THE OPERATIONS MANAGER'S TOOLBOX

USING THE BEST PROJECT MANAGEMENT TECHNIQUES TO IMPROVE PROCESSES AND MAXIMIZE EFFICIENCY

RANDAL WILSON
The Operations Manager’s Toolbox
The Operations Manager’s Toolbox

Using the Best Project Management Techniques to Improve Processes and Maximize Efficiency

Randal Wilson
I would like to dedicate this book to my wife, Dusty, and sons, Nolan, Garrett, and Carlin, for their support and patience through this project.

I would also like to dedicate this book to my parents, Paul and Maxine, and my entire family for their love, support, and encouragement throughout my career.
This page intentionally left blank
Contents

Dedication ...................................................... v
Preface ......................................................... xii
Introduction ................................................... xiv

Chapter 1 The Power of Completion ......................... 1
How Do You Gain Power from Completion? .............. 1
Believing in the Task or Project .............................. 2
Proper Assessment of a Task or Project .................... 3
Managing a Task or Project ................................... 5
Accountability in Completing a Task or Project ........... 7
Take the Blinders Off ........................................... 8
Time Is of the Essence ......................................... 10
Organizing a Task or Project ................................. 12
Should a Task Become an Official Project? ............... 17
Operations Manager or Project Manager—
Who Are You? .................................................. 18
Managing Processes Versus Reporting
on Progress ..................................................... 19
Power Tools for the Manager ................................. 21
Power Tool Summary ............................................ 23

Chapter 2 Communication Is King ............................ 27
Why Communication? ......................................... 28
The Communication Path ...................................... 28
Communication Applications ............................... 32
Communicating in Meetings ................................. 34
Communication Management Plan ......................... 37
Power Tool Summary ............................................ 43

Chapter 3 Fix the Processes .................................. 45
What Is a Process? ............................................. 45
Why Look at the Processes? .................................. 46
Process Development .......................................... 48
Documentation .................................................. 54
Staffing a Process ........................................... 56
Training Staff for Processes ............................... 57
Monitoring and Measuring a Process .................. 59
Changing the Process ..................................... 64
Is There a Better Way? ..................................... 65
Power Tool Summary ...................................... 67

Chapter 4 Waste Management ............................. 69
What Is Waste in an Organization? ...................... 69
Process Organization ...................................... 70
Waste or Manufacturing Cost Reductions? .......... 74
Waste in Procurement ..................................... 76
Waste in Shipping and Receiving ....................... 78
Waste in Facilities ......................................... 79
Waste in Managerial Decision Making ................ 80
Waste in Meetings and Decision Processing .......... 81
Sustainable Change ........................................ 84
Power Tool Summary ...................................... 85

Chapter 5 Managing Your Resources .................... 87
Knowing your Resources .................................. 87
Human Resources .......................................... 89
Managing Versus Leading ................................ 93
Allocation of Resources .................................. 95
New Managers ............................................. 96
Capital Equipment ......................................... 97
Facilities .................................................... 98
Equipment ................................................ 100
Power Tools Summary ................................... 102

Chapter 6 Budget Control ................................. 105
Establishing a Budget ..................................... 106
Scope of the Budget ...................................... 108
Controlling a Budget ..................................... 110
Contracts .................................................. 123
Conclusion ................................................ 125
Power Tool Summary ................................... 127
Chapter 7  Don’t Be Afraid of Risks ..........................129
  Risk in Today’s Operations ................................. 129
  Risk Versus Uncertainty .................................... 134
  Risk Management Planning .................................. 136
  Learn from Your Experiences ............................... 152
  Power Tool Summary ......................................... 155

Chapter 8  Synergy in Management .............................157
  Managerial Behavior ......................................... 157
  Managerial Diversity ........................................ 159
  Managerial Relationships ................................. 160
  Communication System ...................................... 163
  Needs of the Manager ..................................... 167
  Power Tool Summary ........................................ 169

Chapter 9  Tamper-Proof Training .............................171
  Training Is a Process ....................................... 171
  Training Plan ................................................. 172
  Power Tool Summary ........................................ 183

Chapter 10  The Weakest Link .................................187
  Procurements ................................................ 188
  Supplier Relationships ...................................... 191
  Suppliers ..................................................... 194
  Inventory Control .......................................... 198
  Power Tool Summary ........................................ 202

Chapter 11  Organizing for Efficiency .........................205
  At What Level Should Organizing Be Done? .............. 207
  Design It In .................................................. 213
  Cost Benefit .................................................. 214
  Power Tool Summary ........................................ 215

Chapter 12  Managing Change .................................217
  Why Change Anything? ...................................... 218
  Problems with Change ..................................... 220
  Types of Change ............................................. 224
About the Author

**Randal Wilson**, MBA, PMP serves as Visiting Professor of Project Management, Keller Graduate School of Management, at the Elk Grove, CA DeVry University campus. His teaching style is one of addressing Project Management concepts using not only academic course guidelines and text, but includes in-depth discussions in lectures using practical application from industry experience.

Mr. Wilson is currently Operations and Project Manager at Parker Hose and Fittings. He is responsible for five locations across Northern California and Nevada, as well as project management of redesigns and renovation of existing facilities and construction of new facilities.

Mr. Wilson was formally in the telecommunications industry as Senior New Product Introduction Engineer at REMEC, Inc., Senior New Product Introduction Engineer with Spectrian Corp. and Associate Design Engineer with American Microwave Technology. He also served as Senior Manufacturing Engineer at Hewlett Packard.

He is a certified Project Management Professional (PMP) of the Project Management Institute. He acquired an MBA with concentration in General Operations Management from Keller Graduate School of Management of DeVry University in Fremont, CA and a Bachelor of Science in Technical Management with concentration in Project Management from DeVry University in Fremont, CA.
Preface

Organizations grow and thrive based on their response to a competitive environment within a particular market. The success of an organization in how it responds to market demand is largely dependent on how the organization is structured and managed. Today's world of Internet-based e-commerce allows for a broader and potentially worldwide market base requiring faster response in managerial decision processing. The knowledge, skill, and experience within management will dictate the speed and quality of managerial decision processing and the competitive advantage it will afford the organization.

It’s the knowledge and skill managers have that establish how managerial processes are developed and implemented, and what effect these processes will have in the overall operation. Much like people who use tools to perform their work, their success is largely dependent on knowing what tools to use, when to use them, and how to use them to accomplish a desired goal. Managers can also have tools that will help develop processes to manage their department more effectively and efficiently.

Project managers have used several specific tools designed to manage various components of a project to ensure that the project is completed by the appropriate staff, on budget, on schedule, and delivering a quality product or service. Project management tools used for developing processes to manage resources and other levels of management, communications, budget and schedule, supply chain, process improvement, facilities, and waste as well as risk management can also be applied to operations management, having proved to be very effective in maximizing efficiency, productivity, and problem resolution. This gives managers more power and confidence not only in managing and completing their responsibilities, but also in offering efficient ways to improve the culture of management and how the organization conducts business.
Organizations are continually looking to improve competitive advantage, typically through product improvement and production efficiency, but this book offers the manager tools to make improvements not related to product, but that can result in similar improvements in the organization’s competitive advantage. These tools can be implemented in small businesses to very large corporations with locations all over the world, as well as organizations such as government, educational, and nonprofits. These tools can be used by operations managers as well as executive management and lower or mid-level managers because they are effective in all areas of managerial responsibility.

Managers can now have their own tools that will change how they approach managerial responsibilities. When managers implement these tools and witness their usefulness firsthand, this will result in stronger and more confident management resources, creating an advanced and technical managerial base of assets within the organization. It will be these highly effective managers who will create a culture of managerial decision processes, and based on these tools can help organizations turn the tides of competitive advantage to their favor. Managers can now make a bigger difference than ever in being effective by having the right tools and knowing when and how to use them.
Introduction

Realities of Managing

Organizations can be made up of anything from small two- or three-person operations to very large corporations having several divisions broken up into departments with thousands of employees managed by several layers of management, all sharing similar characteristics. These characteristics can include processes performed for a specific objective, operating and overhead expenses, schedules, capital equipment management, and human resource management. These are just a few characteristics that are typical in an organization, but they represent areas that will need to be managed and will likely see problems at some point.

When organizations are first established, the founders and executive staff will largely be responsible for establishing policies and procedures that set the stage for how the organization will be run and the direction it will go. Managers will then be hired to oversee procedures being completed and policies being followed within the organization.

This is much like a captain steering a ship. The captain will understand a course that was laid out and will have the skills, tools, and experience to maneuver the vessel to reach its destination. If the manager is seen as the captain over the department or division, the manager must understand the course, which would be the processes that are carried out to accomplish a desired goal, and then the manager must have the knowledge, skills, and tools to effectively steer the department toward the desired objective. This not only requires the department to be pointed in the right direction, but also requires the manager to know how to make adjustments to steer the department and keep it on track.
The question is, Does the manager have the knowledge and tools needed to make necessary adjustments to keep the department on its course?

Project Management Tools for Operations Management

Much like operations managers, project managers have several areas to monitor and control in steering a project in the right direction. Projects have several of the same characteristics as a department within a functional organization. They have work packages or tasks that are performed one time and that must be completed to accomplish the project objective. Departments have work packages called processes that they perform on an ongoing basis, such as human resource management or resource and material scheduling, and that must be completed to accomplish the objective that the department was designed for. Project managers are typically under pressure to create a well-organized, highly efficient, streamlined flow of processes that will define a particular project. Managers will also have processes being carried out within a department designed to produce a desired output. It is this connection between how project managers approach managing these processes and how operation managers approach them that reveals project management tools that can be used in operations management.

Project managers, in most cases, approach a project looking at every aspect of work that needs to be done, as well as all of the resources required to accomplish the objective. This is an eyes-wide-open approach, looking at every aspect of the project as seen for the first time. Because operations managers see their processes every day, they can overlook areas that appear normal but in reality are causing problems. Managers who step back to view their department as if seeing it for the first time might discover some obvious improvements.
that can be made. This book will give managers tools and perspectives that can be used to unveil hidden problems and areas that can be improved that may not be readily visible to the manager.

In some cases, just looking at things with a different perspective can in itself be a powerful tool. This can reveal areas over which the manager does not have much control and which therefore warrant investigation into setting up monitoring systems to gather information about how much and what types of controls might need to be implemented. This is why project managers will see things that operations managers might miss, simply because they are not used to looking for them. This book is designed to have the operations manager view the department as seen from a project manager’s perspective and show where project management tools and techniques can be used to improve areas within the operation.

Is This for Me?

At this point the manager might be asking, “Is this really for me?” and “Is it necessary?” and “Will it make a difference?” The answer is a question: If the managers are truly the ones making adjustments to stay on course within their department, do they have the skills, knowledge, and tools to make effective adjustments in controlling resource management, budget control, process improvement, communication, training, risk management, and departmental organization? These are just some of the areas that will be covered in this book where project management tools and techniques have proven over and over to be very effective in operations management.

These tools and techniques do not require high levels of education, years of experience, or mathematical expertise—just that they are understood, implemented, and refined, given the manager’s level of responsibility. For those who have been in management for several years, some of these techniques might seem familiar, but viewing
them from a different perspective allows the tool to be sharpened and used in a better way. There might be some ideas that will generate some intrigue into how they can be used, or new items that might prove to be surprisingly effective.

Some managers might have been promoted to their position coming up through the ranks, and might be struggling with certain areas of how to manage or might not be familiar with areas of operation and could use more efficient tools to better control areas within the department. This can also be an opportunity to view the department from a different perspective and implement tools and techniques that can be very effective in changing how the department is monitored and controlled.

New managers or students of management can start their careers with a very cutting-edge and tactical approach in their management style that will prove to make them much more successful in not only managing but controlling a department. This perspective allows the manager to see other areas of the department more from a process standpoint and implement tools and techniques to effectively manage areas that other managers might be struggling with.

Senior and executive-level management can use these tools and techniques in training middle and lower-level management to improve their knowledge and skills in managing their responsibilities. It is frustrating to watch managers who report to you struggle in their approach to manage and control their department. The tools shown in this book will help managers see their department from a different perspective, allowing them to design monitoring systems and use control techniques to make adjustments that will streamline the operation. Improvements in overhead, processes, resource allocation, risk mitigation and elimination, communication, and waste management are some of the typical improvements that can be made using these tools.

Managers at all levels want to be successful and want to know that they are doing everything they can to manage all aspects within their
responsibility. Having these tools and techniques in the manager’s toolbox sets the manager apart as one who not only reports the outcome of what their department is doing, but can actually control and manage by making calculated adjustments that keep the department streamlined, cost-effective, and on course in completing its objective.
The Power of Completion

How Do You Gain Power from Completion?

Power in an organization can be defined in several ways, but this chapter focuses on the area of task and project completion and the types of power that can be accomplished through completion. Understanding power should not have us confined to the area of referent or authoritative power, but should challenge us to expand our critical thinking to explore where power can be found throughout a manager’s leadership. Within management, there are areas over which managers have power or feel that they have more control, which can come across as power, and other areas that seem to be a power drain. Power can also be found in some of the most insignificant areas of leadership and might simply be overlooked or not even considered at all. The point is not in the mastery of control or gaining power; real power in management is accomplishment and completion. There is power great and small within leadership, and studying the area of completion will reveal tools that can be used to gain power in management and better develop your leadership skills.
Believing in the Task or Project

As a manager, you should recognize that your success in leadership with regard to managing tasks depends largely on two things: whether you believe in what you are doing and whether those who report to you believe in what you are doing. You have to be convinced that what you are undertaking is necessary if you want to be convincing to those who report to you. If you are not sold on the idea of the task, it will show in how you organize and manage the task. If you are excited about doing something, it will show in your organization or development of that task or project. You will be motivated to outline the steps that will be most efficient in completing the task because you recognize the value and really want it to be completed. You will put energy and time into planning and will choose the best resources to accomplish the task. You will schedule meetings to go over all the details to make sure everyone understands what is needed. Your level of detail and organization clearly shows everyone how much you believe in what you are doing. This carries over in not only displaying traits of your leadership but also communicating the importance of this task within the organization.

Those on the team will see that you believe in the task, and if it is important to you, it will be important to them. They will derive their loyalty to the project based on what they see in your leadership. They generally look to you as an example, so you need to ask yourself some important questions concerning your mind-set in overseeing a task or project:

1. Do you believe it is doable?
2. Do you believe that the human resources are competent enough to complete it?
3. Do you believe that the organization really needs this done and will benefit from it?
Power Tool

Power comes through a belief system that what you are doing means something—that you believe in it and support it. You will gain much more power in completing things if you believe in what you are setting out to accomplish, which will also drive those who report to you to believe in the task or project as well, giving you power to complete the task or project.

Proper Assessment of a Task or Project

The assessment starts the minute you are aware that something needs to be accomplished. The best project team in the company will not be able to complete a task if information about the task or project is missing or incorrect. To develop an accurate task or project plan, two areas need to be well defined and clearly understood:

1. **The scope**—Boundaries as to only what needs to be accomplished.

2. **The goal or deliverable**—What is the product, service, or desired output the task or project is assigned to produce.

In some cases the goal might be defined, but not understanding the boundaries or scope allows for tasks to expand or migrate beyond what was originally intended, making it harder or making it take longer to complete. Without a clearly defined scope, resources can get misdirected or distracted, leading them down a path that is unnecessary, wasting time and effort.

Power Tool

The power tool here involves helping the team stay focused on only what is required to ensure that they are efficient in completing their task.
Part of why completion might be difficult is that unrealistic goals might be set. If an overly optimistic completion time was set in a management meeting, a task can fail if that time frame is not attainable. If all the components of a task or project were not originally accounted for, an unrealistic time frame might have been set. In understanding the time requirements of task items, the manager must know how that information was obtained. Were the time frames simply your best guess or did you seek expert advice in getting accurate time assessments? One of the biggest problems with managing a task or project is holding to the schedule. If the schedule was built with inaccurate time information, holding to the schedule will be difficult, and you will feel you have no power in completing the task or project.

---

**Power Tool**

Accurate time frames and schedule information are necessary for developing the overall completion time that will be reported. Having realistic time information will help match times during the execution of the task or project, ensuring that resources are more likely to stay on schedule. This is another way you build power in completing tasks.

---

Another area to consider is the skill set of the team. If the skill set of the team is inadequate to address the scope of the task, the task has a much higher probability of failure. Acquiring the appropriate skill sets within the team can have a very big impact on the success of the task. Some resources might overstate their abilities just to get on the team for notoriety. Other resources might be assigned to task teams by their manager even though they lack in their skill sets, but they might be the only resources available.

---

**Power Tool**

The ability of the manager to select or hire staff with appropriate skill sets is another way to build power in completing things in the organization.
Another part of proper assessment involves gathering information needed about the task or project. The power in completion actually goes back to the beginning, to having a clear scope of the goal and accurate cost and schedule data. Reporting on the status of a task might be accurate as to what is happening at that time but might appear over budget or behind schedule with reference to your original data set at the start of the task. If you had more accurate information at the beginning, reporting on the task will appear better if you are actually staying on course. So be careful about who is at fault here—if the team is doing their job, the numbers are only off because of inaccurate baseline data that you set at the beginning.

Managing a Task or Project

There is nothing more disappointing than being called into a meeting about a “new project” only to find that very little has been planned. The other disappointment is watching how disorganized the leader is, which will usually send a message to everyone about how the rest of the project is going to play out. This can also reveal that the manager does not believe in the task and has not invested time in planning it. Some managers pass this off as “I put the outline together and you guys run with it,” which is just another way to communicate that you don’t really support the task and you want the team to put it together and manage it.

Power Tool

Managers who believe in something will invest time in it and will lead it.

Organization is critical because the team is more likely to support the task or project if there appears to be time invested in organizing the task. Teams need leadership, direction, and organization; without
these fundamental components there is no power in completion or, in most cases, any completion at all. Organizations that are not efficient can usually trace this back to a lack of leadership in their management that directly affects the bottom line. Most of what the working staff understands about the professionalism of the organization comes from their perception of management.

This can also trickle down to how staff members view the organization of task assignments and projects within the department. Do not underestimate the perception of a team because most teams can get a sense of buy-in and organization from the leader very quickly in the first meeting.

---

**Power Tool**

*Being organized is good for both the manager and the team.*

Good organization involves having specifics identified, such as detailed tasks, names of people assigned to certain tasks and why, time frames and scopes of individual task items for those doing the tasks, and maybe even some potential risks.

---

Good organization is a sign that thought and time have been spent and care was taken to assess the details. The team will see this and realize how much this project means to the manager, which will drive the importance directly home to them. This is power in completing tasks or projects in your department. There has to be a driving force that steers the team, keeps them focused, assigns tasks, and holds them accountable to get things done. Teams that are left to develop the tasks on their own tend to struggle with arguments and run into delays, and team members become disinterested in the task because it doesn’t appear to be important to anyone. These are the projects that fail. This doesn’t mean that the manager always has to lead a team for them to be successful, but it means that there should be a designated leader and the entire team should know who is leading the team.
Accountability in Completing a Task or Project

Managing accountability requires two primary elements:

1. Having a clear understanding of what needs to be done
2. Being expected to produce the assigned task within a given time frame

Accountability applies to managers overseeing an assigned objective and the staff assigned the actual task items to be completed. The focus here is on having team players take ownership of task items and having the overseeing manager be held accountable for the task’s completion. As just a reminder, managers are responsible for getting processes completed in their department and hiring staff to carry out the tasks. Team members need to be held to a quality standard in producing their task. It is one thing to complete an assignment, but the accountability needs to ensure completeness in both scope and quality of what is being produced.

Managers have a tendency to overcommit in meetings or to say that they will complete projects or task items when they don’t really have the data to support what their team can actually do. This can be dangerous for the team because they had no input on the commitment but are now held accountable for that commitment. This can also be bad for the manager because it will be difficult to keep the team focused on the scope of the project and on schedule. Do not sell your team short by inaccurately committing, but rather find the correct information and then update the other managers on what you are committing to. This will increase your credibility with not only your peers but also your team.

Power Tool

Another tool in the power of completion and accountability is having accurate data. Try not to guess!
After the project is underway, the flow of information is critical. How often does the management team meet to get the status on tasks or projects? Meeting too often does not allow enough time for task items to complete, but not meeting frequently enough takes the accountability away from the managers in reporting accurately. Status meeting must be scheduled frequently enough to capture the right amount of data to be reported yet be efficient in management’s time and mitigating of problems. Not knowing about problems as quickly as possible can have a detrimental effect on the task or project.

Take the Blinders Off

Managers are in a place of responsibility that requires thought and decision processing and when put to the test will reveal how well their decision process actually works. One of the process inhibitors that managers might encounter is working with paradigms. Managers might sometimes start down a path with a great idea of how they want to complete something, which is usually good but can have its drawbacks. Managers might operate in a rut, using the same old ways day in and day out, but not be pleased with the overall outcome of their department. Managers need to constantly look for improvements, and surprisingly they might find ideas in their department staff or management meetings. One of the power tools within an organization is team meetings, which, when conducted well, can produce several ideas and narrow them down to the best course of action. When a manager goes through the decision process, he should take a similar approach and evaluate other options because there might be more than one way to get something done.

Power Tool

Think out of the box and consider other alternatives.
Sticking to an original plan can be good, but consider being open-minded and looking into other ways to accomplish a task.

---

**Power Tool**

There might be others in the organization who have done something similar in the past whom you can consult to find out about “lessons learned” and mistakes that were made that you can avoid.

---

In some cases, brainstorming sessions with your team can reveal slightly different approaches that might be more efficient.

---

**Power Tool**

Brainstorming can touch on some team skills such as listening versus hearing and information gathering meetings that can reveal other ways to accomplish things.

---

These types of activities can be great for both discovering new things about your project and building a great team.

For the manager, this can be an eye-opening experience, revealing how many different alternatives there can be to accomplishing a task or project. This type of process approach can be a very effective decision-processing tool for the manager, as well as an opportunity to learn more about your team members and how the team interacts. This can also be used as an instructional tool for team building.

---

**Power Tool**

It is important for a manager to keep an open mind in how she approaches decision processing and to consider other areas for information that can help develop the best course of action.

---

Always keep this question in mind: “What is the fastest and most cost-effective way to complete a task or project correctly?”
Time Is of the Essence

Time is a vital resource within any organization. Many studies have been published that can quantify how much time companies waste each year and how much that can cost, not only in money but also in inefficient use of resources. One area that can be difficult to manage is human resource efficiency. It is a common fact that resources are not created equal and people will have both strengths and weaknesses. The manager hires human resources based largely on a skill set that shows strengths that can be used to perform required job functions. As these resources are in place to perform their required duty, they are sometimes called on to participate in other things such as additional tasks, projects, or team meetings. This can have one of two effects on a resource:

1. **Opportunity**—The resource is capable of performing the normal task and enjoys the opportunity to participate in other assignments, further developing the resource and improving his job satisfaction. *“They enjoy it.”*

2. **Punishment**—The resource wants only to perform his required duty and feels that he should not have to be involved in other tasks or projects. This resource might or might not be capable of performing extra tasks and will see this as an increased stressful work environment. *“They hate it.”*

In most cases a manager will present these opportunities by asking for volunteers, to get those most likely to embrace the opportunity and not see it as drudgery. The warning here is to not forget that this resource not only is performing her regular duty, but is taking on extra work and will need to have guidance in modifying her work schedule to include additional tasks. This is where problems can start and managers can either gain power or lose it.
Managers might come out of a meeting with an action item list and start throwing resources on new tasks just to get things started. Managers engaged in these new tasks or projects can get overly focused on completing those tasks and forget that these resources have their regular job to perform. Managers still have an operation to run and need to schedule these resources according to what the operation can afford. When these resources are off of their normal job, the organization suffers as a result. This is offset by what the resource is contributing on the special task that will benefit the organization. So as a net result the resource’s time and completion of assignments is in balance relative to the bigger picture in the organization.

---

**Power Tool**

You have to *maintain a balance* of normal departmental duty work and special project work to make the most efficient use of resource time and benefit to the organization.

---

If too much time is spent on the special tasks, morale might decline because people get their satisfaction from performing their normal job.

There is a threshold that people will have in the balance of their normal job versus time spent on a special task that yields a certain job satisfaction. With some, too much time on the task takes them away from their normal job and they cross over the threshold and begin to resent the task for taking them away from their job, resulting in lower job satisfaction. On the other hand, there are people who thrive on the special task assignments and want to get away from their normal job to get the satisfaction they desire. They want to be on several tasks and avoid their normal job as much as possible. This might or might not be good for the organization or the resource. This topic is covered in Chapter 5, “Managing Your Resources.”
Organizing a Task or Project

In talking with people in management, some of the most difficult things to accomplish are surprisingly not the big projects, but in many cases the smaller tasks. When you come out of management meetings, the larger projects usually have lots of resources, energy, focus, and managerial visibility associated with them. Larger projects typically are split into smaller subtasks that have individual work assignments associated with them. With so much focus on the large tasks, it is actually easier to get momentum going and for completion to be realized (lots of power). With the smaller tasks or projects there is less discussion about them in the initial meetings, few people are assigned to the project, and there is almost no focus or energy associated with them. They are not subdivided into smaller components, and getting traction and momentum going is difficult, leaving completion far from easy if it’s even realized at all (no power).

Power Tool

When you have a task or project assignment, it is best to break it up into smaller subtasks that will allow for better definition of what is required and better management of each part.

One of the problems with initially structuring a project relates to going into enough detail on the tasks to cover all the items that will need to be completed. If this data is not accurate, the manager is starting off with incomplete information about the project that can result in inaccurate schedule or cost information. There are several benefits to breaking down tasks or projects into smaller parts:

- Creates an outline form of the task or product to better view all work required.
- Breaks up the project into major components or steps.
- Makes it easier to define each step and breaks steps into smaller work packages.
• Reduces the chance of forgetting required steps.
• Makes it easier to communicate the work to the project team.
• Creates a better resource scheduling tool.
• Enables the project to run more efficiently.
• Allows the manager to have better problem and risk management.
• Enables the manager to more accurately report the status.

When projects are broken up into smaller components, resources are likely to view their part as a smaller, easier task to complete than if they see their part listed as a single large item taking a long time to complete. Part of the power in this tool stems from the perception the resource has of his work. This can be a perception of his regular duty or of an additional task he volunteered for. In many cases the title of Manager or Director can be daunting due to the responsibility involved, but in reality it is just a bunch of smaller jobs that make up that title. How a resource views what he is required to do can play a big role in his perception of a workload. Breaking up projects or tasks into smaller parts allows the resource to see that it might be much easier to complete a large item than originally thought. This can be equally beneficial for the manager. This is also how project managers view a project and how they communicate the tasks, as just small parts that each resource needs to focus on.

Managers are more successful when they have a sense of organization and control over tasks being worked on in their department. Managers should look for ways to make their department run more efficiently and should have more details on what resources are doing, allowing the manager more information to consider alternatives. When managers have the ability to actually manage and control the work performed in their department, they feel better about their job. People working on a project or working in that department can see that the manager is organized, has a sense of vision and direction as to the work being performed, and knows what the end goal is leading up to.
This also promotes accountability within the department or team as resources can see more details about what is required and when.

---

**Power Tool**

The power of completion is in organization that allows *more control over the work being performed*. This is seen not just in reporting on tasks, but also in actually feeling as though you have control over your resources, task detail, and scheduling options as a result of better task organization.

---

One tool used in project management that the operations manager can use to better organize a department is a work breakdown structure, or WBS, as shown in Table 1.1.

This structure can be built using Microsoft Excel or Microsoft Project. The work breakdown structure is used to subdivide work into smaller tasks. You can continue to break down these subtasks as far as you need to go until you get to what’s called the work package. This helps the manager organize tasks in sequence and reveals which subtasks need to be completed before others can start, which is called the predecessor. Predecessors help the manager understand the flow of work and sequence of tasks. This also helps the manager understand, from an accountability standpoint, who will need to complete their work before other work can start.

The manager can also use this work breakdown structure to assign resources to tasks, smaller subtasks, and work packages. The manager can use these resource assignments for those overseeing a task or the people actually doing the task. Other things can be assigned in the work breakdown structure, such as costs for resources and materials, start and stop times that define the timeframe in which a task will need to be completed, and quality checkpoints. This tool can be used for projects or general organization of a department that has several components of work that need to be scheduled in sequence.
Table 1.1 Work Breakdown Structure Illustrated in Microsoft Excel

<table>
<thead>
<tr>
<th>Task</th>
<th>WBS Code</th>
<th>Project Tasks</th>
<th>Durations</th>
<th>Predecessor</th>
<th>Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>Project Name</td>
<td>33 Days Total</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>1.1</td>
<td>First Subtask</td>
<td>14 Days Subtotal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>1.1.1</td>
<td>Lower Divided Subtask or Work Package</td>
<td>2 Days</td>
<td>Name</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>1.1.2</td>
<td>Lower Divided Subtask or Work Package</td>
<td>7 Days</td>
<td>Name</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>1.1.2.1</td>
<td>Lowest-Level Work Package</td>
<td>4 Days</td>
<td>3</td>
<td>Name</td>
</tr>
<tr>
<td>6</td>
<td>1.1.2.2</td>
<td>Lowest-Level Work Package</td>
<td>5 Days</td>
<td>5</td>
<td>Name</td>
</tr>
<tr>
<td>7</td>
<td>1.1.3</td>
<td>Lower Divided Subtask or Work Package</td>
<td>5 Days</td>
<td>6</td>
<td>Name</td>
</tr>
<tr>
<td>8</td>
<td>1.2</td>
<td>Second Subtask</td>
<td>8 Days Subtotal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>1.2.1</td>
<td>Lower Divided Subtask or Work Package</td>
<td>5 Days</td>
<td>7</td>
<td>Name</td>
</tr>
<tr>
<td>10</td>
<td>1.2.2</td>
<td>Lower Divided Subtask or Work Package</td>
<td>3 Days</td>
<td>9</td>
<td>Name</td>
</tr>
<tr>
<td>11</td>
<td>1.3</td>
<td>Third Subtask</td>
<td>11 Days Subtotal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>1.3.1</td>
<td>Lower Divided Subtask or Work Package</td>
<td>7 Days</td>
<td>10</td>
<td>Name</td>
</tr>
<tr>
<td>13</td>
<td>1.3.2</td>
<td>Lower Divided Subtask or Work Package</td>
<td>4 Days</td>
<td>12</td>
<td>Name</td>
</tr>
</tbody>
</table>
The work breakdown structure can help the manager not only see information relative to tasks and resources, but also better organize and plan for resources that will be used later on the project. The manager might also want to use a WBS to help capture all the tasks that need to be done on a large project. When large projects are first organized, it can be difficult to understand everything that needs to be completed because there might be a large amount of work to be done or it might span a long duration of time. Starting off with main subdivided parts of the project can act as an information repository that can be further organized to define the work that needs to be completed. In most cases further refinement is in allocation of resources.

One area of concern in operations management is resource management. Resources can be in the form of facilities, capital equipment, cash or lines of credit, IT and communications systems, and human resources. In the work breakdown structure, the manager can assign not only human resources to tasks, but also other resources that might be required to complete a project. This is critical for efficiency within the organization because most companies do not have an unlimited supply of resources and an organized scheduling structure. Some resources needed by a manager might be critical, such as a line of credit, expensive equipment, corporate aircraft, or resources used by an outside company or contractor. These types of resources require special care and in some cases require contracts to be written that will define the scope of what is needed by the resource. Financial resources can be small and easily managed within the department or they can be very large, requiring a line of credit or a significant amount of the company’s financial resources. This is when the manager could use a work breakdown structure to help other managers like financial managers understand when critical pieces of finances need to be used on a project.

One thing midlevel managers might not be aware of is the amount of cash flow required by a company. Cash flow is typically used for such things as salaries, materials, equipment, and running
the operation, but when a special task or project is underway, extra financial resources might be required to complete critical things on a project or areas of the operation. Using a WBS works well with coordinating tasks on a project or cost-sensitive areas of the operation with the financial department to not only plan cash flow but also coordinate with all the departments in the organization. This is done differently at various levels of management and responsibility.

If the manager has responsibility over a single department, overseeing special projects within that department might be more simplified. In this case, the manager is generally more focused on the people and details of tasks being done. Another level might be the operations manager in charge of several departments or facilities. This level of management requires a more organizational approach and tools like a work breakdown structure to help with identification and the sequence of processes or defining of special projects. It will be important to coordinate resources used on normal departmental activities and those on special projects. This type of tool brings organization, definition, logistics, resources, and accountability all together and makes them all visible in one single tool and increases your power as a manager in completing tasks.

**Should a Task Become an Official Project?**

Much of what will be discussed involves the organization of a department and/or special projects. Because most departments have normal day-to-day tasks they carry out, one critical management step is in determining when a normal task performed in the department should be treated like a project. Project tasks will appear to have a start and stop and be unique from the other things in the department. They can be special things like process or documentation development, facilities or organizational things, or training to help improve the department or staff. If something is a repetitive task, it is generally
not a project. If something will be done once or is set apart from the normal tasks in the department, it might be a project. In some cases a unique task “project” will be big enough to have a project manager (which might be you). These are tasks big enough to be broken up into resource teams and be organized in big project-type steps. In any case, the manager needs to assess tasks and processes in the department to determine whether they are normal operations tasks or projects. This is a critical step in completing tasks as the manager needs to determine projects versus normal everyday processes.

**Operations Manager or Project Manager—Who Are You?**

The status meeting is the test of the operations manager to see whether she can really manage a task or project. In most cases the manager is good at managing the department, but when special tasks are assigned, how does the manager perform then? One of the first setbacks that you as a manager will have to deal with is not being able to complete a task and coming back to the next status meeting to report that you need more time. This might be acceptable once, but the next time this happens the team will start to lose confidence in your leadership ability. Another problem with this is that the more you get used to pushing dates out, the easier it will be to keep pushing them out, and you then are no longer in a task completion mode but a task maintenance mode (reactive). This task has then become a regularly scheduled event; the team has realized that you no longer believe in the task and it has fallen in importance.

Executive management is looking at not only the ability of managers to accomplish their normal responsibilities, but also how successful they are at running special tasks and projects and getting them done! This is primarily the ability to *complete* special tasks or projects. When scheduled completion dates are accurately assessed and hit on a project, the manager knows that the team did a good job
when completing the task. This doesn’t mean that the manager can just push out the dates to ensure that they will always be met, because then these tasks would drag on too long. Managers have to be diligent in sticking to the schedule and managing teams to get things done. In some cases it might be wise to get more accurate information about completion dates instead of committing to a schedule knowing that it’s not realistic.

This can be the first step in understanding how to gain power in completion. Try to improve your process of being better organized as a manager, taking a few extra steps in understanding what you are getting yourself and your team into. Most mistakes made can usually be tracked back to poor assessment of time, resources, or cost or scope of the task, and this results in tasks either not getting completed or taking too long to complete. This is when the operations manager is not thinking like a project manager and is focusing too much attention on the department’s normal work and not enough time on special tasks that need a detailed mind like that of a project manager. The operations manager can do this; they just need to know when and have some basic tools to help organize the project. Completing these special projects on time and efficiently saves the organization time and money, increasing power in both the manager and the organization. The other way to view this is in the organization of normal everyday processes and how much control or power the manager has in accomplishing those tasks.

Managing Processes Versus Reporting on Progress

Most managers are in a position to oversee tasks or processes being completed, but managers are not always sure how to fix something if a task goes wrong or is not being completed the way it is supposed to be done. As processes are being completed, problems or setbacks will come up that can cause delays in the schedule. In most cases the
manager reports delays or problems in something like a manager’s meeting or status meeting. What the manager is really communicating is their “observation” of the problem and not the steps showing how they are “managing” the fix.

One key part of effective managing is the manipulation of resources to improve processes or a project budget and/or schedule. There are two fundamental approaches in overseeing processes or projects: reporting and managing. In reporting, the manager is observing the team progress and reporting the status. In managing, there is the manipulation of things within the project that allows the manager to bring a project back on schedule or budget. This is accomplished first by outlining all the tasks that need to be completed and setting a baseline of project cost and schedule. As a project progresses, you can compare real-time data to the baseline to monitor any deviations and look for ways to shift resources to get costs or the schedule back in line. Depending on how you have your task or project set up, there are some tools that can help bring things back on schedule, several of which are covered in later chapters.

When a process is being completed, resources need to know what to do if something goes wrong. The manager can add more resources to improve the schedule, or in other cases the manager can purchase or lease something that will help fix the problem. In any case, the manager needs to have some idea as to how to fix a problem, and this goes into the area of risk assessment, management, and being able to actually identify potential problems before they happen.

---

**Power Tool**

*Assessing areas of risk* is not hard; it just requires some time spent asking questions of key individuals about what can go wrong so that you can plan for the problems.

Planning for problems is a great way to “manage” a process or project because you feel you have more control when you have tried to account for details such as potential risks.
Power Tools for the Manager

Here’s how to get back on track:

1. **Doing tasks simultaneously**—If there are several tasks in a row, each having to be completed before the next can start, then reevaluate the sequence to see whether that is necessary. There might be a couple of tasks that can be run together or in parallel, allowing you to get you back on schedule.

2. **Sequencing of task starts and stops**—In the initial layout of a project, you have certain tasks that have to be completed before the next task can start. Reevaluate whether that is true because there might be other tasks that can start before all the requirements of the previous task have been completed. This will allow you to get a jump on the schedule.

3. **Adding more resources from other tasks**—You might have to get more resources for a given task or process that is taking too long to complete. Remember, resources can be anything the organization has, whether human, equipment, computers, or lines of credit. Temporarily adding a few more human resources on a task can bring it back on schedule and help the overall completion date. Every day you slip adds to the end date!

4. **Evaluating the scope or requirement of the task**—What did you set out to accomplish and did you bite off more than you could chew? Sometimes taking another look at what you are doing can help bring focus back to the team. Teams also have a tendency to get distracted and drift off topic, putting them behind. Keep the team focused on the task at hand.

5. **Determining whether you have the right skill sets on this project or task**—Evaluate who is on your team or in the department and whether they really have the skills to complete the tasks and processes on schedule and on budget. It is great to
have lesser-skilled resources on a task to give them the experience they need in order to improve. There is a schedule and a budget that also have to be met, however, and if those resources will likely struggle to hit those targets, you might have to get them a little help or consider another, more skilled resource.

The manager might be overseeing several tasks and processes and might need to act as a program or project manager. This requires some other skills or knowledge that managers might not have. Depending on how high up the managers are and how many departments they oversee, they might view their departments like projects within a program to help organize them. How do you view your organization—as a department with a bunch of resources doing stuff? Or do you view it as a bunch of smaller groups or cells like small project groups?

One rule in organizing operations is to break things down into smaller components. This allows you to visualize and see the separate parts of your organizations more clearly. This is why a CEO doesn’t manage all the departments in the organization, because they would just see one mass of resources. When an organization is broken down into smaller departments, the CEO can see separate functional parts of the company being managed independently.

The operations manager needs to view his department or organization the same way, as smaller groups or components, to better monitor and control his department. This is also taken down another level to completing tasks, processes, or projects as you break them down into smaller pieces to better understand the goal of the task and help organize the resources working on the task. Depending on how big the process or project is, you might have to break down each piece further into smaller subtasks.

Organization starts with the “view” or perception managers have of what they are managing. One of the successful tools project managers have is the visibility of the project, and breaking the project down
gives better clarity of the details. Viewing the department in smaller pieces helps give clarity and detail to what is being done, allowing the manager to actually “manage” tasks, costs, and schedules so that completion is realized. This also allows the manager to take on special projects as well and see them to completion, giving the manager power in what they are trying to accomplish. The perception will be of organization, visibility, and knowing that they are more in control than simply watching. Managers need to know that they have the ability to make changes if needed, and using key tools will give the manager confidence to “manage.”

Power Tool Summary

• Power comes through a belief system that what you are doing means something—that you believe in it and support it. You will gain much more power completing things if you believe in what you are setting out to accomplish, which will also drive those who report to you to believe in the task or project as well, giving you power to complete the task or project.

• The power tool here involves helping the team stay focused on only what is required to ensure that they are efficient in completing their task.

• Accurate time frames and schedule information are necessary for developing the overall completion time that will be reported. Having realistic time information will help match times during the execution of the task or project, ensuring that resources are more likely to stay on schedule. This is another way you build power in completing tasks.

• The ability of the manager to select staff with appropriate skill sets is another way to build power in completing things in the organization.
• Managers who believe in something will invest time in it and will lead it.

• **Being organized is good for both the manager and the team.** Good organization involves having specifics identified, such as detailed tasks, names of people assigned to certain tasks and why, time frames and scopes of individual task items for those doing the tasks, and maybe even some potential risks.

• Another tool in the power of completion and in accountability is having **accurate data.** Try not to guess!

• **Think out of the box** and consider other alternatives.

• There might be others in the organization who have done something similar in the past whom you can consult to find out “**lessons learned**” and mistakes that were made that you can avoid.

• Brainstorming can touch on some team skills such as listening versus hearing and **information gathering meetings** that can reveal other ways to accomplish things.

• It is important for a manager to **keep an open mind** in how she approaches decision processing and to consider other areas for information that can help develop the best course of action.

• You have to **maintain a balance** of normal departmental duty work and special project work to make the most efficient use of resource time and benefit to the organization.

• When you have a task or project assignment, it is best to **break it up into smaller subtasks** that will allow for better definition of what is required and better management of each part.

• The power of completion is in **organization** that allows more **control over work being performed.** This is seen not just in reporting on tasks, but also in actually feeling as though you have control over your resources, task detail, and scheduling options as a result of better task organization.
• Assessing *areas of risk* is not hard; it just requires some time spent asking questions of key individuals about what can go wrong so that you can plan for the problems.

Planning for problems is a great way to “manage” a process or project because you feel you have more control when you have tried to account for details such as potential risks.
This page intentionally left blank
A

acceptance
of organizational change
  executive-level management, 207-208
  midlevel management, 210
of risk, 148

accountability
  clear understanding of task, 8-9
  explained, 7-8
  human resource efficiency, 10-11
accuracy
  data, 7
  schedules, 4
  time frames, 4
adjusting budgets, 119-122, 126
allocation
  of facility space, 98-100
  of human resources, 95-97
assessments
  of human resources, 72-74
  of risk, 143-144
  of tasks/projects, 3-5
    baseline data, 5
    goals, 3-4
    processes, 71-72
    scope, 3
    skill set of team, 4
  of training, 181-183
audits of risk management plans, 151-152
authoritative power, 1
avoiding risk, 148

B

baseline data
  budget baselines, 114-116
  gathering, 5
behavior (managerial), 157-159
believing in tasks/projects, 2-3
bottom-up budgets, 107
boundaries of projects, 3.
  See also scope
brainstorming, 8-9
budgets
  adjusting, 119-122, 126
  baselines, 114-116
  bottom-up, 107
  contracts, 123-125
  establishing, 106-108
  estimating, 111-114
  explained, 105-106, 110-111
  measuring, 118-119
  monitoring, 116-117
  scope, 108-110
  summary, 127-128
  top-down, 106
  verifying, 122-123
business needs, developing, 230
business type, changing, 226

capital equipment, 100-101
explained, 97-98
purchase versus lease, 100-101
selecting, 101
cash flow, 17
categorizing risk, 144-145
change management
change process, 229-236
communications, 234
implementation, 232-234
measurement, 235-236
proposal, 230-232
documentation, 228-229
explained, 217-218
need for change, 218
better technology, 219-220
market position, 219
products and profit, 219
problems with change, 220-221
investment, 223-224
lack of data, 222-223
resistance to change, 221
risk, 222
process change, 64-65
summary, 236-237
sustainable change, 84-85, 235-236
types of change, 224
business type, 226
organizational structure, 224-225
policy changes, 227-228
process changes, 227
change process, 229-236
communications, 234
implementation, 232-234
measurement, 235-236
proposal, 230-232
check charts
Check Chart to Record Problems on Specific Items, 60
Check Chart to Record Process Step Problems, 60
classroom training, 180
communication management plan, 37-43
communication matrix, 40-42, 166
communication system, 163
how, 39-40, 164-165
what, 38, 163
when, 38-39, 165-166
who, 37-38, 164
communications, 28-29
in change process, 234
communication management plan, 37-43
communication matrix, 40-42, 166
communication system, 163
how, 39-40, 164-165
what, 38, 163
when, 38-39, 165-166
who, 37-38, 164
feedback, 31
formal communication, 28
goals of, 27-28
importance of, 28
informal communication, 28
listening versus hearing, 30-31
in meetings, 34-37
one-to-group, 32-33
one-to-one, 32
one-to-several locations, 33-34
receivers, 30
senders, 29-30
summary, 43-44, 67-68
completion
  communication path, 21-25
  explained, 1
management accountability
  clear understanding of task, 8-9
  explained, 7-8
  human resource efficiency, 10-11
operations managers versus project managers, 18-19
process management, 19-20
progress reporting, 19-20
tasks/projects
  assessment, 3-5
  believing in, 2-3
  managing, 5-6
  organization, 12-17
  tasks versus projects, 17-18
contingency planning, 150
contracts, 123-125, 190-193
cost benefit of organization, 214-215
cost of doing business, 133-134
cross-training, 83
culture of risk preparation, 132
documentation
  of change, 228-229
  of processes, 46, 54-55
  of risk, 136-143, 153-154
  of training plans, 174-175
documented process training, 173
downsizing, 208

e-commerce, 196
effective communication. See communications
efficiency
  human resource efficiency, 10-11
  process efficiency, 73
engineering waste, 74-75
equipment (capital), 97-98, 100-101
  purchase versus lease, 100-101
  selecting, 101
establishing budgets, 106-108
estimating budgets, 111-114
evaluating. See also assessments
  human resources, 72-74, 89
  tasks, 71-72

data gathering, 60-61, 230
decision making, 80-81
decision processing, 81-84
delivery system for training, 177-181
designed changes, 64
designing organization, 213-214
development of processes, 48-53
diagrams, Network Diagrams, 140
distributors, 195
diversity, 159-160
design
  feedback, 31
  finished goods inventory, 201-202
  fixed-price contracts, 123
  formal communication, 28
facilities
  space utilization, 98-100
  waste, 79-80
feedback, 31
finished goods inventory, 201-202
gathering data, 5, 60-61, 230
goals
  assessing, 3-4
  communication goals, 27-28
groups, communicating with, 32-33

hands-on training, 180
hearing versus listening, 30-31
high-level organization, 66, 207-209
hiring process, 90-91
human resources
  adding, 21
  allocating, 95-97
  common attributes, 88
  cross-training, 83
  efficiency, 10-11
  evaluating, 72-74, 89
  explained, 87-89
  hiring process, 90-91
  job satisfaction, 92
  leadership, 93-95
  new managers, 96-97
  resource management, 16
  resource mind-set, 92-93
  resource waste, 73
  skill set of team
    evaluating, 4
    utilization, 91-92
staffing processes
  choosing staff, 56-57
  training staff, 57-58
  task resentment, 91-92
training plans
  assessment, 181-183
  delivery system, 177-181
documentation, 174-175
documented process training, 173
explained, 172-173
implementation, 172-173
importance of, 171
monitoring, 181-183
for processes, 57-58
qualified trainers, 175-177
summary, 183-185
training process, 171-172
undocumented process training, 173-174

identifying risk, 136-143
  WBS (work breakdown structure), 140-142
  what, 139
  when, 140
  who, 137-139
implementation
  of change, 232-234
  of training plans, 173-174
incoming inspection, 198-199
indicators, 149
individuals, communicating with, 32
informal communication, 28
information gathering, 60-61, 230
inspection, incoming inspections, 198-199
Internet-based business, 196
inventory control, 198
  finished goods inventory, 201-202
  incoming inspection, 198-199
  WIP (work in process), 199-201
investment in change, 223-224
J-K-L

job satisfaction, 92
lack of data, 222-223
large-group training, 180
leadership, 93-95
learning from experiences, 152-155
leasing capital equipment, 100-101
lessons learned from past experiences, 152-155
listening, 30-31
lost opportunity, 130
low-level organization, 66, 211-213

M

management accountability
  clear understanding of task, 8-9
  explained, 7-8
  human resource efficiency, 10-11
management realities, xi-xii
management versus leadership, 93-95
managerial behavior, 157-159
managerial decision making, 80-81
managerial diversity, 159-160
managerial needs, 166-169
managerial relationships, 160-162
manipulation of resources, 20
manufacturers, 195-196
manufacturing
  manufacturing engineer input, 211-212
  manufacturing product, 75
  manufacturing support, 75-76
  waste, 74-75
market position, 219
measuring
  budgets, 118-119
  change, 235-236
  processes, 59-63
meetings
  communication in, 34-37
  waste, 81
midlevel organization, 209-211
mind-set of human resources, 92-93
mitigating risk, 148
monitoring
  budgets, 116-117
  processes, 59-63
  risk, 150-151
  training plans, 181-183
multiple locations, communicating with, 33-34

N

need for change, 218
  better technology, 219-220
  market position, 219
  products and profit, 219
needs of managers, 166-169
Network Diagrams, 140
new managers, 96-97
nonconforming inventory, 200
noncontractual direct purchases, 191-192

O

observing
  environment, 50
  problems, 20
office equipment. See capital equipment
one-to-group communication, 32-33
one-to-one communication, 32
one-to-several locations
  communication, 33-34
on-the-fly changes, 64
open-mindedness, 8-9
operations managers, 18-19
opportunity, 10-11
lost opportunity, 130

organization
cost benefits, 214-215
designing, 213-214
explained, 205-207
high-level organization, 66, 207-209
importance of, 6
low-level organization, 66, 211-213
midlevel organization, 209-211
process organization, 70-71
  high-level process organization, 66
human resource evaluation,
  72-74
importance of, 65-67
low-level process organization, 66
  task evaluation, 71-72
resource management, 16
summary, 215-216
work breakdown structure (WBS), 12-17
organizational structure, changing, 224-225
overallocated resources, 95

plans
communication management plan, 37-43
risk management plans
  audits/reviews, 151-152
  contingency planning, 150
  controls, 150-151
documentation, 136-143
  plan response and contingencies, 145-147
qualitative risk assessment, 143-144
quantitative risk assessment, 143-144
risk identification, 136-143
risk matrix, 144-145
risk monitoring, 150-151
training plans
  assessment, 181-183
delivery system, 177-181
documentation, 174-175
  explained, 172-173
implementation, 173-174
monitoring, 181-183
for processes, 57-58
qualified trainers, 175-177
summary, 183-185
  training process, 171-172
policy changes, 227-228
potential weaknesses. See weak links
power, authoritative, 1
power, referent, 1
power of completion
  explained, 1
management accountability
  clear understanding of task, 8-9
  explained, 7-8
human resource efficiency, 10-11

P
past problems, learning from, 152-155
path of communication
  feedback, 31
  listening versus hearing, 30-31
  receivers, 30
  senders, 29-30
performance
  process performance
    measuring, 59-63
    poor performance, 46-48
  resource performance, 89
operations managers versus project managers, 18-19
process management, 19-20
progress reporting, 19-20
summary, 21-25
tasks/projects
  assessment, 3-5
  believing in, 2-3
  managing, 5-6
  organization, 12-17
  tasks versus projects, 17-18
prioritizing risk, 145-147
proactive mode, 126, 131
problems with change, 220-221
  investment, 222-224
  lack of data, 222-223
  resistance to change, 221
  risk, 222
process efficiency, 73
process engineer input, 211-212
processes
  change management, 227, 235-236
  change process, 229-236
    communications, 234
    implementation, 232-234
    proposal, 230-232
changing, 64-65
development, 48-53
documentation, 46, 54-55
explained, 45-46
managing, 19-20
measuring, 59-63
monitoring, 59-63
organization, 70-71
  high-level process organization, 66
  human resource evaluation, 72-74
  importance of, 65-67
  low-level process organization, 66
  task evaluation, 71-72
poor process performance, 46-48
process efficiency, 73
staffing
  choosing staff, 56-57
  training staff, 57-58
statistical process control (SPC), 59-60
training process, 171-172
weak links
  explained, 187-188
  inventory control, 198-202
  processes, 188-191
  summary, 202-203
  supplier relationships, 191-194
  suppliers, 194-197
procurements
  budgeting, 109
  contracts, 123-125
  potential weaknesses, 188-191
  waste, 76-78
progress, reporting, 19-20
project managers, 18-19
projects
  assessment, 3-5
    baseline data, 5
    goals, 3-4
    scope, 3
    skill set of team, 4
  believing in, 2-3
  clear understanding of, 8-9
  compared to tasks, 17-18
  managing, 5-6
  work breakdown structure (WBS), 12-17
proposing change, 230-232
publicizing changes, 233-234
punishment, 10
purchasing capital equipment, 100-101

Q
qualified trainers, 175-177
qualitative risk assessment, 143-144
quantitative risk assessment, 143-144

R
reactive mode, 126, 131
realities of management, xi-xiii
receivers, 30
receiving waste, 78
referent power, 1
relationships
  managerial relationships, 160-162
  supplier relationships, 191-194
reliability of resources, 89
reporting progress, 19-20
resistance to change, 221
resources
  adding, 21
  capital equipment, 97-98, 100-101
  common attributes, 88
  explained, 87-89
  facilities, 98-100
human resources
  adding, 21
  allocating, 95-97
  common attributes, 88
  cross-training, 83
  efficiency, 10-11
  evaluating, 72-74, 89
  explained, 87-89
  hiring process, 90-91
  job satisfaction, 92
  leadership, 93-95
  new managers, 96-97
  resource management, 16
  resource mind-set, 92-93
  resource waste, 73
  skill set and utilization, 91-92
  skill set of team, 4
  staffing processes, 56-58
  task resentment, 91-92
  training. See training plans
  performance and reliability, 89
  summary, 102-103
  waste, 73
response plan, 147-150
reviews of risk management plans, 151-152
rework, 200
risk, 151-152
  acceptance, 148
  audits/reviews, 151-152
  avoidance, 148
  budgeting, 110
  categorizing, 144-145
  from change, 222
  compared to uncertainty, 134-135
  contingency planning, 150
  controls, 150-151
  documentation, 136-143, 153-154
  explained, 129-130
  identifying, 136-143
  WBS (work breakdown structure), 140-142
  what, 139
  when, 140
  who, 137-139
  indicators, 149
  learning from experiences, 152-155
  mitigation, 148
  monitoring, 150-151
plan response and contingencies, 147-150
prioritizing, 145-147
qualitative risk assessment, 143-144
quantitative risk assessment, 143-144
risk matrix, 144-145
risk register, 145-147
summary, 155-156
in today’s operations
  cost of doing business, 133-134
culture of risk preparation, 132
  lost opportunity, 130
  proactive versus reactive approach to, 131
transference, 148
triggers, 149
risk management plans
audits/reviews, 151-152
contingency planning, 150
controls, 150-151
documentation, 136-143
learning from experiences, 152-155
plan response and contingencies, 147-150
prioritization, 145-147
qualitative risk assessment, 143-144
quantitative risk assessment, 143-144
risk identification, 136-143
  WBS (work breakdown structure), 140-142
  what, 139
  when, 140
  who, 137-139
risk matrix, 144-145
risk monitoring, 150-151
risk register, 145-147
risk matrix, 144-145
risk register, 145-147

S
satisfaction (job), 92
schedules, accuracy of, 4
scope
  assessing, 3, 21
  of budgets, 108-110
  of change, 232-233
selecting capital equipment, 101
senders, 29-30
sequencing task starts/stops, 21
shipping/receiving waste, 78
signing off on proposed changes, 231-232
skill set of team
  evaluating, 4, 21-22
  utilizing, 91-92
space swapping, 100
space utilization, 79-80, 98-100
SPC (statistical process control), 59-60
staff. See human resources
statistical process control (SPC), 59-60
Streamline Thinking, 70, 99
subcontractors, budgeting, 109
success, 168-169
supplier analysis matrix, 76-77
suppliers
  potential weaknesses, 194-197
  relationships, 191-194
  supplier analysis matrix, 76-77
supply chain management
  contracts, 190-193
  explained, 187-188
inventory control, 198

finished goods inventory, 201-202

incoming inspection, 198-199

WIP (work in process), 199-201

procurements, 188-191
summary, 202-203
supplier relationships, 191-194
suppliers, 194-197

sustainable change, 84-85, 235-236

swapping space, 100

T

task resentment, 91-92

task worker input, 211
tasks
assessment, 3-5
baseline data, 5
goals, 3-4
scope, 3
skill set of team, 4

believing in, 2-3
clear understanding of, 8-9
compared to projects, 17-18
evaluating, 71-72
managing, 5-6
sequencing starts/stops, 21
task resentment, 91-92
work breakdown structure (WBS), 12-17
teams. See human resources
technology, 219-220
thinking out of the box, 8-9
time frames, accuracy of, 4
top-down budgets, 106
trainers, 175-177

training plans
assessment, 181-183
delivery system, 177-181
documentation, 174-175
documented process training, 173
explained, 172-173
implementation, 173-174
importance of, 171
monitoring, 181-183
for processes, 57-58
qualified trainers, 175-177
summary, 183-185
training process, 171-172
undocumented process training, 173-174

transference of risk, 148
“tribal knowledge,” 46

triggers, 149

U

uncertainty, 135
undocumented process training, 173-174
unforeseen costs, budgeting, 110

V

validating proposed changes, 231-232

vendors. See suppliers

verifying budgets, 122-123

W-X-Y-Z

waste management

decision processing, 81-84
engineering, 74-75

explained, 69-70
facility waste, 79-80
managerial decision making, 80-81
manufacturing, 74-75
meetings, 81
process organization, 70-71
  
  human resource evaluation, 72-74
  
  task evaluation, 71-72
procurement, 76-78
resource waste, 73
shipping/receiving, 78
Streamline Thinking, 70
summary, 85-86
sustainable change, 84-85

**WBS (work breakdown structure)**
  
  project planning, 12-17
  
  risk planning, 140-142

**weak links**
  
  explained, 187-188
  
  inventory control, 198
    
    finished goods inventory, 201-202
    
    incoming inspection, 198-199
    
    **WIP (work in process), 199-201**
  
  procurements, 188-191
  
  summary, 202-203
  
  supplier relationships, 191-194
  
  suppliers, 194-197
**WIP (work in process), 199-201**

**work breakdown structure (WBS)**
  
  project planning, 12-17
  
  risk planning, 140-142

**work in process (WIP), 199-201**

**work-space organization, 211-213**

writing process documents, 54-55