this feature in the coming chapter. You will also get to know the limitations of this new function.



Request for feedback: We aim to constantly improve this eBook. Therefore, your feedback is important to us. At the end of this chapter, you will find a link to a short survey. Please follow it and take a few seconds to let us know what you thought of this chapter.

To recap: By tactical resource planning, we mean the coordination between project and line managers. It depends on the company's form or organization (matrix or line). The goal is to meet the requirements for resources with the necessary skills for projects in a timely manner using staff from the line. This tends to be the team leaders' task.

Many companies work in a matrix organization. Project managers have to request the staff for their projects from line managers.

In combination with Project Online or Project Server 2016, Microsoft Project Professional 2016 offers a new feature called Resource Engagements. It acts as a communication channel between project managers and team leaders when coordinating the team members working on projects.

If you are already familiar with earlier versions of Microsoft Project, please note: This new Resource Engagements feature replaces the existing Resource Plans.

How Resource Engagements work in MS Project 2016

Project managers can send line managers resource requests for the desired project team members – irrespective of prior planning.

They propose which resources they could use for their projects over what time period.

Subsequently, the team leaders get to see these requests within Project Web App (PWA). Affording them the opportunity to decide to either accept these Resource Engagements fully or in part, or otherwise reject them entirely.

Their response is returned to the project (see figure below). Thus, the project manager receives feedback along with comments (where applicable).

The screenshot shows two views of resource requests in Microsoft Project 2016. On the left, the Project Manager view shows resource requests for Team A (Elias, Ellen) at the project level. On the right, the Team Leader view shows the same requests at the team level. A red arrow points from the Project Manager view to the Team Leader view.

Projekt	Ressource	Vorschlag	176 h	176 h	168 h
Projekt	Elias	Zusage	160 h	160 h	160 h
	Ellen	Vorschlag	176 h	176 h	168 h
Projekt	Elias	Zusage	176 h	176 h	168 h
	Ellen	Vorschlag	176 h	176 h	168 h

Projekt	Ressource	Vorschlag	176 h	176 h	168 h
Projekt	Elias	Zusage	160 h	160 h	160 h
	Ellen	Vorschlag	176 h	176 h	168 h
Projekt	Elias	Zusage	176 h	176 h	168 h
	Ellen	Vorschlag	176 h	176 h	168 h

Einschränkungen bei dem Feature Ressourceneinsätze in MS Project

- Anfragen auf Projektebene
- Zusagen auf Projektebene
- Parallel nötig zur Detailplanung
- Keine Linientätigkeiten erfassbar

Schematized resource request by the project manager (Ellen: 100% commitment, Elias: reduced commitment) and the most important limitations of this feature of Microsoft Project 2016 / Project Online

You will find an overview of the most important properties of the Resource Engagements in MS Project 2016 below. After this, we list the capabilities we find indispensable in a top tool for tactical resource planning between project and line managers.

This gives you an overview of what Microsoft Project currently offers and where there is still room for improvement.

RESOURCE ENGAGEMENTS IN MS PROJECT 2016

Find important notes on the new feature below:

- **Current resource utilization:** The team leader lacks the overview of the current resource utilization. This has a reason: Activities outside of projects such as absences and operations cannot be planned here. The team leader still has to plan these in line projects.
- **Booking resources:** The team leader can also create new engagements for an existing project without prior request. But it is impossible to book resources for future projects which have not been added in the Project Server yet.
- **Parallel planning:** Requests and commitments always exist in parallel to project planning. They cannot be automatically synchronized.
- **Resource engagements** can only be created in relation to projects and not per task. However, this is not sufficient.

WHAT A SOLUTION FOR TACTICAL RESOURCE PLANNING SHOULD BE ABLE TO DO

- **Direct requests from the detailed plan:** Project managers should be able to send requests to team leaders directly from their project plans. This would save time, as they would not have to administer requests separately in an additional view.

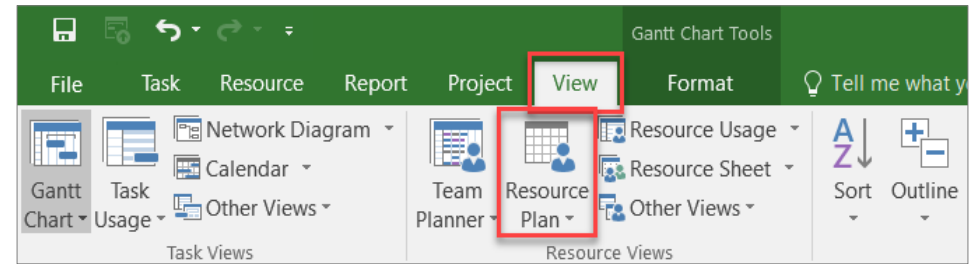
- **Absences and operations:** Team leaders should use a tool made especially for their tasks. It should allow them to administer operations, absences, and project activities. The requests for projects should be directly visible in this tool, too, and allow them to easily make commitments.
- **Booking resources:** Bookings for future projects should be possible, even before these have been set up on the Project Server.
- **Status of resource utilization:** The status of both resource utilization and project requests should be indicated by a combined traffic light view.
- **Priorities:** It should be possible to transfer commitments for prioritized projects automatically.

HOW TO WORK WITH RESOURCE ENGAGEMENTS

Below you find a simple example of the process in Microsoft Project 2016. The project manager's request and the team leader's response are outlined step by step. Please note that you may need to activate this new function under *Additional Server Settings*.

Here is what you do as a project manager: After creating the project plan and assigning resources, you select the view *Resource Plan*.

In the view *Resource Plan*, you can find the new commands in the ribbon *Engagements*.

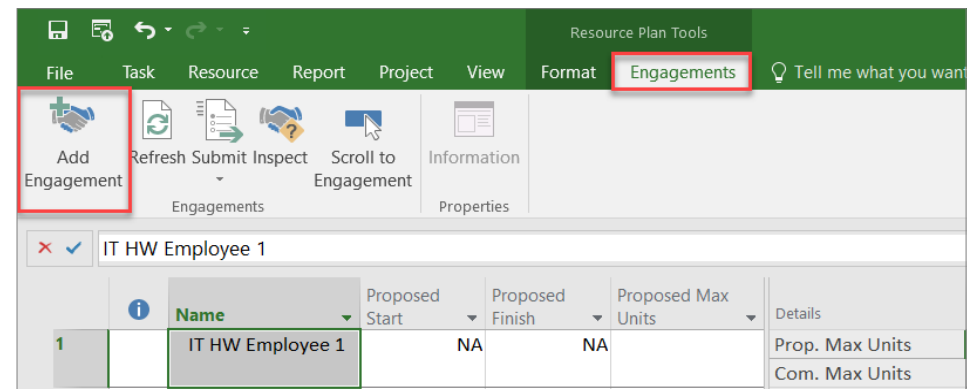


Selecting the view *Resource Plan*

Click *Add Engagement* in the ribbon *Engagements* to open the dialog box *Engagement Information*.

In this view, the name of the selected resource will appear in the dialog box field *Resource*.

Enter *Description*, *Start* and *Finish* of the assignment period. Select the desired allocation by *Units in %* or *Work in hours* and enter a value. You can add optional *Comments*.

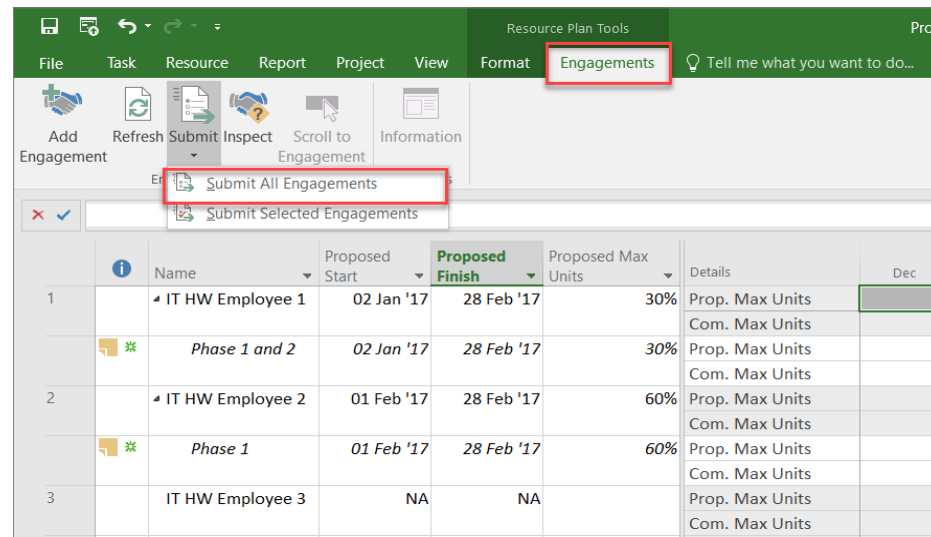


Add Engagement

Once you have created Resource Engagements, these are shown in the view *Resource Plan* per resource. The table on the left gives you information such as the *Proposed Start*, *Finish* and *Max Units* of your request.

In the section on the right, you can see the *Prop. Max Units* on a timeline. For comparison, you could also display the *Proposed Work*, the *Work* planned in the tasks as well as other fields. Unfortunately, the view *Resource Plan* cannot be combined with other views.

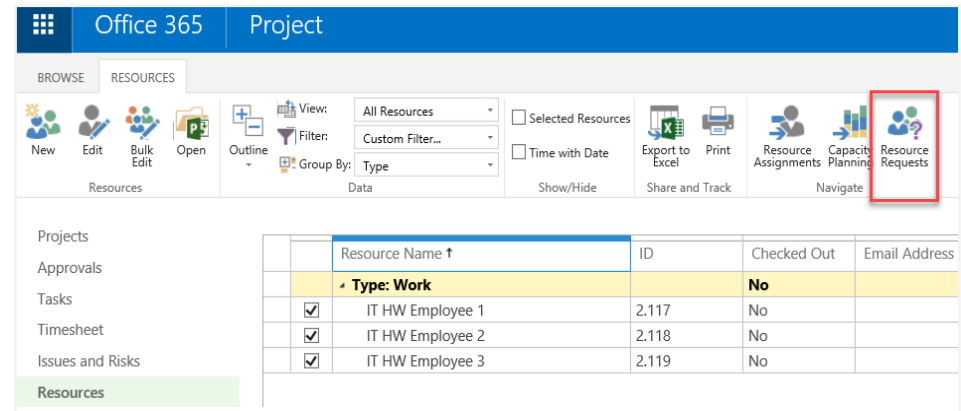
Once you have created all required resource engagements, you need to submit them to the team leader for approval. You will find the respective menu item in the ribbon *Engagements*.



Submit Engagements

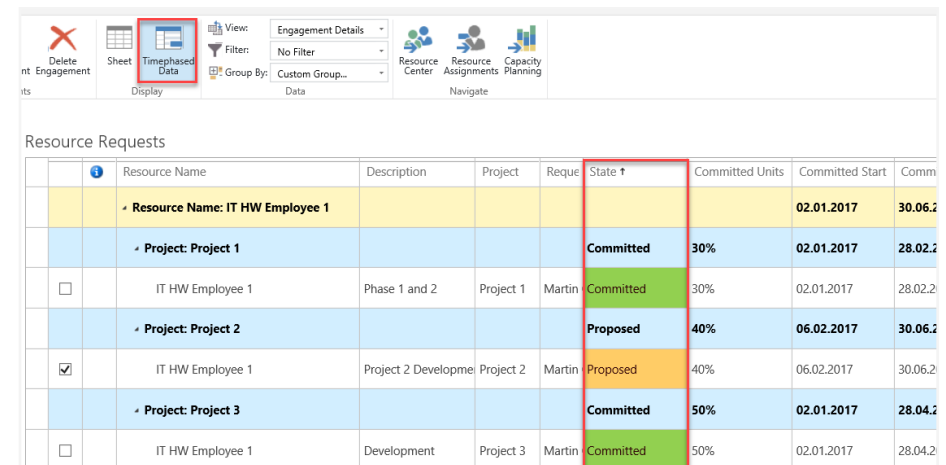
The team leader's view and response

After the project manager has sent the *Resource Requests*, the team leader can see them in the Resource Center within *ProjectWebApp* (PWA). Here is what you do as a team leader. After selecting the resources you want to look at, select *Resource Requests*.



Selecting *Resource Requests* as a team leader

You can see all *Resource Requests* for the resources you selected. The column *State* tells you whether you have already accepted the request, already rejected the request or not yet handled the request. Select *Timephased Data* to analyze the requests on the time line.



Resource Requests in the view *Timephased Data*

This view also shows information regarding the state of the request in the column *State* and the *Committed Units*, *Start* and *Finish* dates. You can select *Resource Requests* in order to accept or reject them. In addition, you can override the information in the time phases.

The options *Filter* and *Group By* allow you to select the way in which the required information is presented. Select the ribbon *Options* to define what date range and units to display.

When accepting or rejecting a Resource Request, you have the option to enter a comment. Note that you must select a request first in order to activate this function.

Confirm Accept ✕

Optional - provide a comment so that others reviewing your decision will have more information.

Comments:

Request is ok

OK Cancel

Entering a comment

The New View Capacity and Engagements Heatmap for the team leader

You can check beforehand if the capacity is sufficient for a new engagement. To do this, select the view *Capacity Planning*.

Resource Name	Description	Project	Reque	State	Committed Units	Committed Start	Committed Finish	Proposed Work	Committed Work
Resource Name: IT HW Employee 1									
Project: Project 1									
IT HW Employee 1	Phase 1 and 2	Project 1	Martin	Committed	30%	02.01.2017	28.02.2017	28,8h	28,8h
Project: Project 2									
IT HW Employee 1	Project 2 Developme	Project 2	Martin	Proposed	40%	06.02.2017	30.06.2017	48h	48h
Project: Project 3									
IT HW Employee 1	Development	Project 3	Martin	Committed	50%	02.01.2017	28.04.2017	48h	48h
Resource Name: IT HW Employee 2									
Project: Project 1									
IT HW Employee 2	Phase 1	Project 1	Martin	Committed	60%	01.02.2017	28.02.2017	19,2h	19,2h

Selecting the view *Capacity Planning*

To display the outstanding requests for analysis, activate the checkbox *Include proposed bookings* in the view *Capacity and Engagements Heatmap*.

Office 365 Project

BROWSE AVAILABILITY

View: Capacity and Engagements proposed bookings

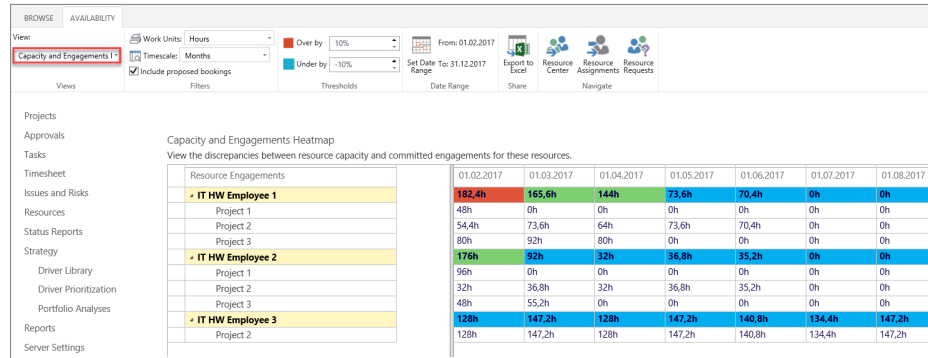
Work Units: Hours Timescale: Months

Over by 10% Under by -10%

Capacity and Engagements Heatmap Resource Utilization Resource Utilization by Project

Selecting the view *Capacity and Engagements Heatmap*

The standard settings present underloads exceeding the value of 10% in blue. Overloads of over 10% are marked in red. The corresponding time period is presented in green, if the sum equals the request with a maximum upward or downward tolerance of 10%. Customize the % thresholds to your requirements directly in the menu.



Capacity and Engagements Heatmap example

Please note: As mentioned above, resource requests are created in parallel to project planning. This means that the view Capacity and Engagements Heatmap will not contain any information about resource assignments in project plans (of the corresponding projects or others).

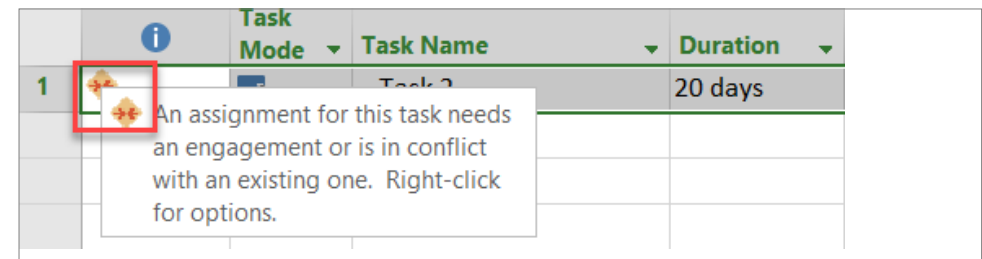
You will not find information regarding the *Resource Requests* of the projects in the four historic capacity planning views *Resource Utilization*, *Resource Utilization by Project*, *Remaining Availability* and *Work by Resource*.

Important: To attain a coherent capacity overview, all **project managers** have to consistently update the resource request when they modify their detailed plan and always submit them for approval.

This also applies when an entire project is postponed. In this case, it is necessary to update every single resource request. The automatic transfer from the detailed plan would be a logical function but is unfortunately not available.

Furthermore, the **team leader** has to make sure there is a resource request for every detailed plan. There is a way of enforcing this. Activate the new option *Resource requires approval* for all project assignments in the *Edit Resource* view. Repeat this step for all resources requiring this type of capacity monitoring.

If you activate this option, the project manager receives an alert in Microsoft Project whenever a resource assignment is missing or insufficient.



Insufficient resource assignment in Microsoft Project

Operations in capacity planning

You may want to allow for operations in order to attain complete capacity planning. For this, you can use option 1 or option 2:

- Set the maximum capacity of resources to the percentage you anticipate for project activities (i.e. 80% instead of 100% for full-time employees). This value will also be set for the views *Resource Utilization*, *Resource Utilization by Project*, *Remaining Availability* and *Work by Resource*.
- Create one project per team for operations. In this project, you plan those operations which are unrelated to projects. You may also want to show these activities in the *Resource Requests* view. To do this, you would have to create resource requests for each of them. This is cumbersome.

All capacity-planning views include absences defined in the resource calendars. This is irrespective of the focus on resource requests or project planning. Yet nowhere are the absences shown in contrast to the capacities. This complicates the rescheduling of vacation. Therefore, it is usually easier to plan absences as tasks in a team project.

The project manager's view after approval

If the team leader has accepted the *Resource Request*, the project manager can see this upon next opening the project plan. It is also possible to track the approval state while working on a project. Click *Refresh* in the ribbon *Engagements* to do this.

You can identify accepted engagements by the value *Committed* in the column *Engagement Status* (in the view *Resource Plan*). In addition, you can find the data approved by the line manager in the column *Com. Max Units*. If you double-click on an engagement, you can see all comments in the *communication*.

Name	Proposed Start	Proposed Finish	Proposed Max Units	Engagement Status
IT HW Employee 1	02 Jan '17	28 Feb '17	30%	Committed
IT HW Employee 2	01 Feb '17	28 Feb '17	60%	Committed
IT HW Employee 3	NA	NA	NA	

Approved Resource Requests

SUMMARY

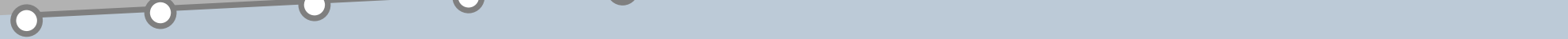
This chapter has introduced you to Resource Engagements, the new feature in Microsoft Project for the coordination between project and line managers. The tool's purpose is to support communication in a matrix organization. However, a lot of discipline is required from project managers and team leaders if the results or resource requests and project planning are to be kept in sync. Only then can they be used as reliable sources of information.

If all you want to do is get the requested resources approved as a project manager, you can use this function in principle. But you will have to maintain requests and project planning in parallel.

We believe there is a tool better suited to tactical resource planning that will simplify your work considerably in comparison to the Microsoft Project 2016 feature described above.

In the last chapter of this eBook, you will learn what this tool – based on Microsoft SharePoint – looks like.

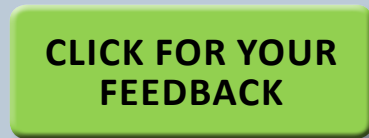
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TPG eBook Tactical Resource Planning

Chapter 11: Tactical Resource Planning with SharePoint

CHAPTER 11

TACTICAL RESOURCE PLANNING WITH SHAREPOINT

By now, you have learned a lot about tools for tactical resource planning. This chapter of the eBook considers a tool based on Microsoft SharePoint: TPG TeamManager.

This SharePoint App was conceived specially for the requirements of team leaders. We will introduce you to new possibilities and advantages available to team leaders and project managers with this tool.

To recap: By tactical resource planning, we mean the coordination between project and line managers. It depends on the company's form or organization (matrix or line). The goal is to meet the requirements for resources with the necessary skills for projects in a timely manner using staff from the line. This tends to be the team leaders' task.



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BRIDGING THE GAP BETWEEN PROJECT MANAGERS AND TEAM LEADERS

The SharePoint App TPG TeamManager supports the ongoing planning and coordination process between project managers and team leaders in a matrix organization in a simple and efficient way.

Both roles base their planning on the same data, but for their own requirements and from different perspectives.

For team leaders, the tool facilitates the complete planning of a team's resources. Besides commitments in response to requests from the projects, team leaders also administer all activities outside projects. These are absences as well as general operations and individual operations.

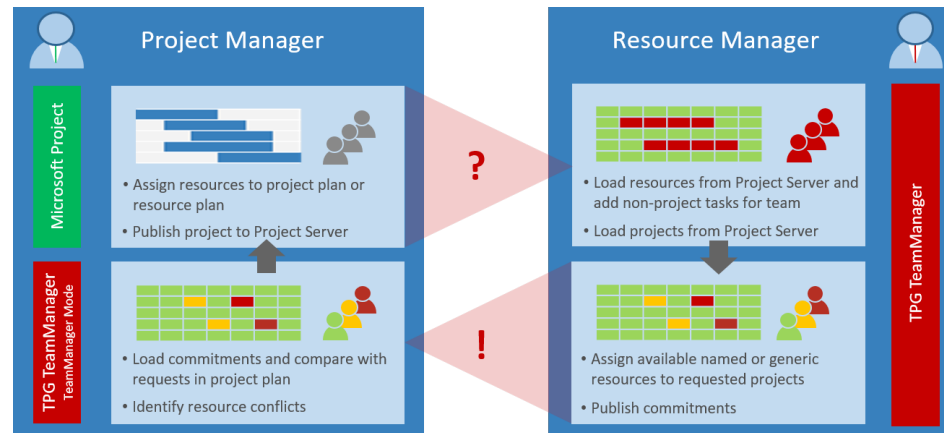
As a **team leader**, you analyze the status of resource utilization and the commitments for requested projects. This happens in a planning table with configurable traffic light colors. What is more, you can edit the contents in real-time. In a single view, you can see all activities and the state of your resources. This makes **identifying and resolving resource conflicts** considerably easier.

As a project manager working in Microsoft Project, you work differently. In your own user interface, you retrieve the committed resource information from the team leaders. After which you incorporate these changes into your project plans.

The advantage of this approach is obvious. As a project manager, you have an increased dependability. After all, **you plan with resources that are actually available**. For the commitment of the team leader was based on the full consideration of the resources' activities.

PROCESS OF RESOURCE PLANNING BETWEEN PROJECT AND LINE MANAGERS

The cycle of resource planning between project managers and team leaders should follow a timed process. This helps to ensure planning is kept up-to-date and relevant, thereby ensuring your stakeholders are satisfied .



Approved resource requests

And here is how the coordination should work:

- The capacities of the resources per team can be loaded from the Project Server's resource pool.
- Team leaders enter absences and operations or import them from other sources.
- Based on this, the actual project availability of the resources is calculated. Which is the essential step towards improving planning quality.
- Project Server or Project Online can load the project requests from the currently published plans of the project managers. This does not require entering any additional planning data in Microsoft Project.
- If your project managers are not using Microsoft Project there are other ways. You can enter their requests manually, or you can import them from other PM tools via text files.

STRUCTURE OF THE PLANNING TABLE

In TPG TeamManager, there is one plan per team. On starting the app, this opens automatically. In one table, you can see all resources, absences, operations and projects in a logical order. And you can even edit them within the same table.

In the first row, you can read off the **utilization status of the entire team** via traffic light colors. Below, you can see:

- the total capacity of the team
- the sums of the absences and operations
- the resulting remaining project availability
- the total status of the project commitments
- the individual resources of the team with their utilization status as a traffic light

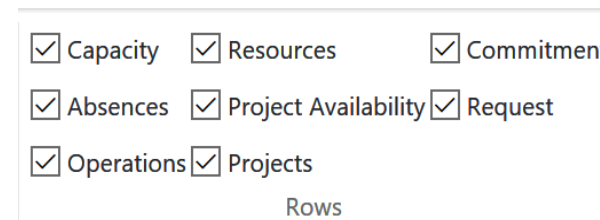
Name	Auto	Total	Σ	JAN Plan	FEB Plan	MAR Plan	APR Plan	MAY Plan
TPG Project Online.Serv...		7.179,00	915,00	16,00	-10,00	2,00	-28,00	146,00
Capacity		16.672,00	8.320,00	704,00	640,00	736,00	640,00	736,00
▶ Absences		888,00	240,00	40,00				
▶ Operations		2.944,00	1.744,00	392,00	242,00	342,00	112,00	152,00
Project Availability		12.840,00	6.336,00	272,00	398,00	394,00	528,00	584,00
▶ Projects		-99,00	581,00	128,00	112,00	32,00	124,00	7,60
▶ _Gen Services								
▶ Sally		1.888,00	412,00	3,00	7,00	39,00	5,00	73,00
▶ Sam		1.637,00	81,00	15,00	-1,00	-13,00	-21,00	51,00
▶ Sean		1.710,00	234,00	3,00	-3,00	-3,00	1,00	1,00
▶ Sonja		1.944,00	188,00	-5,00	-13,00	-21,00	-13,00	21,00

Utilization status of team, resources and projects in one table

The abundance of information may seem a little overwhelming at first. But the view shows you both the resource utilization and the project commitments at a glance using different colors to differentiate between different cases.

ONE view provides you as a team leader with the two perspectives you require. It enables you to make purposeful statements about possible and required assignments and to replan directly.

You can create a convenient overview for yourself by **hiding rows**. Thus, you keep things in view and work efficiently, even with a large table.



Filter options for plan rows to get a better overview

Getting your data into the tool could not be easier; here are a few methods:

- **Capacities** and **project requests** are loaded from Microsoft Project or from text files, or they are entered manually.
- **Absences** and **operations** you can enter manually, select from lists, or import from text files.
- **Absences** and **general operations** are created as rows at team level and automatically assigned to all resources. The entry of hours or days occurs at resource level. The aggregation of their work values happens at team level.

- **Individual operations** are maintained as rows and values under the resources. They are aggregated upwards at team level. In this process, identical individual activities of different resources are consolidated into one row.

Name	Auto	Total	Σ	JAN Plan	FEB Plan	MAR Plan	APR Plan	MAY Plan
TPG Project Online.Serv...		7.179,00	915,00	16,00	-10,00	2,00	-28,00	146,00
Capacity		16.672,00	8.320,00	704,00	640,00	736,00	640,00	736,00
Absences		888,00	240,00	40,00				
Vacation		888,00	240,00	40,00				
Operations		2.944,00	1.744,00	392,00	242,00	342,00	112,00	152,00
General Operations		1.344,00	624,00	52,00	52,00	52,00	52,00	52,00
Admin Work		480,00	240,00	20,00	20,00	20,00	20,00	20,00
TeamMeeting		864,00	384,00	32,00	32,00	32,00	32,00	32,00
Individual Operations		1.600,00	1.120,00	340,00	190,00	290,00	60,00	100,00
Application A		1.460,00	980,00	220,00	170,00	290,00	60,00	100,00

Table with general and individual operations

For the projects, three rows are maintained:

- The requests loaded from Microsoft Project Server / Project Online
- The commitments entered by the team leader
- The resulting color-coded status

Name	Auto	Total	Σ	JAN Plan	FEB Plan	MAR Plan	APR Plan	MAY Plan
TPG Project Online.Serv...		7.179,00	915,00	16,00	-10,00	2,00	-28,00	146,00
Capacity		16.672,00	8.320,00	704,00	640,00	736,00	640,00	736,00
Absences		888,00	240,00	40,00				
Vacation		888,00	240,00	40,00				
Operations		2.944,00	1.744,00	392,00	242,00	342,00	112,00	152,00
Project Availability		12.840,00	6.336,00	272,00	398,00	394,00	528,00	584,00
Projects		-99,00	581,00	128,00	112,00	32,00	124,00	7,60
Request		5.760,00	4.840,00	128,00	296,00	360,00	432,00	430,40
Commitment		5.661,00	5.421,00	256,00	408,00	392,00	556,00	438,00
Project 01		600,00	600,00	128,00	160,00	32,00	72,00	8,00
Project 02					-48,00		48,00	

Project status calculated from requests and commitments of resources

Below the resources, you will find the same structure as at team level, showing the individual data of the resources.

Name	Auto	Total	Σ	JAN Plan	FEB Plan	MAR Plan	APR Plan	MAY Plan	JUN Plan
Sally		2.120,00	620,00	1,00	1,00	-3,00	5,00	45,00	5,00
Capacity		4.176,00	2.088,00	184,00	160,00	176,00	168,00	184,00	168,00
Absences		488,00	320,00	32,00		72,00	40,00	40,00	80,00
Education		120,00	120,00			40,00	40,00		
Vacation		368,00	200,00	32,00		32,00			80,00
Operations		840,00	420,00	35,00	35,00	35,00	35,00	35,00	35,00
General Operations		360,00	180,00	15,00	15,00	15,00	15,00	15,00	15,00
Admin Work		120,00	60,00	5,00	5,00	5,00	5,00	5,00	5,00
TeamMeeting		240,00	120,00	10,00	10,00	10,00	10,00	10,00	10,00
Individual Operati...		480,00	240,00	20,00	20,00	20,00	20,00	20,00	20,00
Application A		480,00	240,00	20,00	20,00	20,00	20,00	20,00	20,00
Project Availability		2.848,00	1.348,00	117,00	125,00	69,00	93,00	109,00	53,00
Projects		244,00	244,00		-4,00	40,00	40,00		
Request		484,00	484,00	116,00	128,00	32,00	48,00	64,00	48,00
Commitment		728,00	728,00	116,00	124,00	72,00	88,00	64,00	48,00
Project 01		-4,00	-4,00		-4,00				

Resource status and all activities combined, i.e. absences, operations & projects

We will refrain from further technical notes on the necessary SharePoint environment and the population with data from tools such as Project Server / Project Online at this point. Please contact us, if you would like to know more about this:

www.theprojectgroup.com/en/tpg-company/contact

HIERARCHICAL TEAM STRUCTURES

Depending on the company structure, you can group teams into higher-level teams or departments. In such a case, only the plan headers, i.e. the sums of the teams, will be imported but not the individual resources of the subordinate teams.

The plan header includes the team status, the sums of the capacities, absences, operations and projects, but not individual resources.

Name	Auto	Total	2017					
		Σ	JAN Plan	FEB Plan	MAR Plan	APR Plan	MAY Plan	JUN Plan
TPG Project Online	10.688,00	10.688,00	1.214,00	1.180,00	1.080,00	834,00	936,00	700,00
Capacity	24.960,00	24.960,00	2.112,00	1.920,00	2.208,00	1.920,00	2.208,00	2.112,00
Absences	360,00	360,00	160,00					80,00
Operations	2.824,00	2.824,00	482,00	332,00	432,00	202,00	242,00	162,00
Project Availability	21.776,00	21.776,00	1.470,00	1.588,00	1.776,00	1.718,00	1.966,00	1.870,00
Projects	-64,00	-64,00		-48,00		52,00	-0,40	-39,60
ProductTests	2.080,00	2.080,00	176,00	160,00	184,00	160,00	184,00	176,00
Steffen Reister	2.080,00	2.080,00	176,00	160,00	184,00	160,00	184,00	176,00
TPG Project Online.Services.Team Services	960,00	960,00	16,00	-10,00	2,00	-28,00	146,00	86,00

Depiction of hierarchical team structures

By clicking on an imported team, you open its plan in a new browser window in read-only mode. This window will only ever show the published data.

If you want to edit the original data, you will have to open the plan of the respective team from its team site. For this, you will need the corresponding access privileges. Thereby maintaining all access privileges across hierarchies.

COMMITTING RESOURCES TO PROJECTS AND CONFLICT RESOLUTION

In the *Matrix* view, resources and projects of the team are shown in a contingency table. The rows and columns can be reversed.

	Project 01	Project 02	Project 03	Project 04	Project 05	Project 06	Project 07	Project 08	Project 09
_Gen Services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Sally	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sam	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sean	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sonja	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
External Vendor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Assigning projects and resources in the Matrix view

By adding or removing the ticks in the checkboxes, you create and remove assignments of projects to resources. A dark background indicates the existence of commitments.

You enter the **work values for the project commitments** in the *Plan* view along the timeline. As a team leader, this will show you how much **current remaining availability** there is. This helps you to protect your team members from overload.

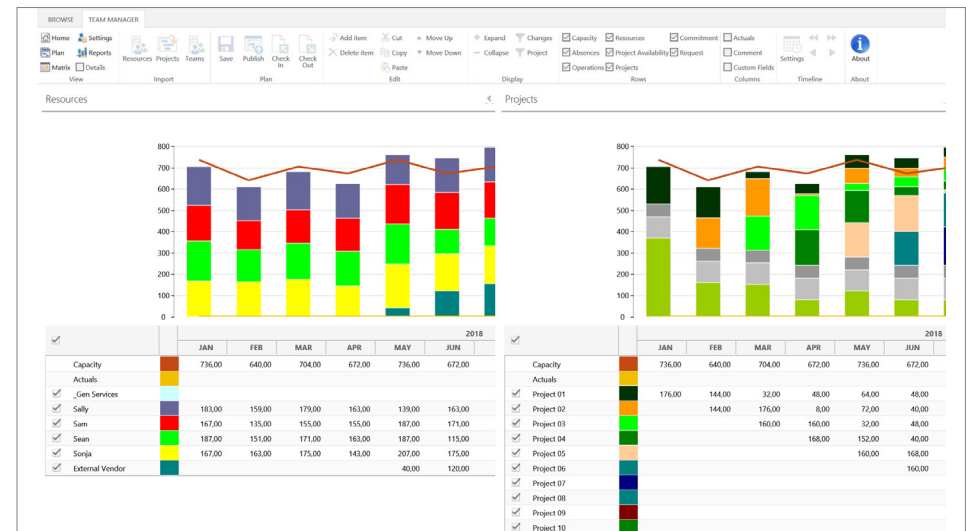
An example: In the example below, Project A and Project B were automatically committed fully using the option *Auto*. The replanning is not yet complete. One position is marked in orange and demonstrates need for action (Sabrina in June). A possible solution could be to move Sabrina's vacation to July. Another would be to remove the *Auto* option for Project A or Project B and move parts of the project to July. This is easy to see in the table.

Name	Auto	Total	2018							
			Σ	JAN Plan	FEB Plan	MAR Plan	APR Plan	MAY Plan	JUN Plan	JUL P
▼ Sabrina		2,720	632	-32		80	16	80	-48	
Capacity		4,176	2,088	184	160	176	168	184	168	
▼ Absences		304	304	40	40	24	8	56	40	
Vacation		240	240	40		24		56	40	
Others		64	64		40		8			
► Operations		192	192	16	16	16	16	16	16	
Project Availability		3,680	1,592	128	104	136	144	112	112	
▼ Projects										
Request		960	960	160	104	56	128	32	160	
Commitment		960	960	160	104	56	128	32	160	
▼ Project A	☑									
Request		320	320	160						
Commitment		320	320	160						
▼ Project B	☑									
Request		640	640		104	56	128	32	160	
Commitment		640	640		104	56	128	32	160	

Current remaining availability in the *Plan* view

GRAPHICAL OVERVIEW OF THE RESOURCE UTILIZATION

The view *Reports* shows two diagrams with the utilization of the resources in bars and their capacity as a line. On the left, you see the **utilization stacked by resource**. On the right, you see the identical utilization **stacked by project**.



Resources and projects in one view – easy to read and filter

If you select the projects and resources, both charts change simultaneously. You can easily adapt the standard colors of bars and lines to fit your needs.

And at the end you can **export all data**. This makes it possible to create further evaluations in Excel, Power BI or via a database with reporting services or other tools.

SUMMARY

This chapter of the eBook has introduced you to the benefits of resource management with SharePoint. The app TPG TeamManager provides your project managers and team leaders with a tool for balanced resource planning. Both sides can work in a tool created for their role and have full transparency. But the responsibilities and access privileges to the planning data remain intact.

An easy-to-handle tool, like TPG TeamManager, allows both small and large companies to obtain a complete resource overview of all teams and departments and operate it on an ongoing basis. And achieve that within a matter of days or weeks. You can also read [this blog post](#) to find out more about this.

With such a tool, you arrive at a very good overview of the company-wide resource utilization quickly. And this is independent of the dissemination of a PM tool. After all, team leaders tend to know to which extent their team members are working on what projects. And, once detailed project planning by the project manager has been introduced, team leaders can still improve the quality of resource planning step by step with the tool.

FOR DECISION-MAKERS:

The most important difference between tactical resource management in Microsoft Project 2016 and in TPG TeamManager

- The function Resource Engagements in Microsoft Project 2016 forces your project managers to maintain the requirements of the resources in parallel to project planning. This is a considerable extra effort and is therefore an impediment to acceptance.
- TPG TeamManager allows your team leaders to import the project requests from project planning without extra effort. In addition, they can also plan all the team's internal activities. In a comfortable way, they create a solid basis on which they can make valid project commitments.

TPG TeamManager is a SharePoint App. The tool can be used in combination with Microsoft Project Server 2013, 2016 as well as Project Online. With this combination, you provide optimal support for the coordination process between project and line management. This increases the prospect of success for your projects. Your team leaders can use the app for team planning, but also as a stand-alone. It is possible to import data from other systems. Find out more at www.theprojectgroup.com/en/teammanager



THANKS FOR YOUR FEEDBACK

REQUEST FOR YOUR FEEDBACK



We aim to constantly improve this eBook. Therefore, we need your feedback. Please, click the green button below and give us your opinion of the chapter. **This will only take a few seconds.**



HERE IS WHAT YOU CAN DO NOW

You have read about the challenges of tactical resource planning, about processes, skills and tools in the preceding 11 chapters. You have received valuable tips and recommendations. And you are familiar with our recommended course of action for introducing resource planning between project and line management to a company. You now have arguments at hand that are necessary if you want to convince decision-makers and users. We hope we provided you with new approaches to optimizing your own tactical resource planning.

If you would like to see TPG TeamManager in action, click the button below to arrange a live demo.



Should you have any questions, please email Achim Schmidt-Sibeth (achims@theprojectgroup.com).

And one last request: If you like the eBook, please recommend this page in your network:

ebook.theprojectgroup.com/resource-planning

You can also do this by clicking on the following buttons for Facebook, Twitter and LinkedIn. Thank you very much!

