



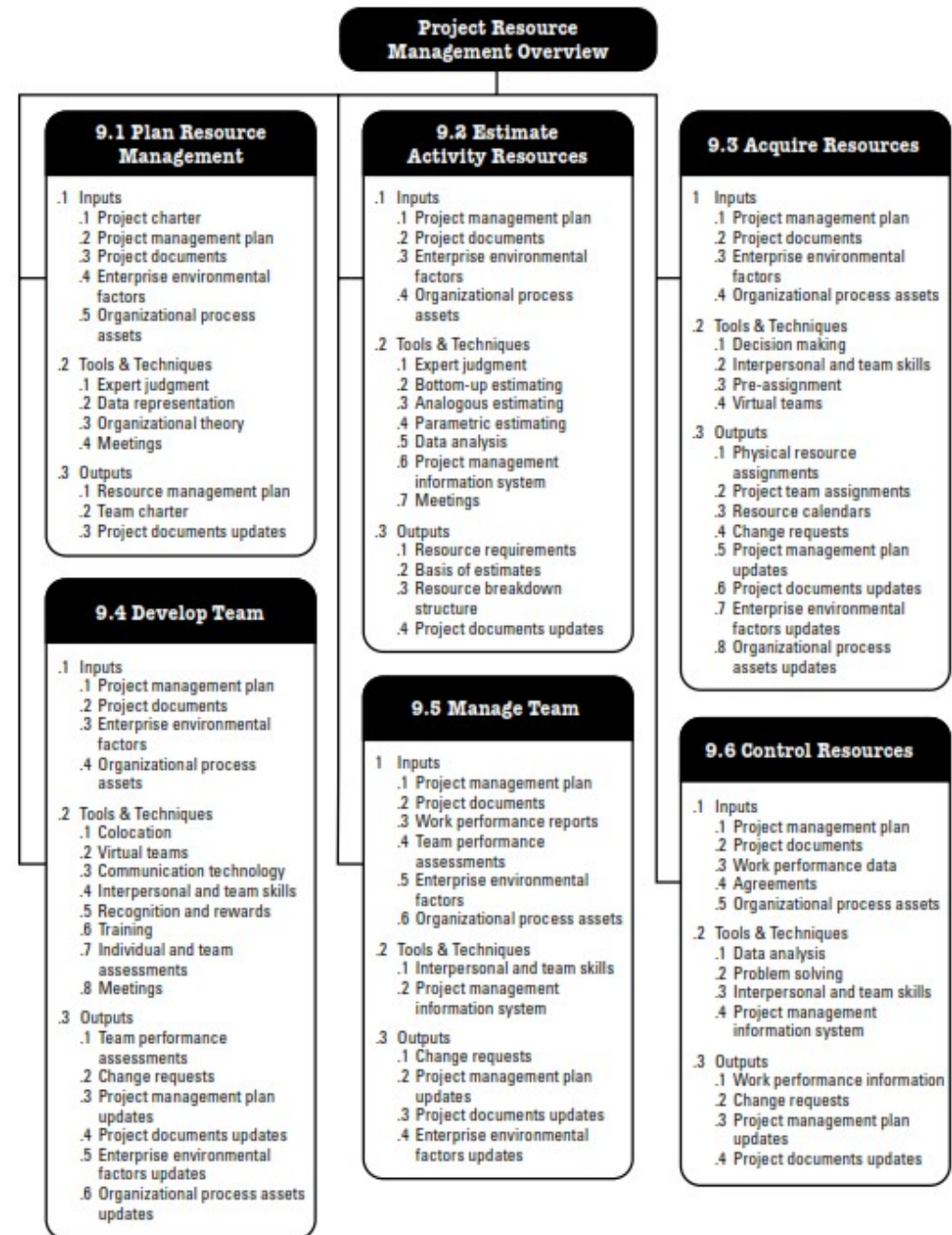
Chapter Nine-Resource management

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Chapter Nine-Human Resource management

- Behind every successful project is a **great team**. So how do you make sure that you get—and keep—the best possible team for your project? You need to plan carefully, set up a **good working environment**, and **negotiate for the best people you can find**. But it's not enough to put a good team together...if you want your project to go well, you've got to keep the team **motivated** and deal with any conflicts that happen along the way.
- Human resource management gives you the tools you need to get the best team for the job and lead them through a successful project.

Big picture



KEY CONCEPTS

- The project team consists of individuals with assigned roles and responsibilities who work collectively to achieve a shared project goal. The project manager should invest suitable effort in **acquiring, managing, motivating, and empowering** the project team. Although specific roles and responsibilities for the project team members are assigned, the involvement of all team members in project planning and decision making is beneficial. Participation of team members during planning adds their expertise to the process and strengthens their commitment to the project.

TRENDS AND EMERGING PRACTICES

- **Resource management methods.** Due to the scarce nature of critical resources, in some industries, several trends have become popular in the past several years. There is extensive literature about lean management, Just-in-time (JIT) manufacturing, Kaizen, total productive maintenance (TPM), theory of constraints (TOC), and other methods. A project manager should determine if the performing organization has adopted one or more resource management tools and adapt the project accordingly.
- **Emotional intelligence (EI).** The project manager should invest in personal EI by improving inbound (e.g., self-management and self-awareness) and outbound (e.g., relationship management) competencies. Research suggests that project teams that succeed in developing team EI or become an emotionally competent group are more effective. Additionally, there is a reduction in staff turnover.
- **Self-organizing teams.** The increase in using agile approaches mainly for the execution of IT projects has given rise to the self-organizing team, where the team functions with an absence of centralized control. In projects that have self-organizing teams, the project manager (who may not be called a project manager) role provides the team with the environment and support needed and trusts the team to get the job done. Successful self-organizing teams usually consist of generalized specialists, instead of subject matter experts, who continuously adapt to the changing environment and embrace constructive feedback.

TRENDS AND EMERGING PRACTICES

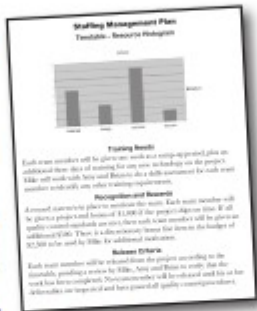
- **Virtual teams/distributed teams**-The globalization of projects has promoted the need for virtual teams that work on the same project, but are not collocated at the same site. The availability of communication technology such as email, audio conferencing, social media, web-based meetings, and video conferencing has made virtual teams feasible. **Managing virtual teams has unique advantages, such as being able to use special expertise on a project team even when the expert is not in the same geographic area, incorporating employees who work from home offices, and including people with mobility limitations or disabilities.** The challenges of managing virtual teams are mainly in the communication domain, including a possible feeling of isolation, gaps in sharing knowledge and experience between team members, and difficulties in tracking progress and productivity, possible time zone difference and cultural differences.

Get your team together

This shouldn't be a surprise—every knowledge area has its planning process, and Plan Resource Management is no exception.

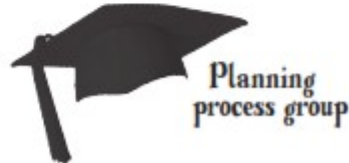


In the Plan Resource Management process, you plan out exactly which resources you'll need, what their roles and responsibilities are, and how you'll train your team and make sure they stay motivated.



Plan Resource Management

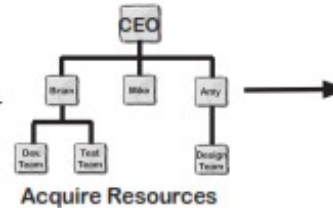
This is where you plan out the resource needs for your project, and how you'll manage and reward the team.



This is where you generate the estimates for the activities being performed.



It makes sense that Acquire Project Team and Develop Team are in the Executing group—you only put the team together AFTER the project has started.



Once the project gets started, you need to put together your team. This means you may need to negotiate for some of the resources.

You'll need to train your team, and keep them motivated with rewards in order to get the project done.

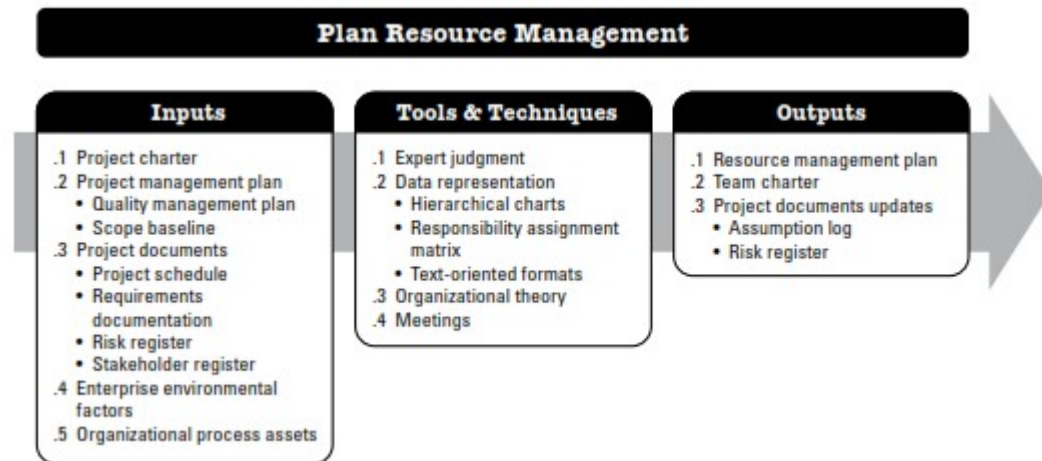
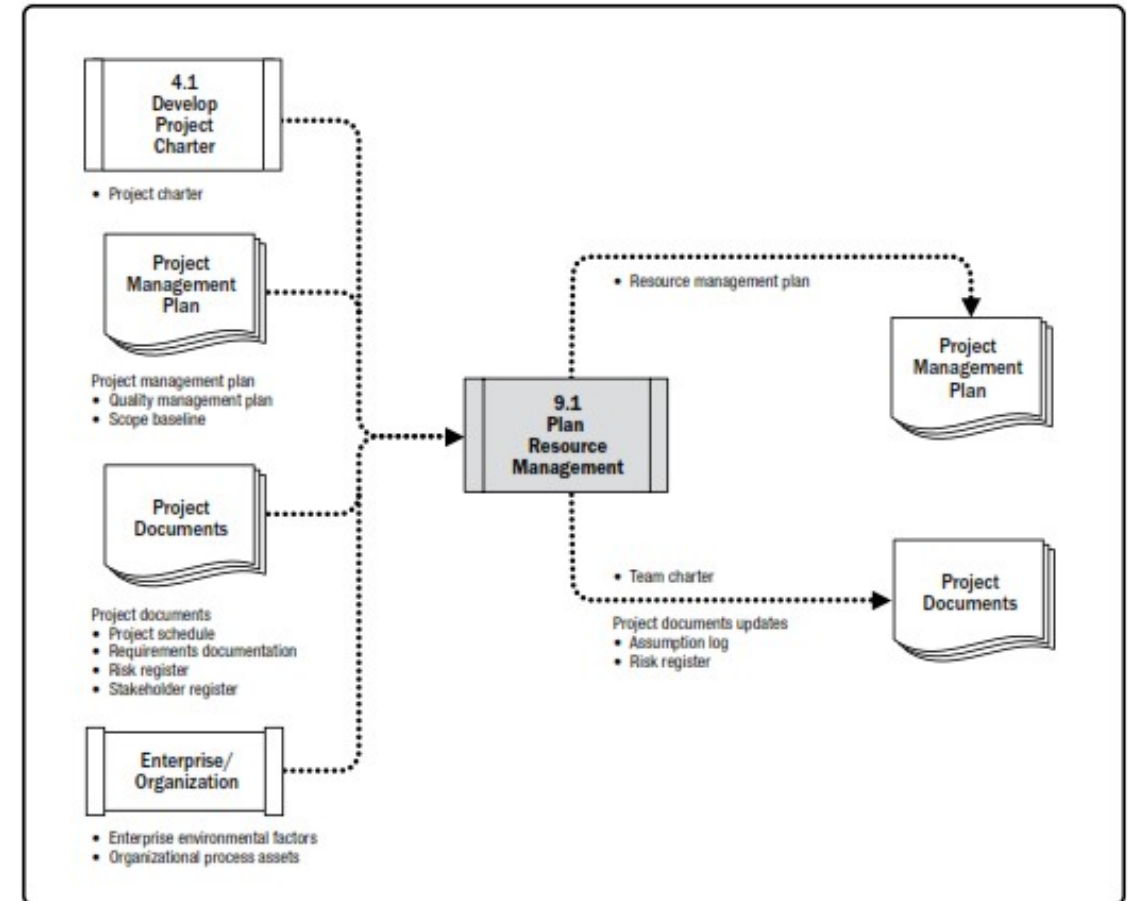


All three of these processes are part of the Executing process group, because they happen while your team's executing the project!



No project goes perfectly. People have conflicts, and it's up to you to make sure they get resolved.



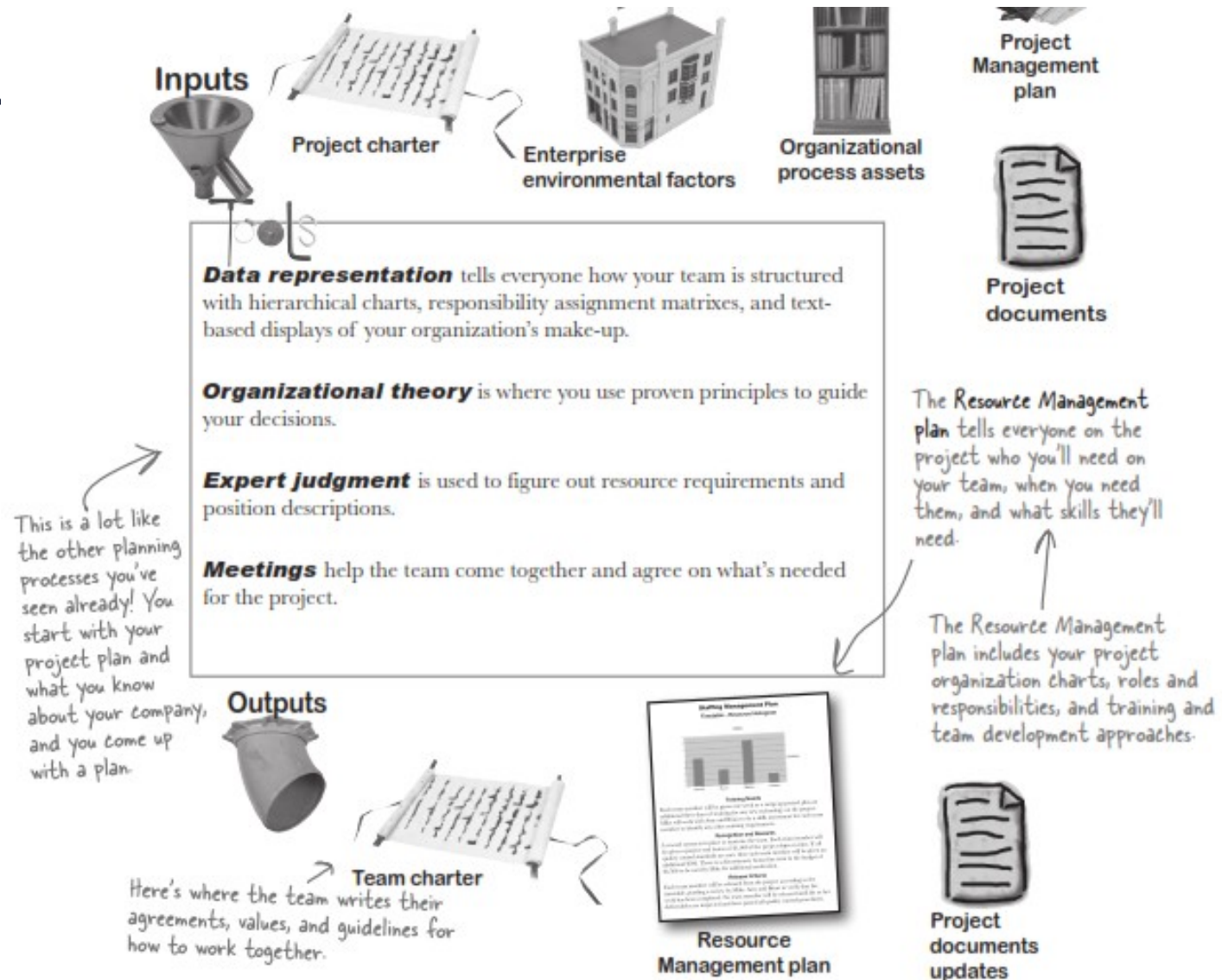


The Staffing Management plan

- An important component of the Human Resource Management plan is the **Staffing Management plan**. It tells you everything that you need in order to build your team, keep them motivated, and manage them to resolve conflicts and get the work done.

*Everything you do with
your team—acquiring them,
developing them, and managing
them—depends on a good
Staffing Management plan.*

Plan Human Resource Management



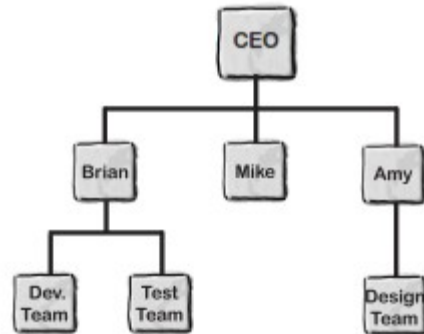
DATA REPRESENTATION

- Data representation techniques that can be used for this process include but are not limited to charts. Various formats exist to document and communicate team member roles and responsibilities. Most fall into hierarchical, matrix, or text oriented formats.
- **Work breakdown structures (WBS)**-The WBS is designed to show how project deliverables are broken down into work packages and provide a way of showing high-level areas of responsibility.
- **Organizational breakdown structure (OBS)**-While the WBS shows a breakdown of project deliverables, an OBS is arranged according to an organization's existing departments, units, or teams, with the project activities or work packages listed under each department. An operational department, such as information technology or purchasing, can see all of its project responsibilities by looking at its portion of the OBS.
- **Resource breakdown structure**-The resource breakdown structure is a hierarchical list of team and physical resources related by category and resource type that is used for planning, managing and controlling project work. Each descending (lower) level represents an increasingly detailed description of the resource until the information is small enough to be used in conjunction with the work breakdown structure (WBS) to allow the work to be planned, monitored, and controlled.

DATA REPRESENTATION

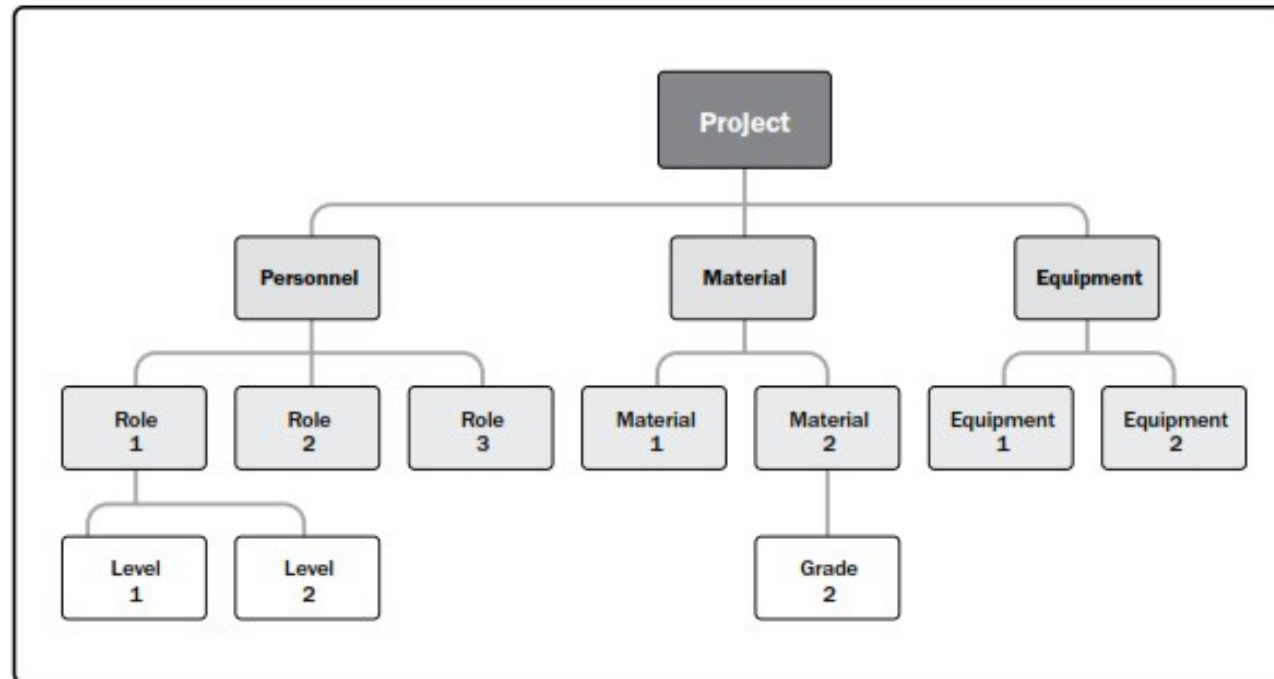
- **Assignment Matrix**-A RAM shows the project resources assigned to each work package. It is used to illustrate the connections between work packages, or activities, and project team members. On larger projects, RAMs can be developed at various levels. For example, a high-level RAM can define the responsibilities of a project team, group, or unit within each component of the WBS. Lower-level RAMs are used within the group to designate roles, responsibilities, and levels of authority for specific activities. The matrix format shows all activities associated with one person and all people associated with one activity. This also ensures that there is only one person accountable for any one task to avoid confusion about who is ultimately in charge or has authority for the work. One example of a RAM is a **RACI** (***responsible, accountable, consult, and inform***) chart

OBS vs RACI



RACI Chart	Person				
Activity	Ann	Ben	Carlos	Dina	Ed
Create charter	A	R	I	I	I
Collect requirements	I	A	R	C	C
Submit change request	I	A	R	R	C
Develop test plan	A	C	I	I	R
R = Responsible A = Accountable C = Consult I = Inform					

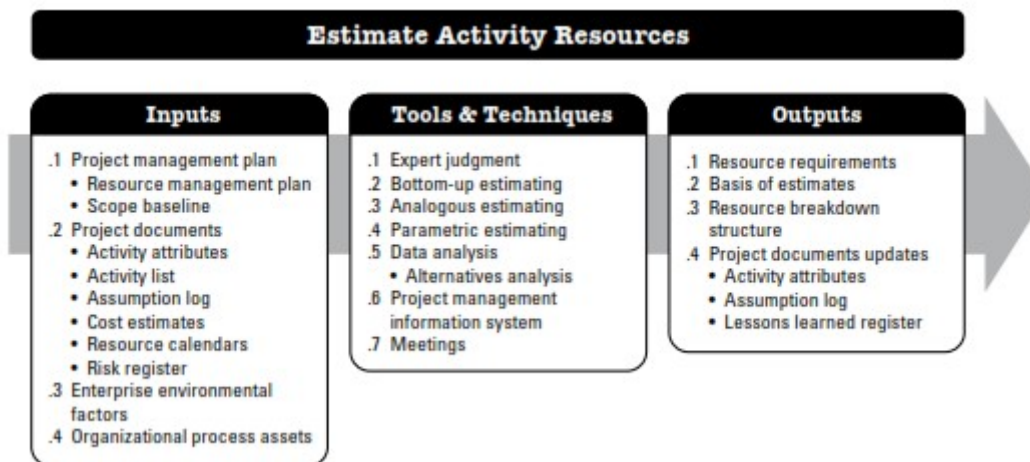
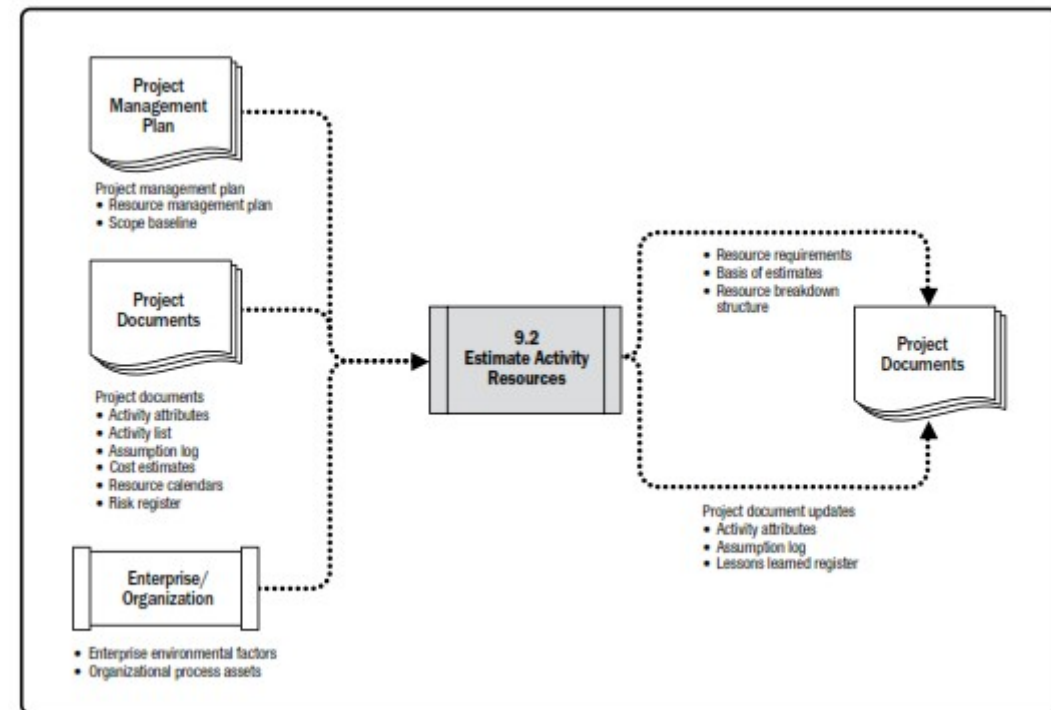
RBS



Estimate activity resources

- Estimate Activity Resources is the process of estimating team resources and the type and quantities of materials, equipment, and supplies necessary to perform project work. The key benefit of this process is that it identifies the type, quantity, and characteristics of resources required to complete the project. This process is performed periodically throughout the project as needed.
- Before you can assign resources to your project, you need to know which ones you're authorized to use on your project. That's an input, and it's called **resource calendars**. **You'll also need the activity list** that you created earlier, and you'll need to know about how your organization typically handles resources.

Estimate activity resources



Acquire a team

- Your Human Resource Management plan is in place, your project is ready to roll, and now it's time to begin the actual project work! You need your team, and the way you bring them on board is the **Acquire Project Team process**.
- This is where you negotiate with functional managers for your project team members. You need the right people for the project, and you've done all the prep work to figure out who you need and when you need them. So now it's time to go get your team!

Acquire Resources

Inputs

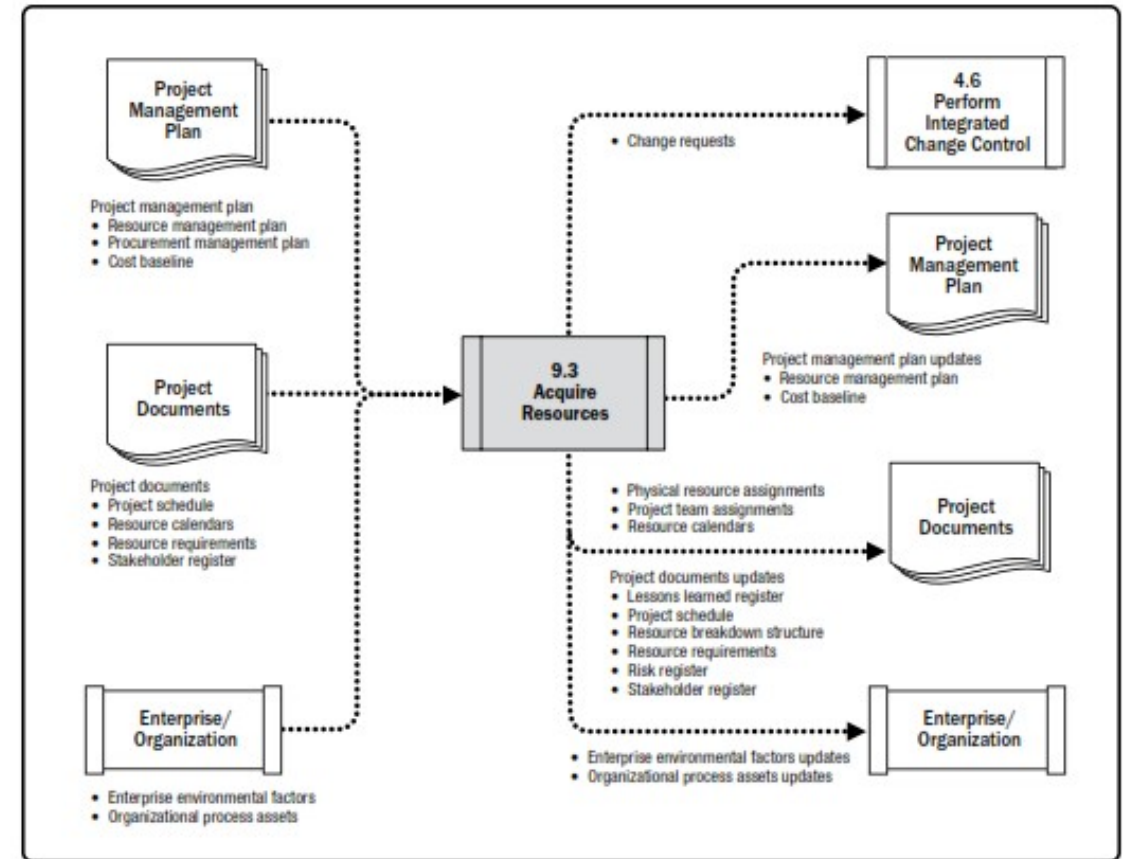
- .1 Project management plan
 - Resource management plan
 - Procurement management plan
 - Cost baseline
- .2 Project documents
 - Project schedule
 - Resource calendars
 - Resource requirements
 - Stakeholder register
- .3 Enterprise environmental factors
- .4 Organizational process assets

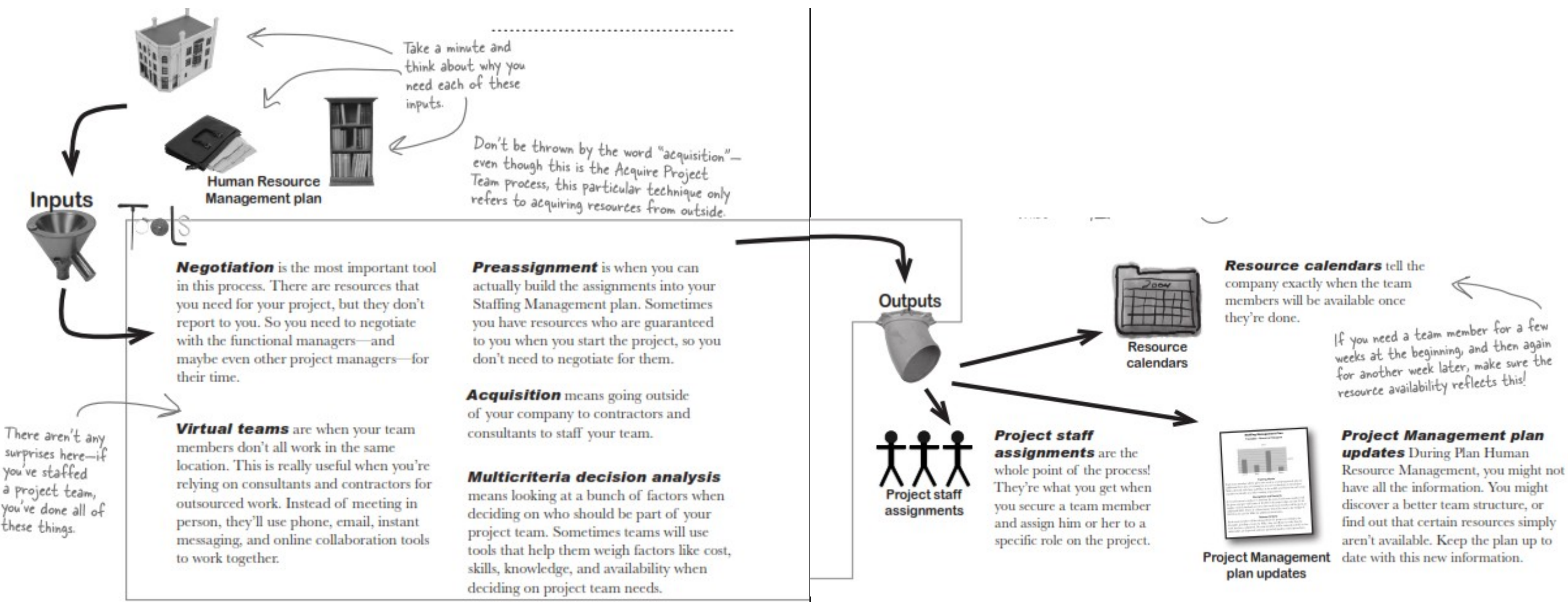
Tools & Techniques

- .1 Decision making
 - Multicriteria decision analysis
- .2 Interpersonal and team skills
 - Negotiation
- .3 Pre-assignment
- .4 Virtual teams

Outputs

- .1 Physical resource assignments
- .2 Project team assignments
- .3 Resource calendars
- .4 Change requests
- .5 Project management plan updates
 - Resource management plan
 - Cost baseline
- .6 Project documents updates
 - Lessons learned register
 - Project schedule
 - Resource breakdown structure
 - Resource requirements
 - Risk register
 - Stakeholder register
- .7 Enterprise environmental factors updates
- .8 Organizational process assets updates



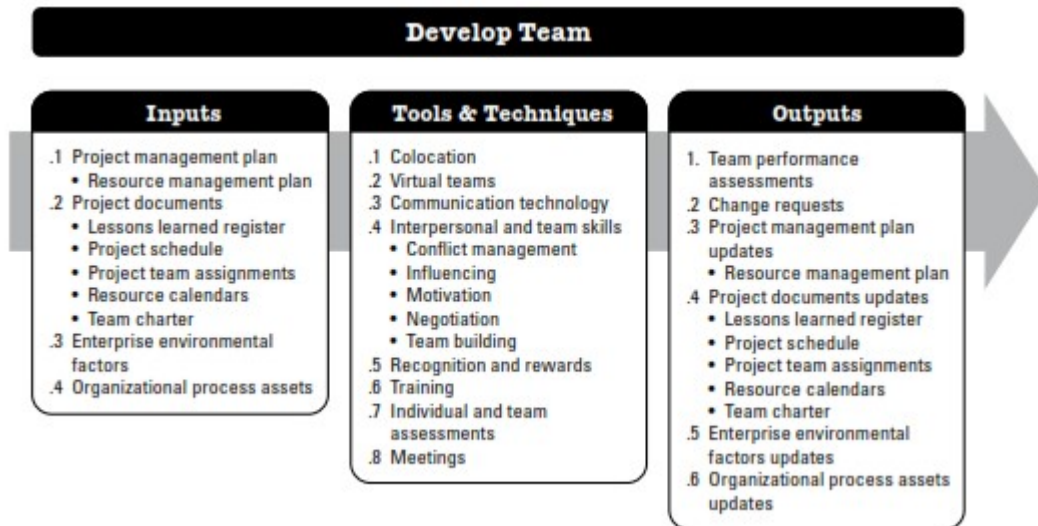
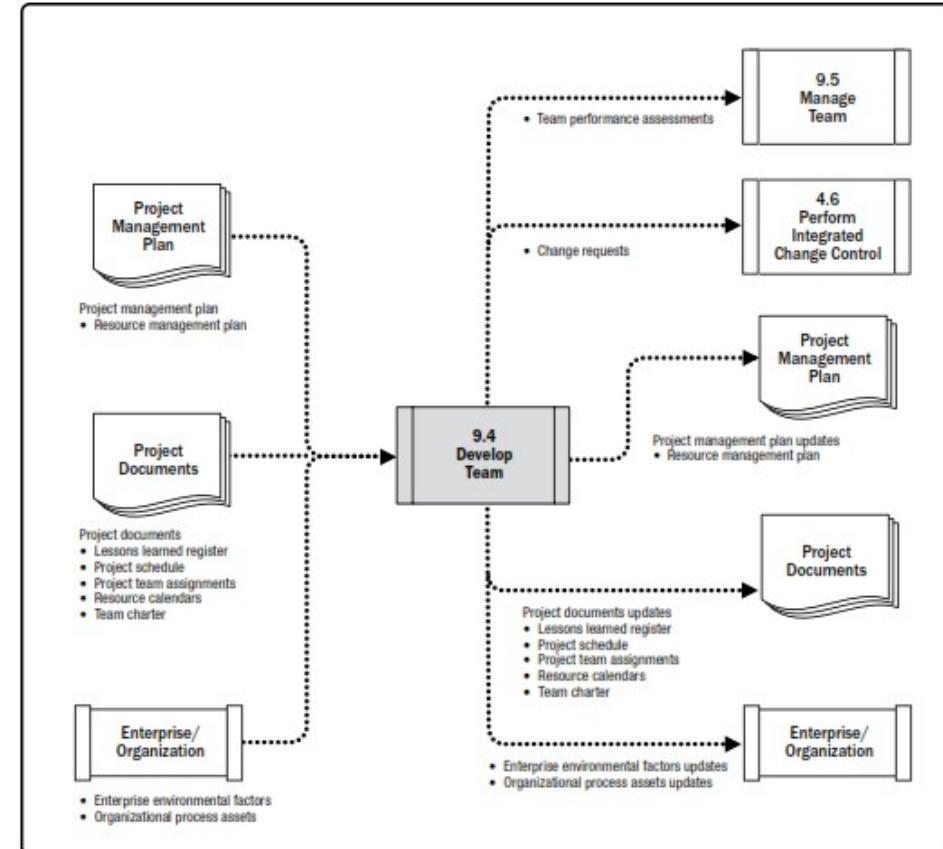


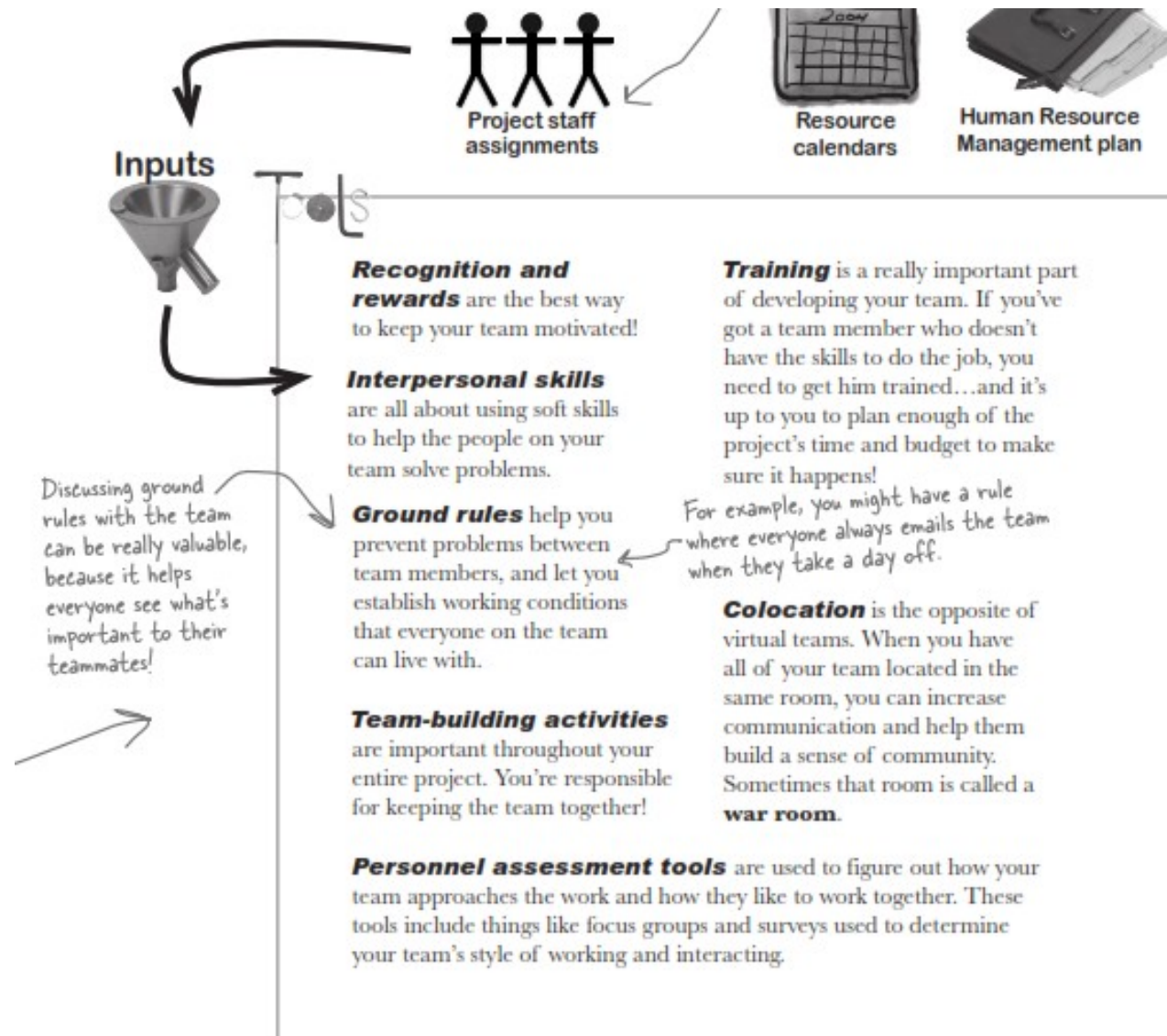
Develop your project team

- The **Develop Project Team process is the most important one in Human** Resource Management. It's the one where you make sure your team is motivated and well managed—and those are some of the most important things that project managers do! You do it throughout the *entire Executing* phase of the project, because you need to keep your team moving toward the goal.

*You develop your project team by keeping them motivated,
and you do this all the way through your entire project.*

Develop your Team





Lead the team

The five kinds of power

There are five kinds of power that a project manager typically uses on a project. The first is called **legitimate power**, which is what you use when you assign work to someone who reports to you.

When you're someone's boss, you have legitimate power to tell them what to do. But when you work in a matrix organization, you don't have direct reports! So you'll need to use the other kinds of power to influence your team.

Reward power is what you have when you can award a bonus or another kind of reward in order to motivate team members. Always make sure that rewards are **fair**—you don't want to single out one person who is eligible for a reward without giving others a chance at it! And rewards work best when they're tied to specific goals or project priorities.

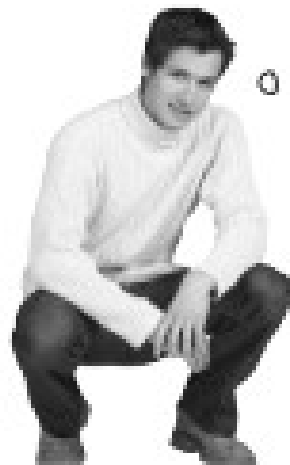
Making everyone compete for one single reward isn't fair—it's actually demotivating to force people to compete for an arbitrary prize.

Expert power means that the team respects you for your expertise in a specific area, and gives you credibility because of that. Think about it: a team of programmers is more likely to respect you and do what you ask them to do if they know that you're an accomplished software engineer!



Referent power means that people admire you, are loyal to you, and want to do what you do because you're part of the cool crowd. Often, a project manager might wield referent power because he's trusted by people in authority, and others perceive him as associated with success.

If you buy something because a celebrity does, that's referent power.



I WAS JUST HAVING COFFEE WITH THE CEO AND WE GOT TO TALKING ABOUT OUR PROJECT. HE'S REALLY COUNTING ON US.

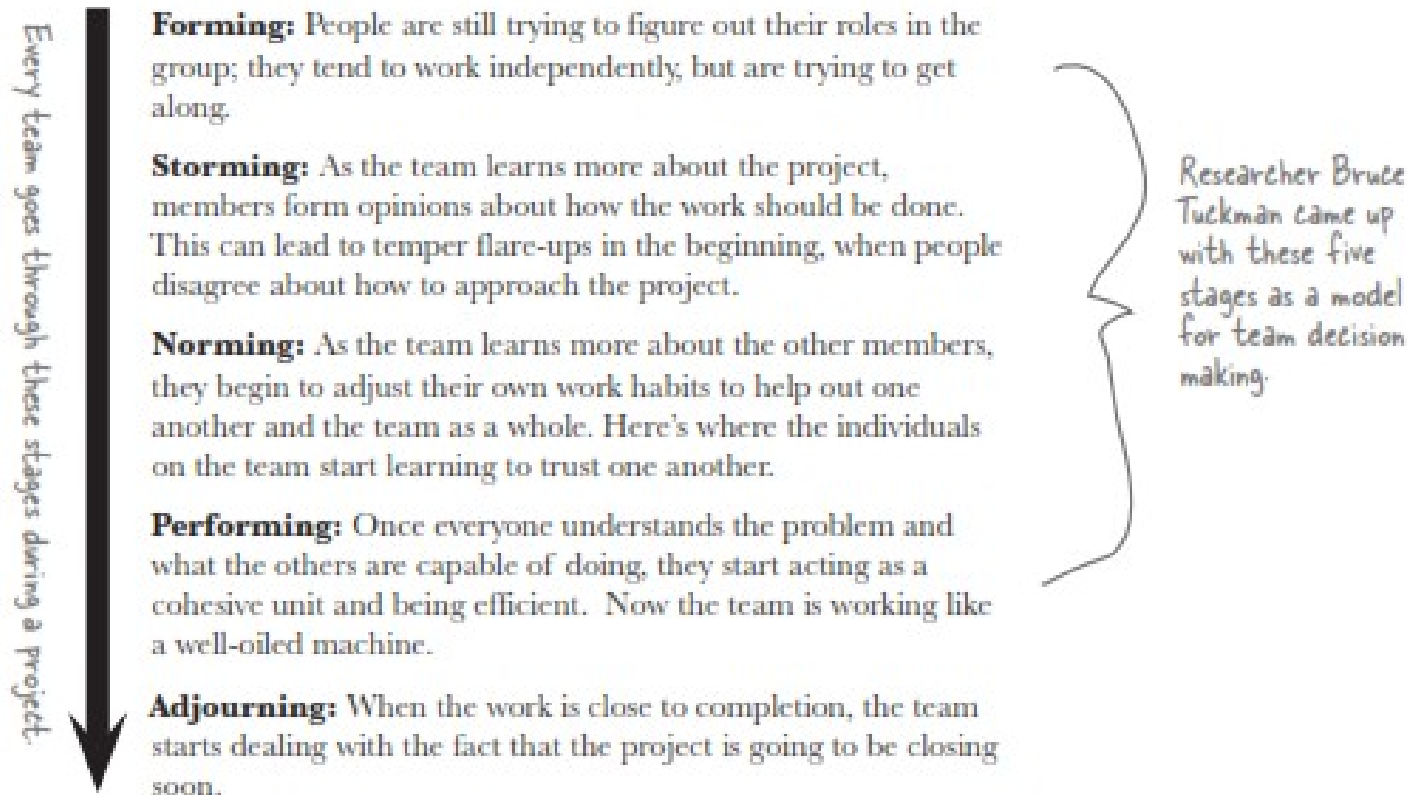
Punishment power is exactly what it sounds like—you correct a team member for poor behavior. **Always remember to do this one-on-one and in private!** Punishing someone in front of peers or superiors is extremely embarrassing, and will be really counterproductive.

LOOK, JOE, I KNOW YOU'RE TRYING YOUR BEST, BUT IF YOU CAN'T MEET THE DELIVERY DEADLINE, I'M GOING TO HAVE TO TAKE YOU OFF THE TEAM.

Could you imagine if someone said that to you in front of your boss?



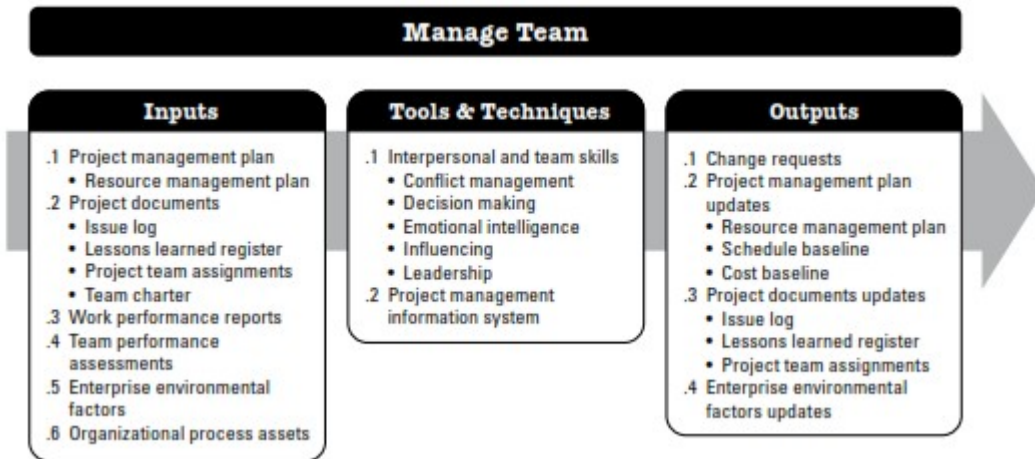
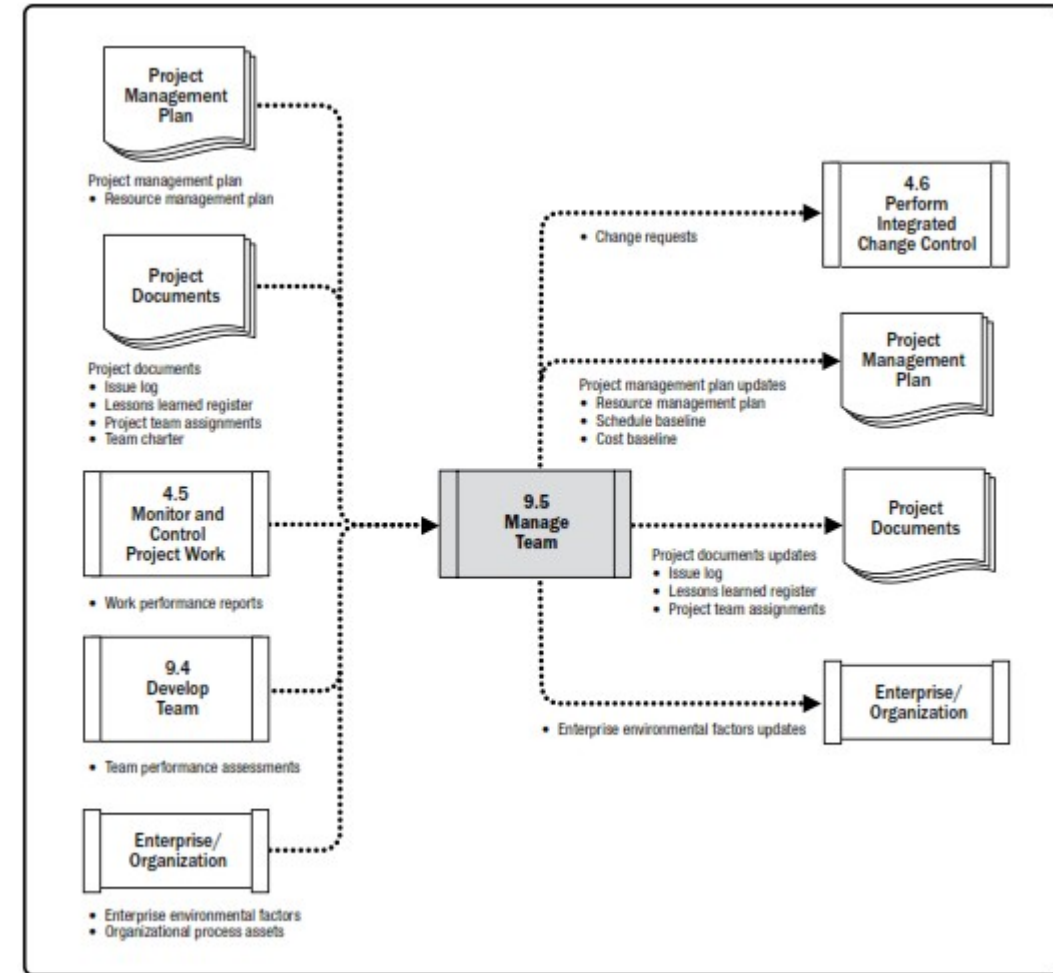
Stages of team development



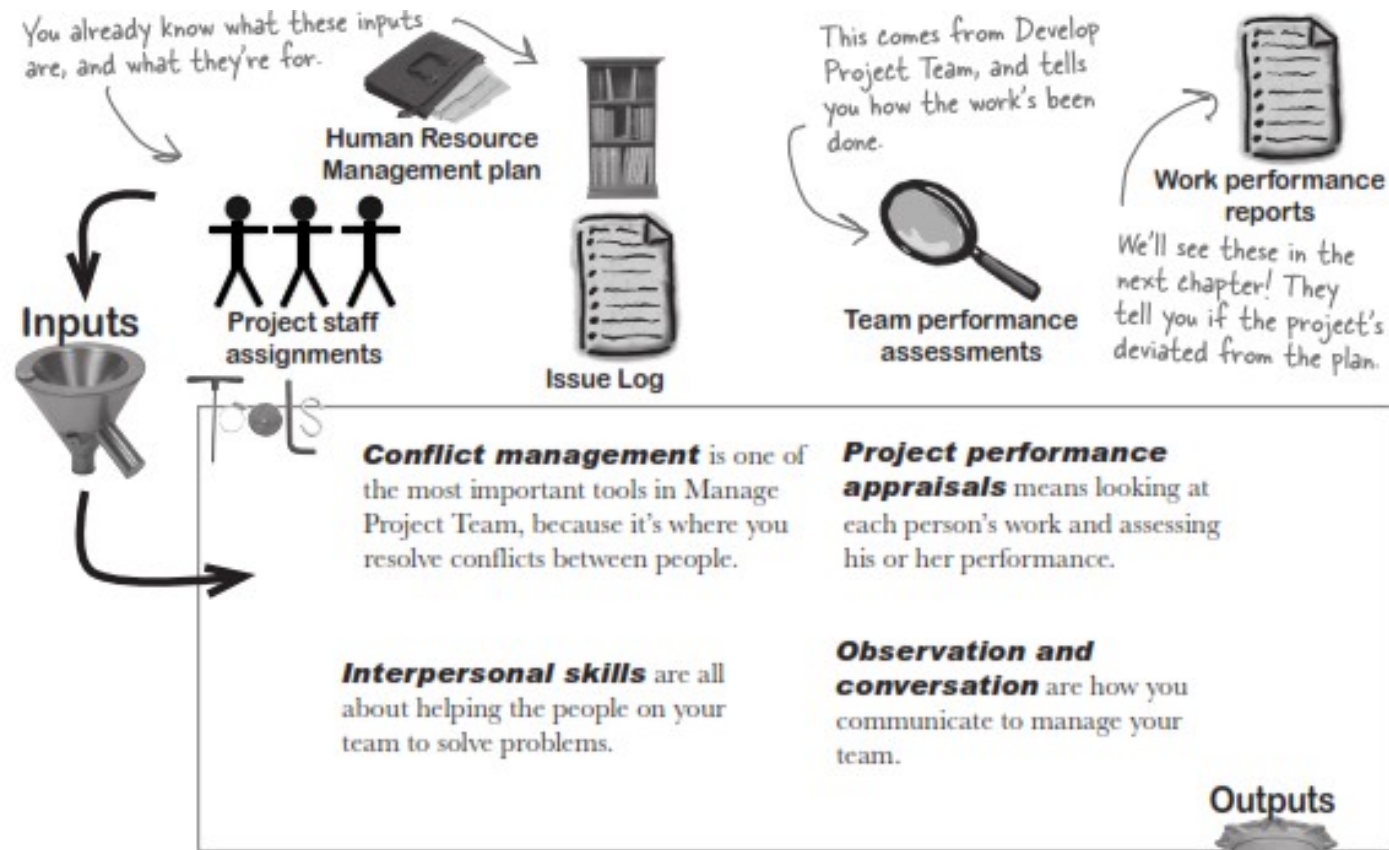
Manage Team

- Manage Team is the process of tracking team member performance, providing feedback, resolving issues, and managing team changes to optimize project performance. The key benefit of this process is that it influences team behavior, manages conflict, and resolves issues. This process is performed throughout the project.
- Managing the project team requires a variety of management and leadership skills for fostering teamwork and integrating the efforts of team members to create high-performance teams. Team management involves a combination of skills with special emphasis on communication, conflict management, negotiation, and leadership. Project managers should provide challenging assignments to team members and provide recognition for high performance.

Managing team



Manage team



Conflict manageme

Some of the common reasons that conflicts happen

Resources are scarce—that's why you have to negotiate for them. Have you ever been in a situation where there's a "good" conference room, or top-performing team member, or even that photocopier machine that always seems to be in use? Well, that's a scarce resource. No wonder resources cause so many conflicts.

Priorities mean one project or person is more important than another, and gets more budget, resources, time, prestige, or other perks. If the company's priorities aren't crystal clear, then conflicts are definitely going to happen.

Schedules decide who gets what, when. Have you ever had a client, sponsor, or stakeholder get upset because your project won't come in as early as he or she wanted it to? Then you've had a conflict over schedules.

These three things are the source of over 50% of all conflicts!

Over half of all conflicts are caused by resources, priorities, and schedules.

Some more sources of conflict

Personalities are always clashing. Sometimes two people just don't get along, and you're going to have to find a way to make them work together in order to get your project done.

Cost disagreements seem to come up a lot, especially where contracts are involved. Even when the price is agreed upon up front, buyer's remorse will set in, and it will lead to issues.

Technical opinions are definitely a reason that conflicts happen, because it's really hard to get an expert to change his mind...so when two of them disagree, watch out!

How to resolve a conflict

Confronting—or problem solving—is the most effective way to resolve a conflict.

When you confront the source of the conflict head-on and work with everyone to find a solution that actually fixes the reason that conflicts happen, then the problem is most likely to go away and never come back!

OK, LET'S SEE IF WE CAN GET TO THE BOTTOM OF THIS.

The first thing you do whenever you face a problem is do your research and gather all the information so you can make an informed decision.



Compromise sounds good, doesn't it?

But hold on a second—when two people compromise, it means that each person gives up something. That's why a lot of people call a compromise a “lose-lose” solution.

LOOK, EACH OF YOU IS GOING TO HAVE TO GIVE UP SOMETHING IF WE WANT TO GET BACK ON TRACK.

You should always try to confront the problem first—you should forge a compromise only after you've tried every possible way to solve the real problem.



Collaborating means working with other people to make sure that their viewpoints and perspectives are taken into account. It's a great way to get a real commitment from everyone.

AMY CAME UP WITH A GOOD IDEA, AND BRIAN EXPANDED ON IT. IT SOUNDS LIKE WE'VE GOT A REAL PLAN HERE!



Smoothing is what you're doing when you try to play down the problem and make it seem like it's not so bad. It's a temporary solution, but sometimes you need to do it to keep tempers from flaring and give people some space to step back and really figure out what's going on.



COME ON, GUYS. I KNOW THIS SEEMS LIKE THE END OF THE WORLD, BUT IT'S REALLY NOT SUCH A BIG DEAL.

Forcing means putting your foot down and making a decision. One person wins, one person loses, and that's the end of that.



I'M IN CHARGE HERE, AND I'VE MADE MY DECISION... AND YOU'RE JUST GONNA HAVE TO LIVE WITH IT.

You should really try to avoid forcing and withdrawal if you can.

Withdrawal doesn't do much good for anyone. It's when people get so frustrated, angry, or disgusted that they just walk away from the argument. It's almost always counterproductive. If someone withdraws from a problem before it's resolved, it won't go away—and your project will suffer.

YOU GUYS ARE BEING TOTALLY UNREASONABLE, AND WE'RE JUST NOT GOING TO TALK ABOUT IT ANYMORE.

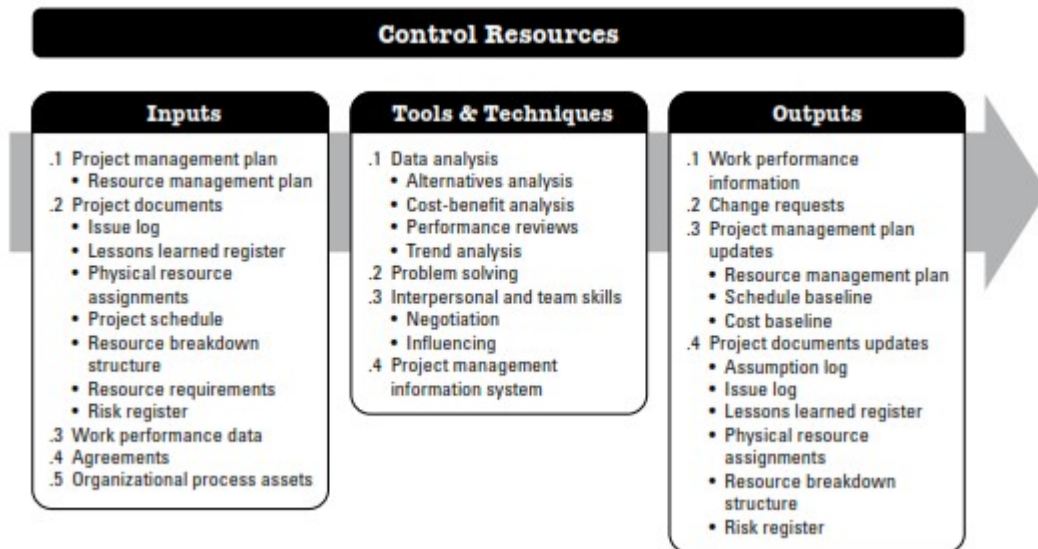
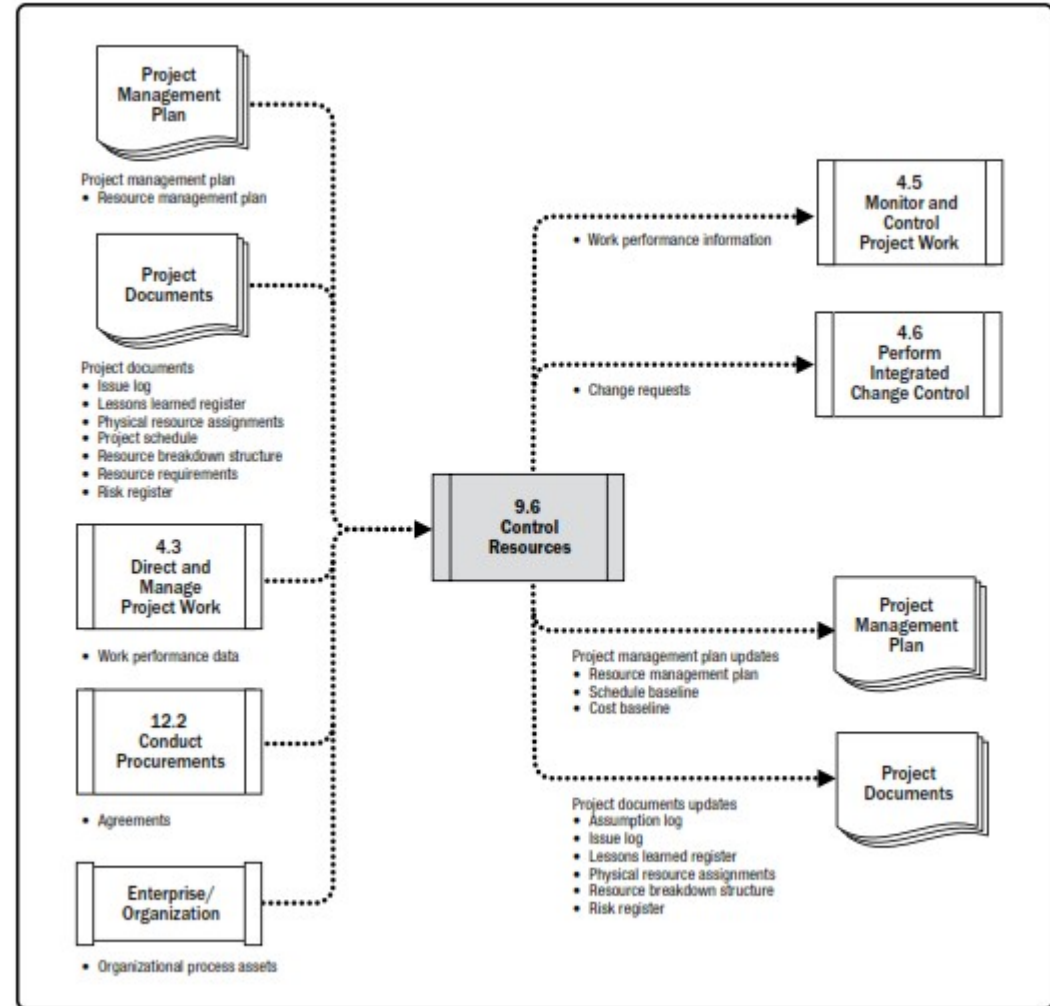
Who's really being unreasonable here?



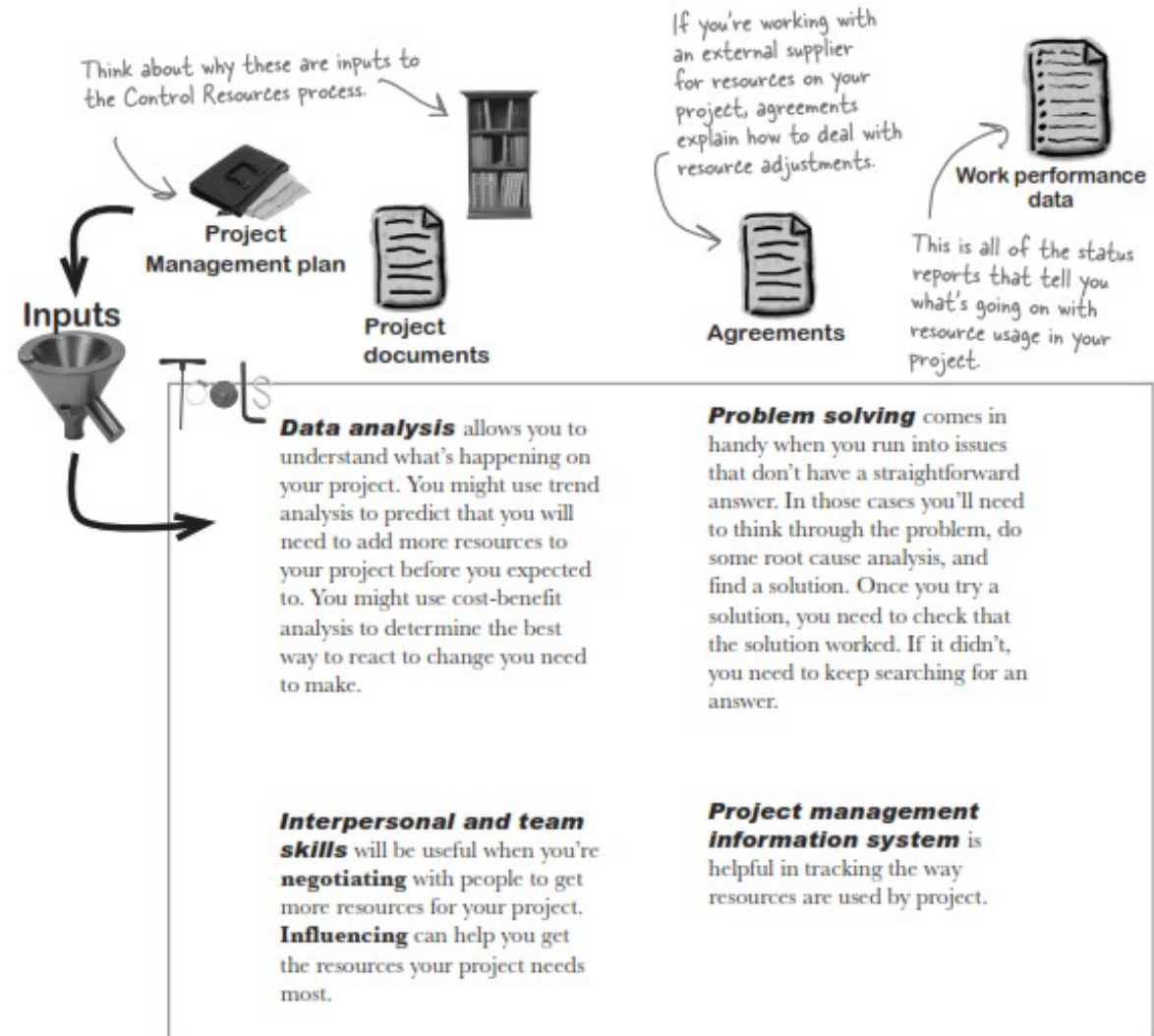
Control resources

- Control Resources is the process of ensuring that the physical resources assigned and allocated to the project are available as planned, as well as monitoring the planned versus actual utilization of resources and taking corrective action as necessary. The key benefit of this process is ensuring that the assigned resources are available to the project at the right time and in the right place and are released when no longer needed. This process is performed throughout the project.

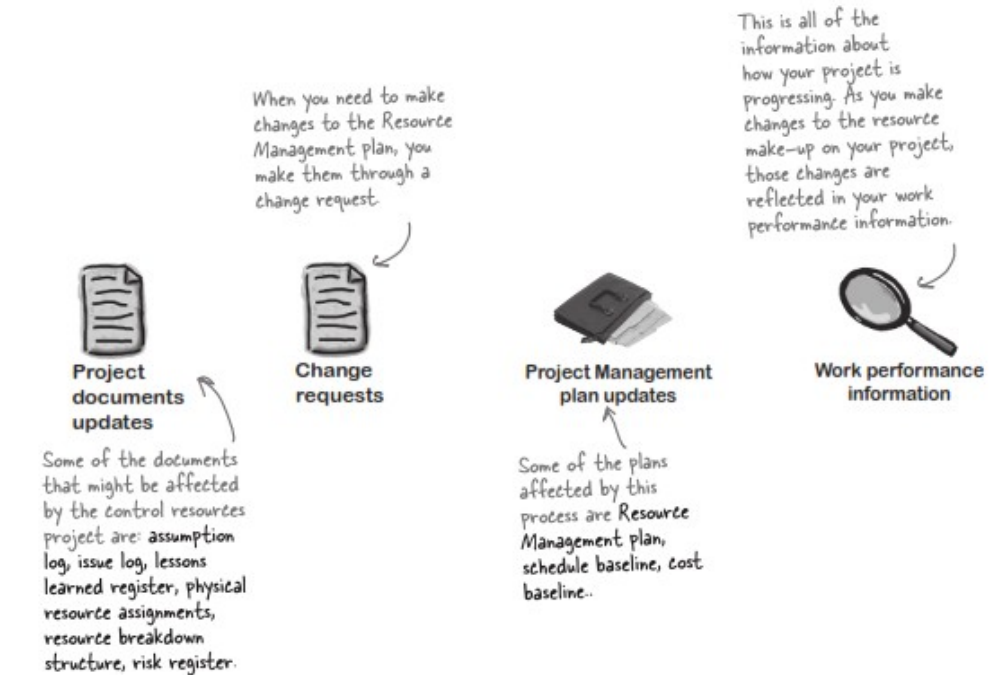
Control Resource



Control resource



Control resource



The Control Resources process lets you adapt your plan to changes that happen during your project.