Introduction to
Time Management

Bianca Drake

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Preface

It is with great pleasure that I present this book. It has been carefully written after numerous discussions with my peers and other practitioners of the field. I would like to take this opportunity to thank my family and friends who have been extremely supporting at every step in my life.

The process of planning and exercising conscious control of time spent on specific activities is known as time management. It aims to increase productivity, efficiency and effectiveness. It includes the management of finite time while fulfilling various demands from work, family, social life, personal interests and commitments. The primary goal of time management is to maximize the overall benefit of a set of activities within the limited amount of time. Some of the techniques which are used for the effective management of time are ABCD analysis, Pareto analysis and the Eisenhower method. This book outlines the processes and applications of time management in detail. Different approaches, evaluations, methodologies and studies in this field have been included in this book. Those in search of information to further their knowledge will be greatly assisted by it.

The chapters below are organized to facilitate a comprehensive understanding of the subject:

Chapter – What is Time Management?

The process of planning, managing and exercising the conscious control of time to increase the efficiency, effectiveness and productivity of certain activities is known as time management. Some of its essential aspects include time management skills, elements, goals, hacks, etc. This is an introductory chapter which will briefly introduce all these significant aspects of time management.

Chapter – Concepts of Time Management

Some of the fundamental concepts of time management are punctuality, time discipline, time blocking, timeboxing, time perception, task management, mind mapping, work–life balance, maestro concept, human multitasking and productivity. This chapter has been carefully written to provide an easy understanding of these concepts of time management.

Chapter – Techniques and Methods of Time Management

There are a number of techniques and methods that are used in time management. A few of them include POSEC method, Eisenhower method, ABC method, Pomodoro technique and ALPEN method. The diverse applications of these techniques and methods have been thoroughly discussed in this chapter.

Chapter – Strategic Time Management

The strategic management of time includes strategic planning, effective scheduling, prioritization of tasks, time audit, eliminating unnecessary tasks and organization of work. The topics elaborated in this chapter will help in gaining a better perspective about these aspects of strategic time management.

Chapter – Time Management Tools

There are various tools that are used for the effective management of time. A few of these tools are to-do lists, schedule, google calendar, personal digital assistant, time management software, online calendar and task scheduling tool. The diverse applications of these time management tools have been thoroughly discussed in this chapter.

Chapter – Goal Setting

The development of an action plan which helps in guiding and motivating a person or group towards a goal is known as goal setting. Some of the various aspects of goal setting are goal modeling, goal orientation, GROW model and goal programming. This chapter discusses in detail all these aspects of goal setting.

Chapter – Barriers to Time Management

Some of the barriers that hinder time management include ineffective planning, fear of failure, procrastination, stress, anxiety, inability to say no, and many other mental barriers. This chapter closely examines these barriers related to the effective management of time to provide an extensive understanding of the subject.

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What is Time Management?

The process of planning, managing and exercising the conscious control of time to increase the efficiency, effectiveness and productivity of certain activities is known as time management. Some of its essential aspects include time management skills, elements, goals, hacks, etc. This is an introductory chapter which will briefly introduce all these significant aspects of time management.

Time management is the process of organizing and planning how to divide your time between specific activities. Good time management enables you to work smarter – not harder – so that you get more done in less time, even when time is tight and pressures are high. Failing to manage your time damages your effectiveness and causes stress.

Many business people struggle with time management and would like to accomplish more tasks in a day, or have more time for non-work activities. There are a number of tips and suggestions for improving time management in a person's workplace and home, and different approaches work for different people.

Delegate
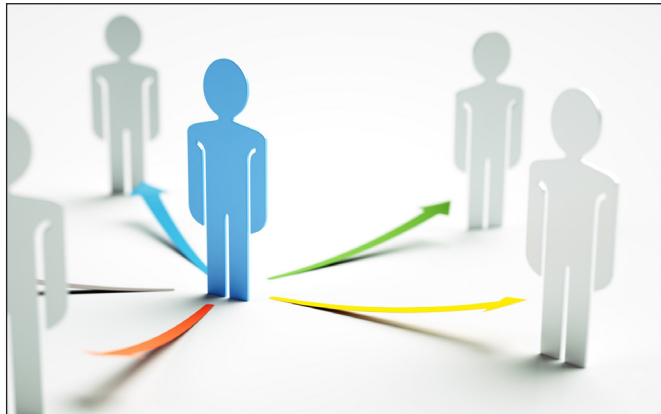
Many of us attempt to accomplish tasks that can be easily assigned to or contracted out to someone else. By delegating a task, you can have more time to accomplish other important tasks. When can a task be delegated and when should you attempt it yourself? Some guidelines are as follows. A primary concern is that you should only delegate if there is a person who is skilled enough to do the task at hand. You can delegate to employees you supervise, those who are your colleagues, and even those above you. When you delegate a task to your subordinate—downward delegation—you have the authority to make sure that the task is done correctly, but assigning a task to an employee who lacks the skill to do it will often require more time than if you did the task yourself. Delegating to a peer, or a colleague, works well if you and the other person have complementary skills. You can trade responsibilities if you each have skills that are stronger than the other person's. Although most employees do not consider it, you can also delegate to employees above you in the organizational hierarchy—upward delegation. If you have been assigned a task that should not be yours or a task that is beyond your abilities, you can ask a superior for guidance or clarification. Your feedback may indicate to your supervisor that the task is better done by him or herself.

Another consideration when delegating is the type of task that can be delegated. There are three types of tasks that are best suited to being assigned to someone else: (1) tasks for which you do not have adequate skill or expertise, (2) tasks that you do not want to do but that others might, and (3) tasks that are easy to accomplish but detract from your value to the organization.

First, if someone else can do something more effectively than you can, you will spend too much time attempting to do it yourself. For instance, if you are planning a retirement party for a colleague, you could purchase, prepare, and arrange the food and beverages yourself. However, if you are not very good at preparing food or creating a buffet, it would be to use your time to hire a caterer for this task. In addition to saving the time it takes to purchase and prepare food and drinks, by hiring a reputable caterer, you would spend considerably less energy managing the task and thinking about it.

A second circumstance that benefits from delegation is if there is a task that another person might enjoy more than you. Again, consider the example of organizing a retirement party. Perhaps you do not enjoy party planning, but your colleague does. You can delegate this task to your colleague, perhaps taking on one of his tasks in return, creating a situation in which both of you feel satisfied with the work you are assigned.

A final situation in which you should delegate is if there is an easy task that takes little skill to accomplish. For instance, if you are sending a mass mailing, it is poor time management for you to stuff the envelopes yourself. A lower-level employee, like an assistant or secretary, might better do this. By allowing this other person to do a task that is easy to complete, you are freed to complete other tasks that require more skill and attention. Since the person to whom you have delegated this task is likely to complete it just as effectively as you would have, then there is no drawback to assigning the task to another.

When should you not delegate? First, you should accomplish your major job tasks. For instance, it may be appropriate for your secretary to stuff envelopes with a letter soliciting business from former clients, but it is not appropriate for this secretary to write the entirety of this letter without your help or final approval. If you consistently have others complete tasks that are supposed to be yours, then you may find yourself replaced by another employee. Second, you should not delegate tasks in which the outcome is critical. If you have tasks that, if not completed, can lose the company a client or money, you must be responsible for this task. If you are accountable for an important outcome, you should use caution when delegating. Finally, there are some tasks for which delegation is too expensive. While hiring a caterer for a party does not represent a large cost, there are other times in which hiring others to complete tasks (e.g., offer training or develop a web site) can be cost prohibitive to some organizations.

Prioritize Tasks

Procrastination, or putting off a task that must be completed, is common to many people, even in business environments. Procrastination occurs for many reasons: you may not know where to start on a task, you may not understand a task, you may dislike the task, or you may worry that you cannot complete a task successfully. Often a person's anxiety about a task leads them to avoid it. Therefore, to accomplish more in a workday, it is best to tackle the most difficult or worrisome task first. This is a beneficial because it allows you to devote the time and mental energy that is necessary for a difficult or unpleasant task when you are most able to. Furthermore, by reducing the anxiety associated with this task in tackling it early, you will find that work becomes easier. When the unpleasant task is finished, it no longer creates anxiety and worry, which can save time.

If a person leaves unpleasant or difficult tasks until shortly before their deadlines or until the end of the workday, he or she will have less energy to complete this task. Additionally, the anxiety and dread associated with the completion of the task that has been procrastinated may affect a person's ability to complete other tasks throughout the day. The negative emotions associated with the anticipation an unpleasant task is likely to distract a person from the other tasks that they are trying to complete. This can make even easy tasks more time consuming to complete.

Set Goals

Goals can be very effective ways to meet work-place demands in a timely manner. Goals are measurable, short-term objectives. Simply by setting an appropriate goal, you can better organize your day or week. Decades of research have supported the effectiveness of goal setting on performance in a variety of tasks. However, for a goal to be effective, it must be designed properly by being specific and difficult. Specific goals are much more effective than non-specific goals, because your progress can be assessed. For instance, setting a goal of reading 20 pages of a report is a good goal

because you can determine whether or not it was accomplished. If your goal was to "read a lot of the report" then you might determine 5 pages into it, that you had accomplished that goal, when in reality, you had not read enough. Goals should also be difficult, but not too challenging. A goal that is too easy, such as "respond to one e-mail today" are not motivating because they present no challenge at all. Overly difficult goals (e.g., "improve my sales by 50 percent in one month") are also not motivational; they are so challenging that a person may give up too soon, realizing they will never reach the goal. In addition to being appropriately specific and difficult, you are more likely to reach goals to which you are committed. A lack of interest or commitment in reaching the goal makes the goal-setting process futile.

One of the advantages of setting goals to improve time management is that, over time, you gain a more realistic understanding of what can be accomplished in a workday. People who do not often set goals may not be aware of what their capabilities are; however, those who have set goals more consistently have a good idea of which goals they have been able to meet and which were set too high or too low.

Meet Deadlines Early

Some people thrive when working under deadlines. Newspaper reporters operate each day with a set of firm deadlines. However, many other people find deadlines to be daunting and stressful. Deadlines are set to help us manage time. By always meeting deadlines, or even by meeting them early, you can appropriately manage time. If you complete deadline work early, you reduce the stress associated with your schedule, and you have more self-confidence about completing work tasks. Additionally, a person's work is likely to be higher quality if deadlines are met; attention to detail can suffer when a person is hurrying to finish a project. To meet your deadlines early, you can break larger tasks into smaller ones and prioritize them. In addition, setting interim deadlines before a final deadline can help you to set goals and to make a large and seemingly unmanageable project seem easier to complete. Finally, tackling more difficult tasks first, as described previously, may increase your ability to meet deadlines.

Stay Organized

Organization and time management go hand in hand. Many people waste time looking for documents, messages, or other information necessary to complete tasks in a timely manner. There are a number of steps that can help you stay organized. First, arrange your workspace in a way that promotes organization. That is, have a place for everything, and put everything in its place. If you do not have a specific location for telephone messages, it is not surprising that you might spend time looking for a telephone message or even misplace one. Additionally, put the items that are most used closest to you. If you use a reference book (such as a dictionary or a computer programming language reference book) frequently, putting that book across the room wastes time. You want to minimize the amount of time you spend getting up from your desk retrieving or looking for items.

A second suggestion for staying organized is to spend a little time each day organizing your workspace. Discard paper and electronic documents that are no longer needed, file documents that will be needed at a later time, and write a to do list for tasks that must be accomplished that day or the next day. Some time management experts suggest that you only touch each piece of paper in your

office once. That is, if you receive a memo, you should read it when you receive it and take action based on it only once, rather than reading the memo, putting it down, and having to reread it several times before acting on it.

A third suggestion it to use a calendar or day planner to stay organized; this will help you to remember important dates and deadlines. Without a calendar in which such dates are noted, some tasks or meetings may be forgotten; instead of planning the time you need to do certain tasks, you may have to drop everything to accomplish a task that must be done for a meeting that you forgot was later that day. For a calendar to be effective for time management, however, you must be sure to note important dates. An incomplete or inaccurate calendar is useless. This suggestion fits nicely with the recommendation to spend a little time each day organizing your workspace. If part of your organization effort includes documenting any important dates and times and reviewing events on a calendar scheduled fro the following days, this can aid time management.

Find your Productive Time

Each person has a time of the day in which they are better able to concentrate or to do certain types of work. And, most people have a time of the day in which they have difficulty staying focused and getting things done. Some people are very productive in the mornings, but less able to concentrate in the afternoons. Others cannot tackle difficult tasks in the morning and prefer to wait until later in the day to do work that requires attention to detail. By determining when you are best able to do certain types of tasks, you can schedule them throughout your day so that you are most productive. For instance, if you are able to read and evaluate best in the morning, schedule those tasks for when you first arrive at work. If you find yourself getting sleepy in the afternoons, then reading quietly is not the best task for this time of day. Instead, you may choose to do tasks that involve a little bit of physical activity or that do not require as much mental concentration. Perhaps returning telephone calls or meeting with co-workers is better for afternoon tasks.

By scheduling tasks during the times of day when you are best able to do them, you are likely to be able to complete your work in a more time effective manner. Many people waste time trying to concentrate or solve difficult problems by doing so at a time that is ineffective for them. Re-reading a memo three times because you lack concentration in the late afternoon is a poor choice when you could read the memo once in the morning.

Minimize Stress

Stress is a major barrier to effective time management. Stress created by the workplace or by personal concerns can create anxiety and worry that are distracting from work. Even ineffective time management can lead to stress, since anxiety over completing tasks in a timely manner can hinder their accomplishment. To manage stress, it is important to first recognize what is creating the stress. Is it worry over a particular task, a work situation, or an issue at home? Once the stressor is recognized, it can be better managed. If the source of stress is unidentified, then it cannot be managed.

Once the source of stress is identified, you must determine which parts of the situation can be controlled and which cannot. For instance, if the source of stress is a looming deadline for

a project, tackling some elements of that project or scheduling some of the tasks may relieve stress. However, there may be parts of the project that are causing stress that cannot be managed. For instance, if part of the successful completion of the project depends on the work of another person, this may create stress that cannot be controlled unless you have some ability to monitor the work of the other person. For stressors that are out of your control, you must either find ways to exert more control or to ignore the issue and focus on those tasks that you can control.

Even when stressors have been identified and controlled to some extent, you may still experience stress. To reduce stress physically, you can get an appropriate amount of sleep, exercise regularly, and eat properly. Many Americans are sleep deprived, and skipping even a couple of hours of sleep each night can have noticeable consequences in the workplace. Some sleep experts liken working while sleep deprived to working while drunk. Although many people think that they will get more done by working more hours and sleeping less, getting appropriate amounts of sleep can instead make a person more productive during their working hours, requiring less time on the job. There are many suggestions for improving sleep.

Tips for Improving Sleep

- Create an environment in a bedroom that reduces distractions; don't do work or watch TV in the bedroom.

- Make your bedroom as dark and as quiet as possible.

- Go to bed and wake up at the same times every day.

- Avoid caffeine late in the day.

- Relax before bedtime by taking a warm bath or listening to soothing music.

- Reduce worry at bedtime by writing a list of things to do the next day before going to bed.

- If you are in bed but cannot sleep, get up and do something boring until you are sleepy.

Physical exercise can also reduce stress. Sports and other fitness activities can reduce a person's resting heart rate and blood pressure, which can help to alleviate the negative effects of stress. Many people forgo physical activity, believing that time invested in exercise will detract from a person's ability to complete other tasks. However, much like getting proper sleep, even minimal physical activity can make a person more effective during working hours due to decreased stress and anxiety.

Learn to Say No

Many people who struggle with time management do so because they have too many obligations. People agree to take on tasks or responsibilities, knowing that their time is limited, but feeling that they cannot say no. However, people agree to take on tasks that they have little time for because they want to help others, they feel guilty for saying no, feel obligated by a superior, or misjudge the time they have available. Saying yes to people who make requests can feel good, but not having time to accomplish tasks can be a letdown to the person and the organization. So, often times,

saying no to a request is a better option than taking on a task for which there is not adequate time. Therefore, knowing the right time to decline a request is important.

How does a person know when to say yes or no to a request? First, you must consider what the actual commitment is; that is, how much time, effort, and energy it will take. If you do not fully explore the possible commitments required by a certain request, you may be agreeing to do something that takes much longer than you originally anticipated. Second, you must decide if agreeing to the request is a good use of your time. If you compare the proposed commitment to your normal duties, which is more important? Those tasks that have very meaningful outcomes may be worth agreeing to do even when time is limited.

Even when a person knows that they do not have the time available to say yes to a new commitment, saying no can be difficult. To decline a request more effectively, you should do four things. First, offer the person a reason for your answer of no. If you do not provide a good reason to decline the request, then others may assume that you are lazy or selfish. Second, be tactful when you turn someone down because the denial may make him or her angry or hurt. Third, suggest an alternative that takes less time. By giving the requester another option, such as a different employee who might do the task or another time when you can help, you show that you want to cooperate, while still protecting your time. Finally, tell the person "no" as soon as possible. By asking for time to think over a decision when you know that you will decline their request, you may cause more problems or even find yourself obligated to say yes.

Reduce the Intrusion of Technology

The availability of communication technology, such as e-mail and cellular telephones has done much to improve the ability of Americans to get work done. However, communication technology can also hinder your ability to get work done. Employees now have many interruptions while trying to get work done. If you find that the arrival of a new email message or the ringing of the telephone is interrupting your work, you may choose to ignore them. If you are able to postpone speaking with people or responding to email messages, it may be helpful to set aside a time period that is communication free. For instance, you might decide that from 1–3 p.m. each day, you must concentrate on getting specific tasks done, and during that time, you will not take calls or read e-mails. It is important, however, after this period of no communication to respond to work-related messages received during this time period.

Organizational Approaches to Improving Time Management

Because time management can have an effect on employees' productivity in the workplace, some employers are now offering information and assistance for employees who want to better manage their time. Some organizations now offer time management workshops that teach skills such as those listed above. Additionally, seminars may be developed around particular models of time management, such as those presented in Steven Covey's book - The Seven Habits of Highly Effective People.

Another approach employers can use to assist employees in time management skills is through wellness programs. Wellness programs are opportunities offered or subsidized by the organization to promote physical and emotional health and well-being, thereby reducing stress. They

are intended as preventative measures and aim to reduce health risks and/or emotional stress. One of the outcomes that may be associated with a wellness plan is the ability to better manage time—if people are more physically well, many of the stress-related barriers to time management are reduced. Wellness plans may involve free or reduced-cost health club memberships, on-site health clubs, relaxation courses, stress-reduction courses, smoking cessation courses, and even time management courses. Some organizations even take the step of reducing health insurance premiums for those employees who participate in a wellness plan.

Finally, many organizations now offer benefits and services intended to help employees manage non-work activities. Flexible work hours, on-site day care, leave banks, and even valet services are now being offered in some organizations. These types of services, while often improving employee recruitment and retention, may also help to reduce distractions at work, to reduce employee stress, and to assist employees in being more productive during working hours.

Time management is a challenge for many people, and there are a number of tips that can help employees to make better use of their time. By learning delegating skills, prioritizing tasks appropriately, setting goals, meeting deadlines early, staying organized, finding the most productive time of the day, minimizing stress, saying "no" to some requests, and reducing the intrusion of technology, employees may be able to improve their time management. Additionally, many organizations now offer programs to teach employees time-management skills in order to reduce stress and improve overall well-being, and to assist them in managing their non-work lives.

Importance of Time Management

Time management is important for your personal life and career success. It teaches you how to manage your time effectively and make the most of it.

Here are a few of the reasons why it is so important, and how it can help you use and manage your time more advantageously:

- Time is a special resource that you cannot store or save for later use. Everyone has the exact same amount of time each day. Time not well used cannot be retrieved.

- Most people, feel like they have too much to do and not enough time. They blame lack of time for their poor finances, stress, bad relationships, and for not exercising their body.

- Wise time management can help you find the time for what you desire, and for what you need to do.

- You need time to get what you want out of life. If you wait for extra time to appear, you might lose the game of life. Through right time management, you can "create" the time you need, and not just wait for it to come. By planning your time wisely, you will have more time to do more things.

- Time management will help you set up your priorities.

- Time is limited to 24 hours a day, so plan your life wisely.

- Time management helps you make conscious choices, so you can spend more of your time doing things that are important and valuable to you.

- You can learn to find the time for the things that are important to you. Even a small amount of time once a day, or even once a week, will take you closer to your goals, and you will be surprised at the progress you make.

- You become more productive using improved time management skills and tools, and can accomplish more with less effort and time. Time management can help you reduce wasted time and energy, help you become more creative and productive, and enable you to do the right thing at the right time. This will of course lead to more balance and fulfillment in your life.

- Life today presents so many distractions, and therefore, it is very easy to lose time on unimportant activities. Ask yourself, is watching this or that TV program, reading this or that gossip or participating in a certain activity is going to add anything to your life. Is the time spent on a particular activity well spent, or is just a waste of time and energy?

- Life puts in front of everyone so many choices each day, and the question is, do you follow what appears on your way, or do you consciously choose what you want to do? Do you allow external distractions to deter you from your goal, or do you use willpower and self discipline to walk toward your goal in a straight line, without wasting time and energy?

- A certain degree of detachment and inner peace are useful in managing your time effectively. They help you avoid spending too much emotional and mental energy on what people say and think about you. They help you stay calm, despite distractions or difficulties, and this saves you a lot of time and energy, which you can spend on better and more rewarding activities.

- Building up willpower and self-discipline can help overcome laziness and procrastination.

There are many things you can do and tools to use to manage your time effectively. There is a lot of time wasted each day, which can be put to better uses. There are changes you can make, which will effectively increase the time you have at your disposal every day.

Elements of Time Management

Time management is a critical skill in modern times. People are constantly under pressure to try and get more done in the same, or less, time. We live in a world which has developed a productivity and efficiency mindset. Companies are constantly pushing for more. New technology is coming on the market every day specifically aimed at improving productivity. However, getting more done is not necessarily the answer. A productivity mindset is not the same thing as a time management mindset.

A time management mindset focuses on completing quality work whereas a productivity mindset focuses on completing an increased quantity of work. Under a productivity mindset, results are measured by the volume of work but with a time management mindset, results are measured in terms of progress made towards your key goals and objectives. When you have a time management mindset, you realise that there is no point in filling your day with extra work if that extra work adds little value. That approach just leads to you becoming a busy fool who is of no use to anybody.

Elements of a Time Management Mindset

Adhering to the following principles will help you to develop an effective time management mindset:

Have a Clear Vision

People have a tendency to confuse change and improvement. Just because you change does not mean you have improved the situation. Unfortunately, most time management solutions focus on changing behaviour rather than improving the situation. If the changes do not make you more effective, and help you to make faster progress towards your goals, then they are not an improvement.

To make sure that your changes are an improvement, you need to have a clear vision of what you are trying to achieve. You wouldn't set out on holiday without knowing your destination, so why would you try to manage your time effectively without knowing what your end result should look like? In both cases it is possible to achieve a successful outcome but it is highly improbable that you will do so.

Know your Priorities

A lot of time can be wasted trying to choose which task is more worthy of your attention. There may be many important tasks competing for your attention, so which do you procrastinate or you flip between tasks without completing any of them. The solution is to be crystal clear on your priorities. Clear priorities are a key foundation stone of a time management mindset. When you are clear on your priorities, you know which tasks add most value, thus making decisions becomes a lot easier.

Focus on Value

The late Richard Carlson pointed out that even on your deathbed; your in-tray will not be empty. There will always be new tasks coming your way; tasks which will steal your time, if you let them. You need to remember that you do not have to get everything done. Even if you wanted to, you couldn't do it. So, rather than focus on the quantity of work, identify the most important task, the tasks which add real value, and focus on them. When you focus on the tasks which add value, you add value to your life. When you look back on your life in years to come, are you going to remember the quantity of work, or the quality of the experience?

Lose the Urgency

Urgency is an incredibly powerful motivator. It can cause you to take action without properly considering the choice you are making. Marketers use urgency to influence buying decisions. Urgency can also influence you to change your schedule to complete a task which is not really that important. When these tasks are added up, you find that they have taken a great deal of time which you could have spent performing tasks which would have added real value. When you find yourself faced with urgency, you need to remember the words of form US President, Dwight D. Eisenhower:

'What is important is seldom urgent and what is urgent is seldom important.'

Determine the real, long-term value of the task and the long-term consequences of not performing the task. When you take the time to put urgent tasks in perspective, you will stop being influenced by urgency and focus on importance and value.

Stop Struggling

You may have important tasks in your life which you struggle to complete. This may be due to a training need or a lack of enjoyment. If you need to be the one to complete it; source the relevant training and get yourself up to speed. If it is a matter of not enjoying the task, see if you can automate it, delegate it, or outsource it.

Purge the Waste

It is important to conduct a regular review of your work practices. This can be done monthly. Take the time to review the work which you have completed in the previous month. Identify the tasks which have been a waste of time or have added little value. For each of these tasks, ask yourself the following:

- Can I eliminate this task?

- Can I automate this task?

- Can I delegate or outsource this task?

- Can I reduce the frequency with which I perform this task?

Treat these tasks like a pushy salesman; make them earn your time. Too often, people approach time management with the mindset of 'how can I get this done?' An effective time management mindset asks 'Why should I be doing this?'

Schedule your Escape

Taking time to escape from your busy schedule by enjoying some of your favourite activities allows you to restore your mental, physical, spiritual and emotional energies. For the best results, you should include some active (e.g. jogging) and passive (e.g. meditation) activities. Find the activities which work best for you and include them in your schedule.

Improving your time management is one of the most effective ways to improve your quality of life but it requires the right mindset. Too often, people focus on getting more done but this is pointless if the extra work is of little value. A proper time management mindset is essential if you want to make lasting and valuable changes. A time management mindset focuses on the most important tasks; tasks which add real value. The value and importance of these tasks is determined by your vision for your life. These tasks allow you to make real progress towards your goals and objectives. With a time management mindset, your life is a lot less stressful, you are happier and healthier, and you achieve superior results. Don't waste time, apply the steps above and ensure that you have a powerful time management powerful time management mindset.

Steps to Manage Time

Strategize to make the best use of your time by doing things such as prioritizing, communicating and taking advantage of available resources.

Make a Plan

Spend the last part of your day or the first part of your day planning what you need to accomplish. Schedule your day into blocks of time. Estimate the amount of time you will need for each task. For example, if the first part of your day is returning calls and emails that you received since the last time you checked calls and emails, schedule a block of time to do it and stick to it. If you have a meeting scheduled with a client, decide how long you will conduct the meeting and have a plan for ending it.

Give a Signal

Let your co-workers or employees know when you're working on something and you don't want to be disturbed. Decide on a signal that you will use when anything but an emergency needs to wait. Tell your colleagues about the signal and its meaning. The signal could be a closed door and a sign outside that states, "Do not disturb." Or you could do something more subtle such as turn off the lights in your office and turn on a lamp while you work. A partially closed door or wearing a certain item of clothing - hat, armbands - can also signal to others that you are busy. Only use the signal when you really can't afford to be disturbed. If you overuse it, it will lose its meaning and people may ignore it.

Replace Old Habits

The best way to break an old habit is to replace it with a new one, according to the University of Hawaii at Manoa. For example, if you have a habit of procrastinating, always schedule the tasks you don't want to do for completion first thing in the morning. Or break up an undesirable task into small blocks of time over several days. If you spend too much time returning calls and checking emails, set a timer for a certain period of time and stop answering calls and checking emails when the time has expired.

Use Time-management Tools

If you find yourself having trouble staying on task, download a timer such as Focus Booster or Instant Boss. Set the timer for a specified amount of time that you want to work on a task, such as 45 minutes. The timer serves as a visual reminder on your computer screen as it counts down and sounds an alarm when the time is up. You can also block certain websites or email programs if you think you'll have a temptation to visit them in the middle of your productivity session. Use an add-on, such as LeechBlock.

Goals of Time Management

To realize the benefits of time management, you need to understand its true goals. All of the best practices used by effective time managers directly contribute to at least one of them. The goals of time management are:

Gain a Sense of Control over your Time

Effective time management enables you to gain control over your time. The goal is not control for the sake of control, but in order to become more effective, reduce your stress, increase your self-esteem and gain a sense of inner peace.

Increase your Productivity

Effective time management increases your productivity allowing you to accomplish more with less effort. Improving your productivity is not about "doing more in less time," it is really about accomplishing more by working less.

Achieve your Goals

Effective time management helps you accomplish your important goals by guiding you to direct and focus the appropriate amount of time and energy towards their achievement. You cannot hope to achieve any level of success in your personal or professional life without devoting some of your valuable time and effort to your goals.

Find Fulfillment

People are beginning to realize that achievement does not automatically lead to fulfillment. Effective time management can lead to fulfillment by helping you realize what is truly important, rewarding, and valuable in your life and making sure that you set your goals and priorities accordingly.

Find Balance

Effective time management enables you to lead a more balanced life by helping you find the time and energy to devote to all the important areas of your life.

Advantages of Time Management

At some point in their lives most people have experienced what happens when time management is not utilized. Whether it's feelings of stress from impending deadlines or loss of sleep from cramming in work during all-nighters, improper management of time can be detrimental on health, as well as productivity. These negative effects help to prove the importance of practicing good time management habits. There are many benefits to be experienced when time management is handled in a good fashion.

When working on an important task, against a deadline, or planning out daily responsibilities, it is important to manage time wisely. Time management can help tasks seem less daunting, more organized, and to be finished in a timely and more productive manner. There are a number of benefits that can be enjoyed from utilizing proper time management.

Less Procrastination

Time management helps people get more out of the day. By making a schedule, the tasks that need to be completed are set out and the person is aware of what needs to be done. Scheduling in tasks allows for the person to understand when a task needs to be completed and the amount of time it should take to finish the job. This schedule also allows for time not to be wasted wondering which task should be completed and also ensures that tasks aren't forgotten. By scheduling out the day, procrastination can be avoided because people are less likely to put off tasks when they

are written down. Accountability to the daily tasks helps them to be finished in a timelier manner. Even though it doesn't seem that by nature a schedule would help someone be more flexible, that is not the case with time management. Knowing which tasks must be completed helps a person to know how much free time he or she has to spare during the day. For surprise plans, having a schedule allows a person to know what he/she can do and how much time can be spent.

Stress Relief

Above all else, making and sticking to a task schedule helps a person to feel less stressed about what needs to be completed. Knowing that there is enough time to complete each duty and ticking off boxes as projects are complete will help ease anxiety about all that needs to be done. When time management is put into practice, there is less room for people to be surprised by what needs to be done. There is also less chance that people will be working right up to tight deadlines. Less rushing allows people to be calmer. When time isn't managed, there is a higher risk for life friction. This could be a missed appointment, neglected deadline, or forgotten obligation. Lack of time management can lead to increased problems in one's life, which in turn can lead to more stress. When a person is constantly stressed it can take a toll on the health and wellbeing of the person. Stress relief may arguably be the greatest benefit of time management.

More Time for Fun

With all of the extra time gained from proper time management, it can be put to use in daily life, spent on things that many people wish they had more time for. People who utilize positive time management have more time to spend on hobbies. They also find that more time can be spent with family or cultivating relationships. A good time management schedule will also help people to be happier in their day to day lives because there will be more time for the fun things. It also allows for more time to be spent on personal health. Having more time in the day allows people to have longer and more restful sleeps. It also means that more time can be given to exercising and healthy dieting.

More Opportunities

Another benefit of time management is that it leads to more opportunities. Organization and time management often allows for tasks to be completed ahead of schedule. As they say, the early bird catches the worm. Time management allows for less time to be wasted performing frivolous activities. As productivity becomes increasingly more effective, so will the reputation of the person doing the task. Being recognized for having a reliable personality will make one more respected, both at work and in personal life. Reliability and productiveness are key qualities that many employers look for.

Time Management Skills

Time management skills include a variety of skills that will help you manage your time well. Some of the most important time management skills include:

- Organization: Staying organized can help you maintain a clear picture of what you need to complete and when. Being well-organized might mean maintaining an up-to-date calendar,

being able to locate certain documents easily, having a tidy environment and taking detailed, diligent notes.

- Prioritization: Assessing each of your responsibilities for priority is key in being a good time manager. There are many ways to prioritize what you need to accomplish. You might decide to complete fast, simple items followed by longer, more involved ones. Alternatively, you might prioritize your tasks starting with the most time-sensitive, or a combination of both.

- Goal-setting: Setting goals is the first step to becoming a good time manager. Goal-setting allows you to clearly understand your end goal and what exactly you need to prioritize to accomplish it. Setting both short and long-term goals can lead to success in your career.

- Communication: Developing strong communication skills can allow you to make your plans and goals clear to people you work with. It also allows you to delegate, which lets you focus on completing the most important, relevant tasks that align with your goals.

- Planning: A fundamental part of time management is planning. Being efficient in planning out your day, meetings and how you will accomplish things will help you stick to your schedule.

- Delegation: Being a good time manager means only completing work that will help you and your company accomplish goals. While this skill is most often done by managers, you can also practice delegating tasks if you are managing a project. While it can often be difficult to say "no" when someone asks you to do something at work, it is important to practice having boundaries to manage your time well and ultimately accomplish your goals.

- Stress management: When practicing good time management, you should also be attentive to your mental health. Handling stress in a positive way can help you stay motivated and perform well when going through your schedule. You might do this by including small breaks throughout your day, or by rewarding yourself in small ways as you accomplish tasks.

Taking time to develop each of these skills will help you organize your daily work, whether you are in a job, searching for a job or trying to develop a new competency.

Why are Time Management Skills Important?

Time management skills are important because they help you structure your work in a way that allows for you to accomplish goals. For example, if your goal is to get a job, you need time to update your resume, search for openings, apply, research companies and prepare for interviews. Setting aside specific amounts of time per day will help you complete the necessary steps to getting a job.

Alternatively, if already have a job, you likely have a variety of responsibilities to help the company achieve certain goals. Maintaining your calendar, meetings and tasks is necessary to be successful in your role.

Being fully present and focused results from strong time management skills. For example, if you are running late to a meeting and must work on a project you forgot was due while people are speaking, you might miss important information that could help you be better at your job.

Managing your time well also allows you to have space to be creative and proactive with your goals. When you have specific time set aside to complete your tasks, you can also allow for time to think about the big picture for yourself and your company.

How to Improve Time Management Skills

Working on your time management skills can help you be a better employee and strong candidate when you apply for new opportunities. Here are a few ways you can improve your time management skills:

- Set short and long-term goals: Practicing regular goal-setting can help you clearly understand exactly what you need to accomplish to achieve certain results. To hit larger, long-term goals, identify smaller milestone goals along the way. For example, if you have a goal to be promoted within six months, you might need to set smaller goals to improve on certain skills. Your goals should be specific, measurable, achievable, relevant and time-based.

- Manage your calendar: Setting time aside to complete the most important tasks on your list is important managing your time. You might consider blocking off certain brackets of time on your calendar on a regular basis so you are guaranteed to have time in your schedule without distractions or meetings. You should also consider whether or not attending certain meetings is beneficial. If you feel you will not add value or contribute in any certain way, you should feel empowered to decline certain meetings. If you do this, use discretion and be polite—you might consider sending the meeting owner an email letting them know why you have declined.

- Prioritize your assignments: Prioritization is a difficult skill but gets easier with practice. You can practice prioritization by making to-do lists. Writing or typing out everything you need to get done can help you physically prioritize the tasks that are most urgent or easy to get out of the way. If you need help, you might consider asking your manager or a colleague who is good at prioritizing how they would complete work. Understanding due dates and how the task affects others and business goals can help you to get certain things done ahead of others.

Improving time management skills can help you be a better worker and have the ability to focus fully as you go about your day. You can be a better time manager by being organized, setting goals and prioritizing your to-do list.

Personal Time Management

Personal Time Management is a small subset of project time management, but a topic where tips can be tremendously useful. Our brains need to focus and remember in order to be productive in our work.

Separate the projects from the tasks on your to-do list. Tasks are fine in a task list, take less than a few hours, and can be completed alone in one sitting. Projects do not belong in your task list.

Projects will have surprises, and need to be broken down into tasks to be worked (which do go on the task list).

- If possible, try to have a consistent approach to your daily activities.

- Do not assume responsibilities for a functional manager's issues.

- Reduce negative stress because it results in the hurry pattern, schedule addiction, complaining, poor sleep and alertness issues.

- Do not overschedule because unexpected things always happen.

- Understand your projects and your own priorities.

- Schedule your hardest work that requires focus to be done at your highest energy time of the day. Remove distractions (such as putting your phone on forward and shutting down your e-mail) while you are doing this work.

- Get organized so that you don't waste time trying to find things.

Multi-tasking

Many project managers are juggling 5-7 major projects simultaneously. A great percentage of time is wasted going from point A to P back to B and then to Z. Our team members are equally torn between priorities – trying to keep all of the balls moving forward slightly each day. When done to excess, multitasking can increase your error rate and cause you to lose time, especially as the complexity of the tasks increases.

When you have a flexibility to work as you want to, it is ideal to take your Project A number 1, and plan to work on it solely from start to finish. It is a novel idea in our society – to do one thing at a time. And it is extremely powerful.

Even focusing on just one large project, say for example juggling a huge corporate event with hundreds of attendees and a staff that is taking direction from you, can require enough of it's own multi-tasking. But then to be forced to shift your attention to multiple other projects at the same time can make our performance drop significantly as we naturally fight with project and stakeholder confusion, lack of adequate time, slowed communications, and many other problems.

If reducing your project multi-tasking is not possible, here are a few affirmations that you can tell yourself that will help put you into the right project mindset while you are working on one of many:

- Tell yourself, the work I am doing is sacred and deserves my complete and total attention for this short while. Tell yourself that there is nothing in the world more important than what you are doing at this very moment.

- If the thoughts of all the other things you have to get done clutter your thoughts, give yourself 5 minutes to write them down with the commitment that after this is done, you will return your full attention to the task at hand for a period of time prior to going back to the list you just made.

Time Boxing

Time boxing is deciding on a fixed time period to work on a particular thing. Basically, instead of working on a task until it's done, you commit to work on it for a specific amount of time. It can help you break large, overwhelming work down into small bites, thereby helping you to overcome your resistance and procrastination.

It can help you focus. For example you can tell yourself that during that time box you will not check e-mail or answer the telephone, thereby eliminating the multi-tasking and distractions that cause painful tasks to get drawn out.

Time Management in Corporate Sector

Employees must learn to manage time well at the workplace to achieve targets ahead of deadline and make a mark of their own. One who understands the value of time is never overburdened and enjoys each and every moment to the fullest.

Why Time Management is Important in Corporates?

*   Every organization works on deadlines. Time Management helps individuals to finish work within the assigned time and stay stress free and relaxed through out the day. Time Management helps you plan specific time slots for all your day to day tasks at workplace.

*   Time Management helps an individual to prioritize things. It is important for an employee to understand what is important and urgent at the moment. Staying overburdened at work leads to frustration and eventually one loses interest in work. You can't do anything and everything. Pick up all that is important and urgent at the start of the day and finish it off first before starting with something which can be done a little later. Know what is important for you. Allocate specific time slots to activities as per their relevance and make sure you stick to the same.

*   Effective Time Management makes you a favourite amongst your superiors, clients as well as fellow workers. Do not keep work pending from your end. Finish off tasks as and when required. Ignoring critical issues is pointless. You have to do it in any case. Discuss with your co workers or immediate reporting boss and find out a solution. Keeping a check on your time helps you complete task just when it is needed.

*   Managing time well helps an employee to plan his career path effectively. Doing things on time helps you reach the top of your career within the shortest possible time frame. Employees who just work for the sake of doing work and do not pay attention to deadlines are never taken seriously at the workplace. They are the ones who always crib and complain of excessive work load.

*   Time Management makes you an organized individual. One needs to keep things at their respective places. Avoid keeping heaps of paper and stacks of files on your desk. Not only it gives a cluttered look to your workstation but also wastes half of your time in searching important documents, files, folders and so on. Individuals should prefer writing on notepads instead of loose papers.

- Effective Time Management helps an individual to identify the time wasters at the workplace. It is foolish to waste time on unproductive things which yield no results. No one expects you to work at a stretch for the whole day. Assign some time in your daily schedule to check updates on social networking sites or calling up your friends but do know where to draw the line. Your office does not pay you for gossiping and loitering around.

- Time Management makes an individual disciplined and punctual. One gets in the habit of reaching work on time as a result of effective time management.

How to Practice Effective Time Management at Workplace?

Time Management refers to assigning specific time slots to activities as per their importance and urgency in order to make the best possible use of time. In a layman's language Time Management is nothing but to manage time well and doing things when they actually need to be done.

Every organization works on deadlines. An individual constantly needs to be on his toes to finish off assignments within stipulated time frame. It is essential for employees to understand the value of time for them to do well and make a mark of their own at the workplace.

How to practice effective time management in organization ?

- Know your targets well. Do not hesitate to speak to your Boss if targets are unrealistic and unachievable within the allocated time slot. It is always better to discuss things at the initial stages than cutting a sorry figure later on. Accept tasks only when you are confident.

- There is absolutely no harm in discussing work with your fellow workers. You can't do almost everything on your own. Distribute work amongst your team members. It is foolish to over burden yourself. One must share his work load with others to finish assignments within the stipulated time frame. Know your capabilities.

- Organize yourself. Be very careful about your files, important documents, visiting cards, folders etc. Keep them at their proper places so that you do not waste half of your time in searching them.

- Be loyal to your organization. Do not work only when your superiors are around. Remember you are getting paid for your hard work. Concentrate on your own work rather than loitering and gossiping around. Do not waste time by playing games on computer or finding out what your fellow worker is up to.

- It is absolutely okay to call up family members or friends once in a while but make sure you do not end up in long phone calls while at work. Phone calls and messages are one of the biggest distractions at work.

- Plan your things well in advance. Do not work just for the sake of working. The first thing an employee should do in the morning is to jot down what all tasks he need to do in a single day against the time slot assigned to each task. Preparing a Task Plan right at the start of the day always helps and provides you a sense of direction at work. A "TO DO" List suggests you way forward. Tick off completed assignments. Make sure you finish tasks within the assigned deadlines.

- Keep a notepad and pen handy. Avoid writing on loose papers. You will never find them when you actually need something. Prefer using an organizer as it helps you plan your work better.

- Eat only during lunch hours. Eating while working not only makes you feel sleepy but also breaks continuity.

- Be punctual. Avoid taking frequent leaves from work unless it is an emergency. Make it a habit to reach office on time.

- Do not keep things pending at your end. Escalate matters immediately which need approval of higher authorities. Do not keep ignoring things. They would create problems for you sooner or later.

Role of Planning in Time Management

Time Management plays an essential role in corporates and helps employees to finish off assignments on time. Doing the right thing at the right time is called Time Management.

It is essential for an individual to value time as time once lost never comes back, no matter how much money you spend. An individual who fails to deliver results on time is appreciated by none and is never taken seriously at the workplace.

Planning plays a pivotal role in effective time management. An individual needs to plan his day well in advance to make the best possible use of time. There is no point in working just for the sake of doing work. Planning gives an individual a sense of direction in the organization and motivates him to complete assignments on time.

Plan how you want to move forward. It is important for an individual to set a goal and objective for himself and work hard towards achieving the same. Detailed planning suggests you the steps towards realizing your goals at the workplace within a defined time frame.

Planning helps an individual to know what all he needs to do urgently and what all can be done a little later. To plan things better, employees should prepare a Task Plan where he can jot down tasks against the time slots assigned to each activity. High priority activities must come on top followed by the ones which do not require immediate attention. Planning helps you accomplish urgent and critical tasks way ahead of deadline. Plan as to how your day should look like. Develop the habit of using an organizer. It helps you plan things better. You can also use a table top calendar for the same. Individuals who adopt a planned approach finish off work on time as compared to those who just accept anything which comes there way.

This is how a Task Plan should ideally look like:

Date - ....

Day - ....

9 AM - Day Begins.

9.15 - 10 AM - Reply urgent emails.

10 AM - 12 noon - Work on client A's proposal, prepare reports and necessary data. (Most Urgent).

Also work on comparative analysis of competitors. (Urgent)

12 Noon - 12.30 PM - Sit and discuss with team members on pending issues (Have to clear all pending work by end of the day).

12.30 - 1.30 PM - Lunch Break (Enjoy with fellow workers).

1.30 - 1.40 PM - Call up spouse.

1.40 - 3 PM - Work on Client B's Proposal (Still have two days).

3 PM - 4 PM - Sit with Boss for approvals and other critical issues.

4 PM - 5 PM - Call up existing and potential clients.

5 PM - 5.15 PM - Check personal mails.

5.15 - 6 PM - Collate reports and send to immediate reporting Boss.

6 PM - 6.15 PM - Organize Work Station.

Day Ends

Stick to your schedule. If you have assigned fifteen minutes to check your personal emails, make sure you do not keep doing it for say an hour. An individual should strive hard to finish off tasks as per the time slot allocated to each activity; however last minute changes can't be ignored.

Planning in a way also helps in predicting where you stand five years from now. Plan as to how you would reach a certain position and in what time. Planning makes things easier and helps you realize your dreams in the shortest possible time span.

Common Time Management Mistakes

Productivity and time management skills don't come natural to everyone and that's okay. The key is to identify the mistakes you're making so you can be more efficient and better delegate your energy. Here are 5 common time management mistakes you should avoid.

Not Planning out your Day

It's important to plan out your day for maximum efficiency. You don't have to know what you're doing by the minute, but try to set daily goals including tasks you'd like to complete, then prioritize them in order of importance.

Also, consider prepping your tasks and brainstorming in advance to save yourself time and energy. You can plan out your day simply with a calendar application or you can write down a detailed to-do list in a daily planner. Having a general guide will help you stay on track throughout the day so you waste less time.

Procrastination

Procrastination can be extremely draining and a big waste of time. It's easier to procrastinate when you don't have structure or any relief. You can fix this by prioritizing and tackling your most challenging tasks early in the day.

If you prioritize your most important tasks, you'll be able to get them completed and out of the way early. Also, focus on giving yourself short breaks throughout the day to recoup.

Over Commitment

Another reason why your time management sucks (and perhaps why you may be procrastinating) is because you're overcommitted and have too much going on. When you have too much going on, it's easy to get overwhelmed and accomplish nothing because you have no idea where to start.

It's common to say yes to everything in an attempt to please others, but it's crucial that you draw the line somewhere.

Your time and energy and limited resources. Weigh the cost and benefit before you say yes to something and determine a limit for your level of commitment.

Not Scheduling or Automating

Time management is all about using the time you have wisely and effectively to produce your desired results. If you're doing everything yourself, you'll find it harder to manage time and make any progress. This is why you should consider automating and scheduling certain tasks.

Not Getting Rid of Distractions

Finally, you have to get rid of distractions if you want to make better use of your time. Lack of focus can be a huge obstacle to overcome, but you can make it easier on yourself by avoiding distractions.

Stop multi-tasking, turn off the television, move away from loud noises, put your phone away, and avoid social media in order to get more done in less time.

Another big interruption can be email. If you find yourself constantly checking your email out of habit, delete the app from your phone and close the tab in your browser when it's time to work. Set up designated times throughout the day to spend a few minutes checking email so you don't feel pressured to do it every 10 minutes.

Time Management Hacks

These days, if you can save time there's a good chance you can save money. This is true whether you are at home or at work.

At home, saving time could enable you to do things yourself instead of paying others to do them. At work, it means lowered costs for your business or employer. Unfortunately, not everyone uses all of the things they could be utilizing to save time.

Master Calendar

Turning your calendar into a master calendar is one of the time management hacks you may not be using. When your work and personal events are in one place it makes scheduling faster and simpler and there's less rescheduling.

Scheduling System

When you use a task scheduling system at work, you can plan and prioritize tasks with ease. You'll have no more paper lists to lose and scheduling meetings will be a breeze.

Meeting Agendas

Meeting agendas are another of the hacks you may not be using that can save you precious time. Use of a meeting agenda keeps you and other meeting attendees on track and moving along. Otherwise, important topics that need to be discussed could get missed entirely.
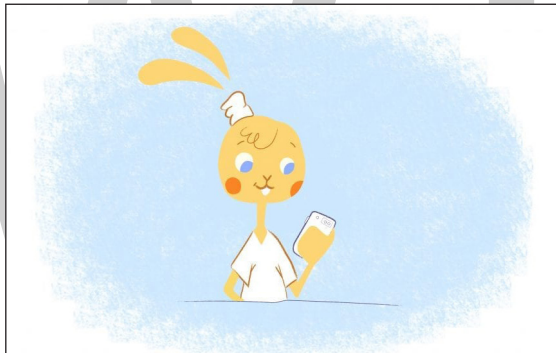
Smart Phones

Some people must use their smart phones for their jobs while others don't necessarily need them for work. Regardless, if the temptation is too great, set your phone out of reach. Check it only during rest or lunch breaks to get more done.

Timers and Reminders

You can set reminders in some scheduling systems and calendars to alert you of important deadlines. But another of the time management hacks you may not be using is timers for regular work. Setting a timer can keep you pushing forward as you work so you get more done.

Regular Routine

Did you know that creating a regular routine can save you lots of time? It helps you pick up speed because actions are familiar which eliminates pauses to stop and think.

Of course, everyone's routines get broken now and then. When they do, the sooner you get back into your regular routine, the more time you'll save.

Email Management

Another time management hack you may not be using is email management. This includes responding to emails only every few hours as well as using preset text scripts.

Batching Work

Batching your work is a time management hack you may not be using but could start. Working in groups of tasks prevents delays due to switching thought processes.

Saving Tasks

If you save tasks on your computer often you may save time. If your system goes down or the power goes out, you can avoid hours of rework.

Keyboard Shortcuts

There are tons of keyboard shortcuts you could be using for tasks you do often. If you aren't using them, you're wasting valuable time every day.

Project Templates

It's possible you could be missing out on another of the time management hacks by not using templates. Although not every app has them, many do. Use as many templates as possible and create your own for repetitive projects to save time.

Multiple Monitors

At times when working you may have more than one application open at once. To save time, use more than one monitor. This will keep you from continually switching between applications.

Automation Options

Whenever possible, make use of automation features. This is another of the time management hacks you may not be using but could be. If you can set up repetitive duties to do themselves, you can save valuable time for other tasks.

Social Media

If you post social media, another great time saver is to schedule posts to go out automatically. This can help you get them out at regular times even if you're busy with other things.

Tracking Time

Have you ever considered tracking your time? This is another time management hack you may not

be using. Once you know how your time is spent through time tracking, you can find ways to use it better.

Urgent Matters

When urgent matters need attention one of the best time savers is to do them right away. This helps you ensure they get completed before your day is done.

Quick Items

An additional way to make better use of your time is to get through quick tasks early in your day. These tasks should be 5 minutes or less. Doing them sooner rather than later builds momentum and increases productivity.

Avoiding Perfection

Try as you might to do everything right, nobody is perfect. In fact, some projects don't have to be done with precision at all. When it needs to be done but not perfect, don't waste time trying to get it just right.

Setting Goals

When you set goals for your work and personal life it can help you manage your time better. Working toward something makes you work harder toward achieving it. Furthermore, to reach your goals you may manage time more wisely to get there faster.

Wake up Early

Waking up early is a time management hack you may not be using. If you begin working on time management at home, you'll arrive at work on time and less stressed. This allows you to get more done in your day.

Prepare Lunch

Take your lunch to work to save money as well at time. Making lunch the night before is cheaper and saves time the next morning. This will help you get more done at work because eating there is faster than going out.

Choose Clothing

Choose your work attire each evening before work the next day. Having your clothes out and ready eliminates wasted time and speeds up your morning routine.

Look Ahead

Avoid surprises in your schedule by looking ahead at your calendar while at home. Doing this can help you save time the next day. You'll no longer have to scramble to prepare for meetings or appointments.

Eat Well

In order to make the most of your day each day you should eat well. Healthy meals can increase your alertness helping you use your time better.

Exercise Regularly

Regular exercise during off work hours is another time management hack you may not be using. When you exercise, oxygen invigorates you and promotes good health. In turn, being healthy reduces lost time at work from health issues.
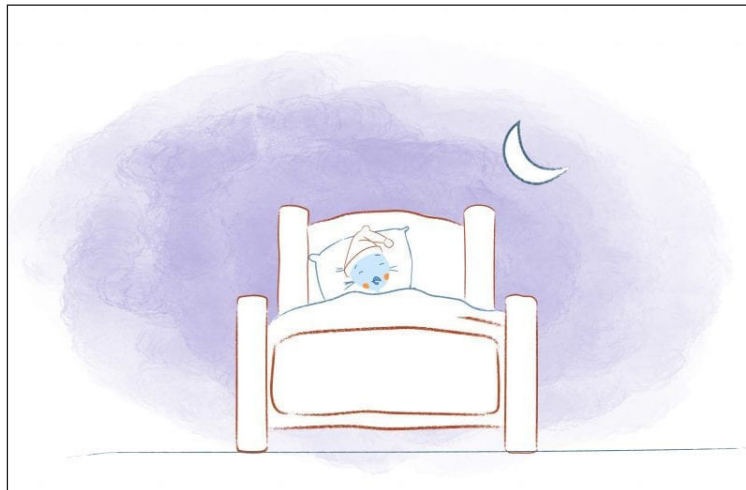
Get Sleep

If you short yourself on sleep there's a good chance you aren't being as productive as you could be. To use your time better at work and get more done, get plenty of rest. This makes you more alert and able to work faster.

Take Breaks

Believe it or not, taking a break from work can help you with time management. When you get time away you can rest, relax, and come back to work raring to go. Work speeds will increase and so will efficiency and productivity.

Using time wisely is something we should all do whether at home or at work. If you haven't tried these time management hacks, put some of them into practice today. You may find yourself achieving greater success in all areas of your life.

Time Management across Cultures

The time orientation of a culture affects how it values time and control time. Therefore differing concepts of time and its management across cultures are a significant problem in global organizations.

Each culture has its own perspective of time, meeting deadlines and managing project workflows when working with people from different nationalities across the world can be one of the most challenging aspects of managing intercultural business relationships. Culturally different attitudes to time management can be extremely harmful in multinational organizations.

Monochronic versus Polychronic

Interactions between the two types of cultures can be problematic. Recognizing whether you are dealing with a polychronic or monochronic culture and the attendant differences in how time and relationships are valued is crucial to being able to communicate effectively across cultures.

Training Outcome

- Understand the importance of time between cultures.

- Manage your time effectively.

- Become more flexible and stress free.

- Maximise your business potential.

- Minimise misunderstandings.

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2
Concepts of Time Management

Some of the fundamental concepts of time management are punctuality, time discipline, time blocking, timeboxing, time perception, task management, mind mapping, work–life balance, maestro concept, human multitasking and productivity. This chapter has been carefully written to provide an easy understanding of these concepts of time management.

Punctuality

Punctuality is a wonderful trait of a person, one to be admired and respected. Punctuality displays a person's respect for people and time. In a scheduled appointment, the late-comer usually gives an impression that he/she doesn't value the other person's time or considers his/her time more important than that of the other.

Punctuality is more important at the workplace because it is here that you get paid for the hours you put in and Employees are expected to be punctual and dependable in order to meet the needs of their department and the College. When employees are absent or tardy, work and service are interrupted and an additional burden is placed on colleagues. Punctuality is one of the important factors in evaluating individual performance and continued employment. Many people work from home these days, to them punctuality means being available online during office hours, logging in into meetings punctually, and meeting project deadlines.

To earn and maintain the respect you wish to have at the workplace you cannot wayside this wonderful human virtue. Below are some reasons why you should be punctual:

Respect

Punctuality speaks of a person's respect of others. In giving respect to others we can earn in turn.

Deadlines

An employee who isn't stressed about reaching late or has come in early enough to give him minutes to settle in before the day's work begins, has got better chances to get more accomplished than a late comer who feels more pressurized. Some professionals, such as writers, journalists,

producers and accountants, have daily, weekly and monthly deadlines. Meeting deadlines and timelines assures clients that they can count on you to get the job done. Without professional punctuality, customers might look for another company to supply their needs. Striving to meet deadlines helps establish your strong work ethic and your desire to be productive.

Team-centered Goals

When you're on time for meetings, conference calls and shift changes, you show others that you have team-centered work goals. Punctuality demonstrates your respect for co-workers and clients and reinforces your time-management skills. Team-focused employees avoid extended lunch breaks, respond to emails in a timely fashion and avoid tardiness, making sure to carry their weight on the job. If you want your boss and co-workers to see you as a responsible team-centered worker, then be punctual.

Credibility

It might not seem like your job security is based on punctuality, but it certainly doesn't hurt, especially in a struggling economy. The number of employees arriving late to work at least once a week has slid from 20 percent to 15 percent. In a tough job market, you don't want to risk losing your job because your boss sees you as lazy or irresponsible. Punctuality demonstrates your willingness to get up early, plan and make every effort to complete your work on time.

Professionalism

Punctuality is a sign of professionalism and helps you stand out as a reliable and trustworthy employee. If you don't get your part of a project completed on time, you keep others from being able to finish their tasks. Being punctual helps you establish your reputation as a dependable and consistent worker. In an interdependent work environment, everything runs like a well-oiled piece of machinery. Being on time helps ensure that you're doing your best to keep things running smoothly.

Deadlines

Deadlines are the "bane" of many people's working lives, and a source of relentless and worrying pressure. But they are important to almost any task and any role, and they are essential for the smooth running of your organization.

Why Deadlines Matter?

Typically, we have deadlines for one of the following reasons:

- To ensure that we complete our work. It's easy to delay or to forget a task that has no agreed end point. Deadlines help to avoid this.

- To encourage a smooth flow of work. Deadlines help us to collaborate toward achieving a shared goal, and to keep complex, multistage projects on track.

- To set expectations. Deadlines make clear what we're expected to deliver and when. This means that we can take control of our work, free of confusion.

There can also be serious consequences for failing to meet a deadline. On a personal level, it can damage your reputation and harm your career prospects – especially if it happens more than once.

It can also be extremely damaging at an organizational level. Missing a deadline will likely impact your company's reputation, and it can have serious financial implications if your delay triggers a penalty clause in a contract.

There are two main areas to focus on when you have to hit a deadline: managing the deadline, and managing yourself.

Managing a Deadline

Chances are, most of us simply accept the deadline that we are given. But it's important to consider it properly before agreeing to it. People often underestimate how long it takes to complete projects, so the deadline you've been set could be unrealistic. And sometimes deadlines are set unnecessarily early to prevent problems from arising when delivery is late.

So, what should you do before agreeing to a deadline? Here are five steps to follow:

Evaluate what's Required

First, you need to understand exactly what the task involves. If your deadline is for a complicated task or project.

Ideally, the person who set the deadline will have taken into account the complexity of the work. But our article, Estimating Time Accurately, is packed with full of tips and strategies for setting realistic and manageable timelines.

Get the Right Resources

Next, make sure that you have what you need to get the job done promptly. Will you have the people, technical support, equipment, training, or materials ready and available in time? If not, you may have to suggest a longer schedule, or a lowering of the quality or quantity of work that you'll deliver on time.

Allow for Problems

Things don't always go to plan, so it's wise to think about potential problems. For example, how would illness, equipment failure, or an unexpectedly urgent and important competing task affect your plans?

Consider what contingencies you could draw up to minimize the impact. You might, for example, consider briefing a co-worker so that he or she can cover for you or another member of your team in an emergency.

Plan in Detail

The next step is to create a detailed schedule. A good approach is often to break tasks down into small components and to create deadlines for each one.

As a result, you might find that you're going to need more time than the overall deadline allows. Be sure to raise this as an issue as soon as possible, and avoid simply hoping for the best.

The ability to see how you're progressing can be very motivating, and it can help you to immediately identify tasks that haven't been done.

Limit the Damage of a Missed Deadline

Despite all your hard work and forethought, you might still miss a deadline. If this happens, keep calm and make every effort to limit the damage.

Keep your stakeholders informed of progress throughout your work, highlighting any issues that delay you, and show that you are putting your contingency plans into action. Then, if you do fail to deliver on time, more people will understand the situation – and some might be prepared to help you.

In such a situation, it's best to deal with the immediate problem quickly, and to agree and meet a new deadline. Then, hold a project review to identify what went wrong and to guard against a repeat.

However, missing a deadline can have wider implications. For example, as we mentioned earlier, if you are working with an outside client or organization, there could be a financial penalty. It may also harm your reputation.

Managing Yourself

The other important factor in meeting a deadline is you. If you have the right mindset, the self-discipline, and are organized, then you're almost "home and dry."

Here are some ideas to consider:

- Be assertive: Learn to say "no," if appropriate, or to at least give yourself space to evaluate a deadline before you agree to it.

- Adjust your mindset: Adopt a positive attitude toward deadlines, instead of resenting them. Deadlines can help you to achieve goals that you might otherwise put off.

- Don't mistake "planning" for "doing:" No matter how good a plan you have, that is all it is – a plan. Once you have it, put it into action.

- Make good use of your time: Avoid trying to multitask, as it's not efficient. And keep track of your time to help you to work effectively, especially when the deadline is close.

- Beat self-sabotaging behaviors: If you know that you /community/Bite-SizedTraining/ OvercomingProcrastination.phpprocrastinate, for example, work on addressing this.

- Understand your motivations: Research shows that some people just aren't inspired by deadlines. If that's you, consider what does motivate you.

  Is it doing a good job, getting praise and recognition, or having free time to do the things that you enjoy? Meeting your deadline will likely help in all of these areas.

- Make meeting deadlines a habit: Start by working toward smaller deadlines in your daily work, and transfer this /community/BookInsights/BetterThanBefore.phphabit across to bigger ones when they arise.

Helping others to Meet Deadlines

As a manager, you likely know who in your team is confident and capable of meeting deadlines, and who needs more support.

Remember, deadlines that you've set for your people become their responsibility, but you can help them to succeed. For example, encouraging them to develop their self-confidence can equip them to handle the pressure of deadlines.

Check in with your people regularly, or set up a system whereby they report to you on their progress. 5-15 Reports are an effective way to do this. But, take care to avoid micromanaging.

Allow your people to show initiative and set their own deadlines, where appropriate. Research shows that this can improve performance.

In any case, be sure to take responsibility, to avoid making excuses, and to focus on delivering whatever you can as soon as possible.

Time Discipline

In sociology and anthropology, time discipline is the general name given to social and economic rules, conventions, customs, and expectations governing the measurement of time, the social currency and awareness of time measurements, and people's expectations concerning the observance of these customs by others.

The concept of "time discipline" as a field of special attention in sociology and anthropology was pioneered by E. P. Thompson in Time, Work-Discipline, and Industrial Capitalism, published in 1967. Coming from a Marxist viewpoint, Thompson argued that observance of clock-time is a consequence of the European industrial revolution, and that neither industrial capitalism nor the creation of the modern state would have been possible without the imposition of synchronic forms of time and work discipline. The new clock time imposed by government and capitalist interests replaced earlier, collective perceptions of time that Thompson believed flowed from the collective wisdom of human societies. While in fact it appears likely that earlier views of time were imposed instead by religious and other social authorities prior to the industrial revolution, Thompson's work identified time discipline as an important concept for study within the social sciences.

The alarm clock is for many people a reminder of the intrusion
of socio-economic time discipline into their sleep cycle.

While Thompson's theory of industrial time-discipline has dominated the field for more than 40 years, critics of his work have emerged.

Paul Glennie and Nigel Thrift posit an alternative perspective on the development of time-consciousness in "Reworking E. P. Thompson's 'Time, Work-Discipline and Industrial Capitalism'. According to Glennie and Thrift, Thompson and subsequent theorists on modern time competence in England have theorized that industrial work-discipline centered on the clock is responsible for spreading a unitary concept of time rooted in materialist realities. In contrast, Glennie and Thrift explore the role of symbolic, qualitative, and multiple time-senses in the West. Different kinds of work and multiple means of measuring time problematize the centrality of factory work and the clock. Generally, they argue that time-discipline was evident before the spread of industrialization and that it did not trigger a significant change in time-sense. Because it rests on the argument that disparate, spatial temporalities can not be unified, critics have argued that their analysis seems incomplete. In short, they offer poignant critiques of the dominant theory without positing a stronger theory in its place.

Michael J. Sauter argues that Thompson's approach to time discipline is "gendered and Eurocentric". Time discipline did not arise because of the Industrial Revolution, but had been a phenomenon since the Middle Ages as the government, religion, and economics played larger roles in day-to-day life. In Sauter's article, he argues that time discipline came from the streets, and was part of the rise of "local knowledge" as public clocks were used by public event planners. People began to learn where clocks were located and which social groups used which ones. Furthermore, Sauter argues that time discipline is not "externally imposed" on people, but "a standard that is determined by people with specialized knowledge and skills". Prior to the rise of mechanical timekeeping, clocks were based on the easily accessed sun, and after 1800 precise timekeeping again returned to the Earth's position in relationship to the stars, as measured by scientists using specialized instruments.

In societies based around agriculture, hunting, and other pursuits that involve human interaction with the natural world, time discipline is a matter governed by astronomical and biological factors. Specific times of day or seasons of the year are defined by reference to these factors, and measured, to the extent that they need measuring, by observation. Different peoples' needs with respect to

these things mean sharply differing cultural perceptions of time. For example, it surprises many non-Muslims that the Islamic calendar is entirely lunar and makes no reference at all to the seasons; the desert-dwelling Arabs who devised it were nomads rather than agriculturalists, and a calendar that made no reference to the seasons was no inconvenience for most of them.

Western Religious Influences

In Western Europe, the practice of Christian monasticism introduced new factors into the time discipline observed by members of religious communities. The rule of Saint Benedict introduced canonical hours; these were religious observances that were held on a daily basis, and based on factors again mostly unrelated to natural phenomena. It is no surprise, then, that religious communities were likely the inventors, and certainly the major consumers, of early clocks. The invention of the mechanical clock in Western Europe, and its subsequent technical developments, enabled a public time discipline even less related to natural phenomena. (Highly sophisticated clepsydras existed in China, where they were used by astrologers connected with the imperial court; these water clocks were quite large, and their use limited to those who were professionally interested in precise timekeeping.)

The Invention of the Clock

The English word clock comes from an Old French word for "bell," for the striking feature of early clocks was a greater concern than their dials. Shakespeare's Sonnet XII begins, "When I do count the clock that tells the time." Even after the introduction of the clock face, clocks were costly, and found mostly in the homes of aristocrats. The vast majority of urban dwellers had to rely on clock towers, and outside the sight of their dials or the sound of their bells, clock time held no sway. Clock towers did define the time of day, at least for those who could hear and see them. As the saying goes, "a person with a clock always knows what time it is; a person with two clocks is never sure."

Improvements of the Clock

The discipline imposed by these public clocks still remained lax by contemporary standards. A clock that only strikes the hours can only record the nearest hour that has passed; most early clocks had only hour hands in any case. Minute hands did not come into widespread use until the pendulum enabled a large leap in the accuracy of clocks; for watches, a similar leap in accuracy was not made possible before the invention of the balance spring. Before these improvements, the equation of time, the difference between apparent and mean solar time, was not even noticed.

During the 17th and 18th centuries, private ownership of clocks and watches became more common, as their improved manufacture made them available for purchase by at least the bourgeoisie of the cities. Their proliferation had many social and even religious consequences for those who could afford and use them.

Before time became standardized, clock masters used "True Time". The day work began and ended with the sun. This time period was divided into 12 equal hours. This meant that these hours would vary with the seasons, as the length of daylight changed. Each town would have their own variance of this "True Time". Eventually, cities adopted "Mean Time", which is how we think of time nowadays. Astronomers used the Earth's rotation and the stars to calculate the time, and divided

the day into 24 uniform and equal hours. Geneva was the first city to adopt mean time in 1780, followed by London in 1792, Berlin in 1810, Paris in 1816, and Vienna in 1823.

Religious Consequences

Religious texts of the period make many more references to the irreversible passage of time, and artistic themes appeared at this time such as Vanitas, a reminder of death in the form of a still life, which always included a watch, clock, or some other timepiece. The relentless ticking of a clock or watch, and the slow but certain movement of its hands, functioned as a visible and audible memento mori. Clocks and sundials would be decorated with mottos such as ultima forsan ("perhaps the last" [hour]) or vulnerant omnes, ultima necat ("they all wound, and the last kills"). Even today, clocks often carry the motto tempus fugit, "time flies." Mary, Queen of Scots was said to have owned a large watch made in the shape of a silver skull.

Economic Consequences

Economically, their impact was even greater; an awareness that time is money, a limited commodity not to be wasted, also appears during this period. Because Protestantism was at this time chiefly a religion of literate city dwellers, the so-called "Protestant work ethic" came to be associated with this newly fashioned time discipline. Production of clocks and watches during this period shifted from Italy and Bavaria to Protestant areas such as Geneva, the Netherlands, and England; the names of French clockmakers during this time disclose a large number of commonly Huguenot names from the Old Testament.

Standard, Synchronous and Public Time

In the nineteenth century, the introduction of standard time and time zones divorced the "time of day" from local mean solar time and any links to astronomy. Time signals, like the bells and dials of public clocks, once were relatively local affairs; the ball that is dropped in Times Square on New Year's Eve in New York City once served as a time signal whose original purpose was for navigators to check their marine chronometers. However, when the railroads began running trains on complex schedules, keeping a schedule that could be followed over distances of hundreds of miles required synchronization on a scale not attempted before. Telegraphy and later shortwave radio were used to broadcast time signals from the most accurate clocks available. Radio and television broadcasting schedules created a further impetus to regiment everyone's clock so that they all told the same time within a very small tolerance; the broadcasting of time announcements over radio and television enabled all the households in their audience to get in synch with the clocks at the network.

The mass production of clocks and watches further tightened time discipline in the Western world; before these machines were made, and made to be more accurate, it would be pointless to complain about someone's being fifteen, or five, minutes late. For many employees, the time clock was the clock that told the time that mattered: it was the clock that recorded their hours of work. By the time that time clocks became commonplace, public, synchronized clock time was considered a fact of life. Uniform, synchronized, public clock time did not exist until the nineteenth century.

When one speaks about the intellectual history of time, one essentially is stating that changes have occurred in the way humans experience and measure time. Our conceived abstract

notions of time have presumably developed in accordance with our art, our science, and our social infrastructure.

Towards Time-keeping

The units of time first developed by humans would likely have been days and months (moons). In some parts of the world the cycle of seasons is apparent enough to lead to people speaking about years and seasons (e.g. 4 summers ago, or 4 floods ago). With the invention of agriculture in the 3rd millennium BC, people relied heavily on the cycle of the seasons for planting and harvesting crops. Most humans came to live in settled societies and the whole community relied upon accurate predictions of the seasonal cycle. This led to the development of calendars. Over time, some people came to recognize patterns of the stars with the seasons. Learning astronomy became an assigned duty for certain people so they could coordinate the lunar and solar calendars by adding days or months to the year.

At about the same time, sundials were developed, likely marked first at noon, sunrise and sunset. In ancient Sumer and Egypt, numbers were soon used to divide the day into 12 hours; the night was similarly divided. In Egypt there is not as much seasonal variation in the length of the day, but those further from the equator would need to make many more modifications in calibrating their sundials to deal with these differences. Ancient traditions did *not* begin the day at midnight, some starting at dawn instead, others at dusk (both being more obvious).

Since a sundial has only one "hand," a minute probably only meant "a short time." It took centuries for technology to make measurements precise enough for minutes (and later seconds) to become fixed meaningful units—longer still for milliseconds, nanoseconds, and further subdivisions.

When the water clock was invented, time could also be measured at night—though there was significant variation in flow rate and less accuracy and precision. With water clocks, and also candle clocks, modifications were made to have them make sounds on a regular basis.

With the invention of the hourglass (perhaps as early as the 11th century), hours and units of time smaller than an hour could be measured much more reliably than with water clocks and candle clocks.

The earliest reasonably accurate mechanical clocks are the 13th century tower clocks probably developed for (and perhaps by) monks in Northern Italy. Using gears and gradually falling weights, these were adjusted to conform with canonical hours—which varied with the length of the day. As these were used primarily to ring bells for prayer, the clock dial likely only came later. When dials were eventually incorporated into clocks, they were analogous to the dials on sundials, and, like a sundial, the clocks themselves had only one hand.

A possible explanation for the shift from having the first hour being the one after dawn, to having the hour after noon being designated as 1 pm (post meridiem), is that these clocks would likely regularly be reset at local high noon each day. This, of course, results in midnight becoming 12 o'clock.

Peter Henlein, a locksmith and burgher of Nuremberg, Germany, invented a spring-powered clock around 1510. It had only one hand, had no glass cover, and was rather imprecise because it slowed

down as the spring unwound. In fact, Henlein went so far as to develop the first portable watch; it was six inches high. People usually carried it by hand, or wore it around their necks or in large pockets. The first reported person to actually wear a watch on the wrist was the French mathematician and philosopher, Blaise Pascal. He attached his pocket watch to his wrist with a piece of string.

In 1577, the minute hand was added by a Swiss clock maker, Jost Burgi (who also is a contender for the invention of logarithms), and was incorporated into a clock Burgi made for astronomer Tycho Brahe, who had a need for more accuracy as he charted the heavens.

Isochronous Time

With invention of the pendulum clock in 1656 by Christiaan Huygens, came isochronous time, with a fixed pace of 3600 seconds per hour. By 1680, both a minute hand and then a second hand were added. Some of the first of these had a separate dial for the minute hand (turning counter-clockwise), and a second hand that took 5 minutes per cycle. Even as late as 1773, towns were content to order clocks without minute hands.

But the clocks were still aligned with the local noonday sun. Following the invention of the locomotive in 1830, time had to be synchronized across vast distances in order to organize the train schedules. This eventually led to the development of time zones, and, thus, global isochronous time. These time changes were not accepted everywhere right away, because many people's lives were still tied closely to the length of the daytime. With the invention in 1879 of the light bulb, that changed too.

The isochronous clock changed lives. Appointments are rarely "within the hour," but at quarter hours (and being five minutes late is often considered being tardy). People often eat, drink, sleep, and even go to the bathroom in adherence to some time-dependent schedule.

Time Blocking

Time blocking is the practice of scheduling out everything in your entire day, including meals, work projects and personal time in order to better manage time and discover where precious hours are either being wasted or underutilized.

The Road Warrior blog credits Cal Newport with the idea with his article back in 2013, but of course, this productivity method has surely been used before then.

Time Blocking your Entire Day

As mentioned, time blocking (sometimes called calendar blocking) works when your entire day is scheduled. While this can seem too constraining to some people, it actually helps you get more done, so you have more free time to do the things you enjoy. After all, when you get everything done that you need to in any given day, you feel less anxious and stressed after work in the evenings.

How people block their days varies depending on their needs, but the beauty of time blocking is that it can work for anyone, from a stay-at-home mom to a busy business owner. The only thing that varies is what their blocks contain.

Block off Work

The first thing that needs to be blocked off in a calendar is the actual work day. This will give you a good bird's eye view of when you'll be able to fit in meetings and projects. Your work day is the time of day that you actually spend at your desk, so exclude your commute and your lunch break. For many people, that's an eight or nine hour day, Monday through Friday, likely from 8:00 am to 5:00 pm or 9:00 am to 6:00 pm.

Using that metric, we can see that we have about forty hours blocked per week for work. From there, we can further segment this time into designated chunks. For someone who is a full-time parent or isn't working a traditional job, these hours can be designated for times you do the same things at the same time every day or week, like school drop-offs or trips to the post office, for example.

Segment Meeting and Creative Time

Start filling in your workday with designated times for meetings and creative work. For someone in a creative field, this is especially important, as having meetings at random times throughout the week can throw off creative focus.

If possible, designate one or two days a week as "meeting days." Try to always have your standing meetings during these days, and ask others you usually meet with to move regular meetings to these days as well. Because you are only trying to meet on these designated days, make sure you are completely flexible about the time of day these meetings occur.

The other days of the week can be assigned as creative time or actual work time. For many professionals, these are the hours where the actual work is done. Meetings, on the other hand, are usually more of an administrative task unless your profession is something like project management or sales.

Calendar Separated by "Meeting Days" & "Client Work Days".

If you have standing clients, one possibility is to assign each client a specific day or window that you work solely on their projects. This works well if you have a set amount of work each week that doesn't require daily check-ins. For example, running a weekly report or writing an article would be projects that could be assigned to specific days.

Otherwise, if your work varies each week, simply segment your work days into creative blocks. Usually, this is broken up by lunch, but be sure to schedule in breaks if you always take one.

Blocking off Personal Time

Besides the work day, it's also important to block off your personal time. If you don't do something specific every week, then just block it off as "personal time." However, you can break it down even further by thinking about what you do every evening after work. Most people walk their dogs, cook and eat dinner, workout, spend time with their spouse and kids, etc.

Calendar Featuring "Personal Time."

Be sure to also look at what you're doing before work. This can be time blocked as well. Showering, blow drying hair, exercising, and other daily activities can all be scheduled before the work day begins.

Once you map out your work and personal activities, you can see your ideal day. This helps you further refine your schedule to build in more of what you want.

Scheduling in Goals

It's possible to work in any additional goals that you have if you designate a time for it. After taking a look at your blocked calendar, look at where you can feasibly fit in 30-60 minutes to work on a goal of yours. This might be to exercise more or to make dinner at home five nights a week. If they are scheduled in your calendar, you are much more likely to get them done.

On the meeting days, you might realize that you won't have enough meetings each week that would take up the 13-16 hours a week that you've set aside for it. This means that you might be able to use some of this time on meetings days to work toward a goal.

Setting aside time for what you want to work on can give you the permission you've been waiting for to really put effort into it. It's easy to be unable to see how we can fit in additional projects when

our regular week seems so full. However, by scheduling everything out, you are better able to see how the puzzle pieces of a schedule fit together to make everything work.

Lunch 12 – 1pm	Lunch 12 – 1pm	Lunch 12 – 1pm	Lunch 12 – 1pm
Meetings 1 – 3pm	Client Work 1 – 5pm	Meetings 1 – 3pm	Client Work 1 – 5pm
Work on Book 3 – 5pm		Work on Book 3 – 5pm	
Workout 5 – 6:30pm	Workout 5 – 6:30pm	Workout 5 – 6:30pm	Workout 5 – 6:30pm
Dinner and Kids Bed 6:30 – 7:30pm	Dinner and Kids Bed 6:30 – 7:30pm	Dinner and Kids Bed 6:30 – 7:30pm	Dinner and Kids Bed 6:30 – 7:30pm
Shower and Read Until Bed 7:30 – 10pm	Shower and Read Until Bed 7:30 – 10pm	Shower and Read Until Bed 7:30 – 10pm	Shower and Read Until Bed 7:30 – 10pm

Calendar with Both "Work Blocks" & "Personal Time."

Account for Wasted Time

In addition to blocking time for your regular work, like email or meetings, you can also block for things you do every day that you don't realize are really taking up time. This includes showering, getting ready in the morning, and your daily commute. By accounting for these things, you can see where your workday actually begins and when it should end (depending on what you want to do in the evenings).

Lunch 12 – 1pm	Lunch 12 – 1pm	Lunch 12 – 1pm	Lunch 12 – 1pm
Meetings 1 – 3pm	Client Work 1 – 5pm	Meetings 1 – 3pm	Client Work 1 – 5pm
Work on Book 3 – 5pm		Work on Book 3 – 5pm	
Drive to Gym, 5pm	Drive to Gym, 5pm	Drive to Gym, 5pm	Drive to Gym, 5pm
Change Clothes and 5:30 – 6:30pm	Change Clothes and 5:30 – 6:30pm	Change Clothes and 5:30 – 6:30pm	Change Clothes an 5:30 – 6:30pm
Drive Hor, 6:30pm	Drive Hor, 6:30pm	Drive Hor, 6:30pm	Drive Hor, 6:30pm
Dinner and Kids Bed 7 – 8pm	Dinner and Kids Bed 7 – 8pm	Dinner and Kids Bed 7 – 8pm	Dinner and Kids Bed 7 – 8pm
Shower and Read Until Bed 8 – 10:30pm	Shower and Read Until Bed 8 – 10:30pm	Shower and Read Until Bed 8 – 10:30pm	Shower and Read Until Bed 8 – 10:30pm

Fully Developed Calendar with Specifics.

When you account for drive time, you might realize that you actually need to start going into work earlier or ending your workday sooner so you can fit it all in. For example, in the sample calendar above, when we account for commuting to and from the gym, we see that dinner and the kids' bedtime is pushed to 7:00-8:00 pm. If we know the kids always go to bed at 7:30, and 8:00 pm would be too late, so we need to figure out how to either leave work earlier, make our workout shorter, or change when we do our workout to make sure everything fits.

You can also account for how much time you'll have in the evenings by counting backward from the morning to how many hours of sleep you need. For instance, if you always wake up at 6:30 am and you need eight hours of sleep at night, then bedtime should be around 10 or 10:30 pm each night.

Time blocking may seem overwhelming at first, but it's actually a time management strategy that gives you a lot of freedom to see where you have pockets of time to work on your goals and where you need to reframe your working or personal hours. Even if you don't leave your time blocks as a permanent addition to your calendar, this can be an interesting exercise to learn where your time is really going each day.

Timeboxing

In time management, timeboxing allocates a fixed time period, called a timebox, within which planned activity takes place. It is employed by several project management approaches and for personal time management.

Timeboxing is used as a project planning technique. The schedule is divided into a number of separate time periods (timeboxes), with each part having its own deliverables, deadline and budget. Sometimes referred to as schedule as independent variable (SAIV).

As an Alternative to Fixing Scope

In project management, there are generally considered to be three constraints of time (sometimes schedule), cost (sometimes budget), and scope; with quality often added as a fourth constraint (represented as the middle of a triangle). The assumption is that a change in one constraint will affect the others.

Without timeboxing, projects usually work to a fixed scope, in which case when it becomes clear that some deliverables cannot be completed within the planned timescales, either the deadline has to be extended (to allow more time to complete the fixed scope) or more people are involved (to complete the fixed scope in the same time). Often both happen, resulting in delayed delivery, increased costs, and often reduced quality (as per The Mythical Man-Month principle).

With timeboxing, the deadline is fixed, meaning that the scope would have to be reduced. As this means organizations have to focus on completing the most important deliverables first, timeboxing often goes hand-in-hand with a scheme for prioritizing of deliverables (such as with the MoS-CoW method).

To Manage Risk

Timeboxes are used as a form of risk management, to explicitly identify uncertain task/time relationships, i.e., work that may easily extend past its deadline. Time constraints are often a primary driver in planning and should not be changed without considering project or sub-project critical paths. That is, it's usually important to meet deadlines. Risk factors for missed deadlines can include complications upstream of the project, planning errors within the project, team-related issues, or faulty execution of the plan. Upstream issues might include changes in project mission or backing/support from management. A common planning error is inadequate task breakdown, which can lead to underestimation of the time required to perform the work. Team-related issues can include trouble with inter-team communication; lack of experience or required cross-functionality; lack of commitment/drive/motivation (i.e. poor team building and management).

To stay on deadline, the following actions against the triple constraints are commonly evaluated:

- Reduce scope: drop requirements of lower impact (the ones that will not be directly missed by the user).

- Time is the fixed constraint here.

- Increase cost: e.g., add overtime or resources.

Adoption in Software Development

Many successful software development projects use timeboxing, especially smaller ones. Adopting timeboxing more than tripled developer productivity at DuPont in the '80s. In some cases, applications were completely delivered within the time estimated to complete just a specification. However, Steve McConnell argues that not every product is suitable and that timeboxing should only be used after the customer agrees to cut features, not quality. There is little evidence for strong adoption amongst the largest class of projects.

Timeboxing has been adopted by some notable software development methodologies:

- Dynamic systems development method (DSDM).

- In lean software development, pull scheduling with Kanban provides short term time management. When developing a large and complex system, when long term planning is required timeboxing is layered above.

- Rapid application development (RAD) software development process features iterative development and software prototyping. According to Steve McConnell, timeboxing is a "Best Practice" for RAD and a typical timebox length should be 60–120 days.

- Scrum was influenced by ideas of timeboxing and iterative development. Regular timeboxed units known as sprints form the basic unit of development. A typical length for a sprint is less than 30 days. Sprint planning, sprint retrospective and sprint review meetings are timeboxed.

- In Extreme programming methodologies, development planning is timeboxed into iterations typically 1, 2 or 3 weeks in length. The business revalues pending user stories before each iteration.

Agile software development advocates moving from plan driven to value driven development. Quality and time are fixed but flexibility allowed in scope. Delivering the most important features first leads to an earlier return on investment than the waterfall model.

A lack of detailed specifications typically is the result of a lack of time, or the lack of knowledge of the desired end result. In many types of projects, and especially in software engineering, analyzing and defining all requirements and specifications before the start of the realization phase is impossible. Timeboxing can be a favorable type of contracting for projects in which the deadline is the most critical aspect and when not all requirements are completely specified up front. This also allows for new feedback or insights discovered during the project to be reflected in the end result.

In Personal Time Management

Timeboxing can be used for personal tasks, as well, in which case it uses a reduced scale of time (e.g., thirty minutes) and of deliverables (e.g., a household chore instead of project deliverable).

Personal timeboxing is also said to act as a life hack to help curb perfectionist tendencies (by setting a firm time and not overcommitting to a task) which can also enhance creativity and focus (by creating a sense of urgency or increased pressure).

Relationship with other Methods

Timeboxing acts as a building block in other personal time management methods:

- The Pomodoro Technique is based on 25 minute timeboxes of focused concentration separated by breaks allowing the mind to recover.

- Andy Hunt gives timeboxing as his 'T' in SMART.

Time Perception

A contemporary quartz watch.

Time perception is a field of study within psychology, cognitive linguistics and neuroscience that refers to the subjective experience, or sense, of time, which is measured by someone's own perception of the

duration of the indefinite and unfolding of events. The perceived time interval between two successive events is referred to as perceived duration. Though directly experiencing or understanding another person's perception of time is not possible, such a perception can be objectively studied and inferred through a number of scientific experiments. Time perception is a construction of the sapient brain, but one that is manipulable and distortable under certain circumstances. These temporal illusions help to expose the underlying neural mechanisms of time perception.

Pioneering work, emphasizing species-specific differences, was conducted by Karl Ernst von Baer.

Theories

William J. Friedman also contrasted two theories for a sense of time:

- The strength model of time memory. This posits a memory trace that persists over time, by which one might judge the age of a memory (and therefore how long ago the event remembered occurred) from the strength of the trace. This conflicts with the fact that memories of recent events may fade more quickly than more distant memories.

- The inference model suggests the time of an event is inferred from information about relations between the event in question and other events whose date or time is known.

Another theory involves the brain's subconscious tallying of "pulses" during a specific interval, forming a biological stopwatch. This theory alleges that the brain can run multiple biological stopwatches at one time depending on the type of task one is involved in. The location of these pulses and what these pulses actually consist of is unclear. This model is only a metaphor and does not stand up in terms of brain physiology or anatomy.

Philosophical Perspectives

The *specious present* is the time duration wherein a state of consciousness is experienced as being in the present. The term was first introduced by the philosopher E. R. Clay in 1882 (E. Robert Kelly), and was further developed by William James. James defined the specious present to be "the prototype of all conceived times the short duration of which we are immediately and incessantly sensible". In "Scientific Thought", C. D. Broad further elaborated on the concept of the specious present and considered that the specious present may be considered as the temporal equivalent of a sensory datum. A version of the concept was used by Edmund Husserl in his works and discussed further by Francisco Varela based on the writings of Husserl, Heidegger, and Merleau-Ponty. Although he lived prior to these modern philosophers, Hasidic master Rabbi Nachman of Breslov discussed the nature and perception of time in various teachings. He remarked that only the present day and present moment are "real," and also noted that a person could sleep for fifteen minutes and dream that he or she had lived seventy years.

Neuroscientific Perspectives

Although the perception of time is not associated with a specific sensory system, psychologists and neuroscientists suggest that humans do have a system, or several complementary systems, governing the perception of time. Time perception is handled by a highly distributed system involving the cerebral cortex, cerebellum and basal ganglia. One particular component, the suprachiasmatic

nucleus, is responsible for the circadian (or daily) rhythm, while other cell clusters appear to be capable of shorter (ultradian) timekeeping. There is some evidence that very short (millisecond) durations are processed by dedicated neurons in early sensory parts of the brain.

Professor Warren Meck devised a physiological model for measuring the passage of time. He found the representation of time to be generated by the oscillatory activity of cells in the upper cortex. The frequency of these cells' activity is detected by cells in the dorsal striatum at the base of the forebrain. His model separated explicit timing and implicit timing. Explicit timing is used in estimating the duration of a stimulus. Implicit timing is used to gauge the amount of time separating one from an impending event that is expected to occur in the near future. These two estimations of time do not involve the same neuroanatomical areas. For example, implicit timing often occurs to achieve a motor task, involving the cerebellum, left parietal cortex, and left premotor cortex. Explicit timing often involves the supplementary motor area and the right prefrontal cortex.

Two visual stimuli, inside someone's field of view, can be successfully regarded as simultaneous up to five milliseconds.

In the popular essay "Brain Time", David Eagleman explains that different types of sensory information (auditory, tactile, visual, etc.) are processed at different speeds by different neural architectures. The brain must learn how to overcome these speed disparities if it is to create a temporally unified representation of the external world: "if the visual brain wants to get events correct timewise, it may have only one choice: wait for the slowest information to arrive. To accomplish this, it must wait about a tenth of a second. In the early days of television broadcasting, engineers worried about the problem of keeping audio and video signals synchronized. Then they accidentally discovered that they had around a hundred milliseconds of slop: As long as the signals arrived within this window, viewers' brains would automatically resynchronize the signals". He goes on to say that "This brief waiting period allows the visual system to discount the various delays imposed by the early stages; however, it has the disadvantage of pushing perception into the past. There is a distinct survival advantage to operating as close to the present as possible; an animal does not want to live too far in the past. Therefore, the tenth-of- a-second window may be the smallest delay that allows higher areas of the brain to account for the delays created in the first stages of the system while still operating near the border of the present. This window of delay means that awareness is retroactive, incorporating data from a window of time after an event and delivering a delayed interpretation of what happened."

Experiments have shown that rats can successfully estimate a time interval of approximately 40 seconds, despite having their cortex entirely removed. This suggests that time estimation may be a low level process.

Types of Temporal Illusions

A temporal illusion is a distortion in the perception of time. Time perception refers to a variety of time-related tasks. For example:

- Estimating time intervals, e.g., "When did you last see your primary care physician?";

- Estimating time duration, e.g., "How long were you waiting at the doctor's office?"; and

- Judging the simultaneity of events.

Short list of types of temporal illusions:

- Telescoping effect: People tend to recall recent events as occurring further back in time than they actually did (backward telescoping) and distant events as occurring more recently than they actually did (forward telescoping).

- Vierordt's law: Shorter intervals tend to be overestimated while longer intervals tend to be underestimated.

- Time intervals associated with more changes may be perceived as longer than intervals with fewer changes.

- Perceived temporal length of a given task may shorten with greater motivation.

- Perceived temporal length of a given task may stretch when broken up or interrupted.

- Auditory stimuli may appear to last longer than visual stimuli.

- Time durations may appear longer with greater stimulus intensity (e.g., auditory loudness or pitch).

- Simultaneity judgments can be manipulated by repeated exposure to non-simultaneous stimuli.

Kappa Effect

The Kappa effect or perceptual time dilation is a form of temporal illusion verifiable by experiment, wherein the temporal duration between a sequence of consecutive stimuli is thought to be relatively longer or shorter than its actual elapsed time, due to the spatial/auditory/tactile separation between each consecutive stimuli. The kappa effect can be displayed when considering a journey made in two parts that take an equal amount of time. Between these two parts, the journey that covers more distance may appear to take longer than the journey covering less distance, even though they take an equal amount of time.

Eye Movements and Chronostasis

The perception of space and time undergoes distortions during rapid saccadic eye movements.

Chronostasis is a type of temporal illusion in which the first impression following the introduction of a new event or task demand to the brain appears to be extended in time. For example, chronostasis temporarily occurs when fixating on a target stimulus, immediately following a saccade (e.g., quick eye movement). This elicits an overestimation in the temporal duration for which that target stimulus (i.e., postsaccadic stimulus) was perceived. This effect can extend apparent durations by up to 500 ms and is consistent with the idea that the visual system models events prior to perception. The most well-known version of this illusion is known as the stopped-clock illusion, wherein a subject's first impression of the second-hand movement of an analog clock, subsequent to one's directed attention (i.e., saccade) to the clock, is the perception of a slower-than-normal second-hand movement rate (the seconds hand of the clock may seemingly temporarily freeze in place after initially looking at it).

The occurrence of chronostasis extends beyond the visual domain into the auditory and tactile domains. In the auditory domain, chronostasis and duration overestimation occur when observing auditory stimuli. One common example is a frequent occurrence when making telephone calls. If, while listening to the phone's dial tone, research subjects move the phone from one ear to the other, the length of time between rings appears longer. In the tactile domain, chronostasis has persisted in research subjects as they reach for and grasp objects. After grasping a new object, subjects overestimate the time in which their hand has been in contact with this object. In other experiments, subjects turning a light on with a button were conditioned to experience the light before the button press.

Oddball Effect

The perception of the duration of an event seems to be modulated by our recent experiences. Humans typically overestimate the perceived duration of the initial event in a stream of identical events and unexpected "oddball" stimuli seem to be perceived as longer in duration, relative to expected or frequently presented "standard" stimuli.

The oddball effect may serve an evolutionarily adapted "alerting" function and is consistent with reports of time slowing down in threatening situations. The effect seems to be strongest for images that are expanding in size on the retina, in other words, that are "looming" or approaching the viewer, and the effect can be eradicated for oddballs that are contracting or perceived to be receding from the viewer. The effect is also reduced or reversed with a static oddball presented amongst a stream of expanding stimuli.

Initial studies suggested that this oddball-induced "subjective time dilation" expanded the perceived duration of oddball stimuli by 30–50% but subsequent research has reported more modest expansion of around 10% or less. The direction of the effect, whether the viewer perceives an increase or a decrease in duration, also seems to be dependent upon the stimulus used.

Effects of Emotional States

Awe

Research has suggested the feeling of awe has the ability to expand one's perceptions of time availability. Awe can be characterized as an experience of immense perceptual vastness that coincides with an increase in focus. Consequently, it is conceivable that one's temporal perception would slow down when experiencing awe.

Fear

Possibly related to the oddball effect, research suggests that time seems to slow down for a person during dangerous events (such as a car accident, a robbery, or when a person perceives a potential predator or mate), or when a person skydives or bungee jumps, where they're capable of complex thoughts in what would normally be the blink of an eye. This reported slowing in temporal perception may have been evolutionarily advantageous because it may have enhanced one's ability to intelligibly make quick decisions in moments that were of critical importance to our survival. However, even though observers commonly report that time seems to have moved in slow motion during these events, it is unclear whether this is a function of increased time

resolution during the event, or instead an illusion created by the remembering of an emotionally salient event.

A strong time dilation effect has been reported for perception of objects that were looming, but not of those retreating, from the viewer, suggesting that the expanding discs — which mimic an approaching object — elicit self-referential processes which act to signal the presence of a possible danger. Anxious people, or those in great fear, experience greater "time dilation" in response to the same threat stimuli due to higher levels of epinephrine, which increases brain activity (an adrenaline rush). In such circumstances, an illusion of time dilation could assist an efficacious escape. When exposed to a threat, three-year-old children were observed to exhibit a similar tendency to overestimate elapsed time.

Research suggests that the effect appears only at the point of retrospective assessment, rather than occurring simultaneously with events as they happened. Perceptual abilities were tested during a frightening experience — a free fall — by measuring people's sensitivity to flickering stimuli. The results showed that the subjects' temporal resolution was not improved as the frightening event was occurring. Events appear to have taken longer only in retrospect, possibly because memories were being more densely packed during the frightening situation.

People shown extracts from films known to induce fear often overestimated the elapsed time of a subsequently presented visual stimulus, whereas people shown emotionally neutral clips (weather forecasts and stock market updates) or those known to evoke feelings of sadness showed no difference. It is argued that fear prompts a state of arousal in the amygdala, which increases the rate of a hypothesized "internal clock". This could be the result of an evolved defensive mechanism triggered by a threatening situation.

Empathy

The perception of another persons' emotions can also change our sense of time. The theory of embodied mind (or cognition), caused by mirror neurons, helps explain how the perception of other people's emotions has the ability to change one's own sense of time. Embodied cognition hinges on an internal process that mimics or simulates another's emotional state. For example, if person (a) spends time with person (b) who speaks and walks incredibly slowly, person (a) 's internal clock may slow down.

Depression

Depression may increase one's ability to perceive time accurately. One study assessed this concept by asking subjects to estimate the amount of time that passed during intervals ranging from 3 seconds to 65 seconds. Results indicated that depressed subjects more accurately estimated the amount of time that had passed than non-depressed patients; non-depressed subjects overestimated the passing of time. This difference was hypothesized to be because depressed subjects focused less on external factors that may skew their judgment of time. The authors termed this hypothesized phenomenon "depressive realism."

Changes with Age

Psychologists have found that the subjective perception of the passing of time tends to speed up with increasing age in humans. This often causes people to increasingly underestimate a

given interval of time as they age. This fact can likely be attributed to a variety of age-related changes in the aging brain, such as the lowering in dopaminergic levels with older age; however, the details are still being debated. In an experimental study involving a group of subjects aged between 19 and 24 and a group between 60 and 80, the participants' abilities to estimate 3 minutes of time were compared. The study found that an average of 3 minutes and 3 seconds passed when participants in the younger group estimated that 3 minutes had passed, whereas the older group's estimate for when 3 minutes had passed came after an average of 3 minutes and 40 seconds.

Very young children literally "live in time" before gaining an awareness of its passing. A child will first experience the passing of time when he or she can subjectively perceive and reflect on the unfolding of a collection of events. A child's awareness of time develops during childhood when the child's attention and short-term memory capacities form — this developmental process is thought to be dependent on the slow maturation of the prefrontal cortex and hippocampus.

One day to an 11-year-old would be approximately 1/4,000 of their life, while one day to a 55-year-old would be approximately 1/20,000 of their life. This helps to explain why a random, ordinary day may therefore appear longer for a young child than an adult. The short term appears to go faster in proportion to the square root of the perceiver's age. So a year would be experienced by a 55-year-old as passing approximately 2¼ times more quickly than a year experienced by an 11-year-old. If long-term time perception is based solely on the proportionality of a person's age, then the following four periods in life would appear to be quantitatively equal: ages 5–10 (1x), ages 10–20 (2x), ages 20–40 (4x), age 40–80 (8x).

The common explanation is that most external and internal experiences are new for young children but repetitive for adults. Children have to be extremely engaged (i.e. dedicate many neural resources or significant brain power) in the present moment because they must constantly reconfigure their mental models of the world to assimilate it and manage behaviour properly. Adults however may rarely need to step outside mental habits and external routines. When an adult frequently experiences the same stimuli, they seem "invisible" because they have already been sufficiently and effectively mapped by the brain. This phenomenon is known as neural adaptation. Thus, the brain will record fewer densely rich memories during these frequent periods of disengagement from the present moment. Consequently, the subjective perception is often that time passes by at a faster rate with age.

Effects of Drugs

Stimulants produce overestimates of time duration, whereas depressants and anaesthetics produce underestimates of time duration.

Psychoactive drugs can alter the judgment of time. These include traditional psychedelics such as LSD, psilocybin, and mescaline as well as the dissociative class of psychedelics such as PCP, ketamine and dextromethorphan. At higher doses time may appear to slow down, speed up or seem out of sequence. In a 2007 study, psilocybin was found to significantly impair the ability to reproduce interval durations longer than 2.5 seconds, significantly impair synchronizing motor actions (taps on a computer keyboard) with regularly occurring tones, and impair the ability to keep tempo when asked to tap on a key at a self-paced but consistent interval. In

1955, British MP Christopher Mayhew took mescaline hydrochloride in an experiment under the guidance of his friend, Dr Humphry Osmond. On the BBC documentary The Beyond Within, he described that half a dozen times during the experiment, he had "a period of time that didn't end for him".

Stimulants can lead both humans and rats to overestimate time intervals, while depressants can have the opposite effect. The level of activity in the brain of neurotransmitters such as dopamine and norepinephrine may be the reason for this. Dopamine has a particularly strong connection with one's perception of time. Drugs that activate dopamine receptors speed up one's perception of time, while dopamine antagonists cause one to feel that time is passing slowly.

The effect of cannabis on time perception has been studied with inconclusive results.

Effects of Body Temperature

Time perception may speed up as body temperature rises, and slow down as body temperature lowers. This is especially true during stressful events.

Reversal of Temporal Order Judgment

Numerous experimental findings suggest that temporal order judgments of actions preceding effects can be reversed under special circumstances. Experiments have shown that sensory simultaneity judgments can be manipulated by repeated exposure to non-simultaneous stimuli. In an experiment conducted by David Eagleman, a temporal order judgment reversal was induced in subjects by exposing them to delayed motor consequences. In the experiment, subjects played various forms of video games. Unknown to the subjects, the experimenters introduced a fixed delay between the mouse movements and the subsequent sensory feedback. For example, a subject may not see a movement register on the screen until 150 milliseconds after the mouse had moved. Participants playing the game quickly adapted to the delay and felt as though there was less delay between their mouse movement and the sensory feedback. Shortly after the experimenters removed the delay, the subjects commonly felt as though the effect on the screen happened just before they commanded it. This work addresses how the perceived timing of effects is modulated by expectations, and the extent to which such predictions are quickly modifiable.

In an experiment conducted by Haggard and colleagues in 2002, participants pressed a button that triggered a flash of light at a distance after a slight delay of 100 milliseconds. By repeatedly engaging in this act, participants had adapted to the delay (i.e., they experienced a gradual shortening in the perceived time interval between pressing the button and seeing the flash of light). The experimenters then showed the flash of light instantly after the button was pressed. In response, subjects often thought that the flash (the effect) had occurred before the button was pressed (the cause). Additionally, when the experimenters slightly reduced the delay, and shortened the spatial distance between the button and the flash of light, participants had often claimed again to have experienced the effect before the cause.

Several experiments also suggest that temporal order judgment of a pair of tactile stimuli delivered in rapid succession, one to each hand, is noticeably impaired (i.e., misreported) by crossing the hands over the midline. However, congenitally blind subjects showed no trace of temporal order judgment reversal after crossing the arms. These results suggest that tactile signals taken in

by the congenitally blind are ordered in time without being referred to a visuospatial representation. Unlike the congenitally blind subjects, the temporal order judgments of the late-onset blind subjects were impaired when crossing the arms to a similar extent as non-blind subjects. These results suggest that the associations between tactile signals and visuospatial representation is maintained once it is accomplished during infancy. Some research studies have also found that the subjects showed reduced deficit in tactile temporal order judgments when the arms were crossed behind their back than when they were crossed in front.

Flash-lag Effect

In an experiment, participants were told to stare at an "x" symbol on a computer screen whereby a moving blue doughnut-like ring repeatedly circled the fixed "x" point. Occasionally, the ring would display a white flash for a split second that physically overlapped the ring's interior. However, when asked what was perceived, participants responded that they saw the white flash lagging behind the center of the moving ring. In other words, despite the reality that the two retinal images were actually spatially aligned, the flashed object was usually observed to trail a continuously moving object in space — a phenomenon referred to as the flash-lag effect.

The first proposed explanation, called the 'motion extrapolation' hypothesis, is that the visual system extrapolates the position of moving objects but not flashing objects when accounting for neural delays (i.e., the lag time between the retinal image and the observer's perception of the flashing object). The second proposed explanation by David Eagleman and Sejnowski, called the 'latency difference' hypothesis, is that the visual system processes moving objects at a faster rate than flashed objects. In the attempt to disprove the first hypothesis, David Eagleman conducted an experiment in which the moving ring suddenly reverses direction to spin in the other way as the flashed object briefly appears. If the first hypothesis were correct, we would expect that, immediately following reversal, the moving object would be observed as lagging behind the flashed object. However, the experiment revealed the opposite — immediately following reversal, the flashed object was observed as lagging behind the moving object. This experimental result supports of the 'latency difference' hypothesis. A recent study tries to reconcile these different approaches by approaching perception as an inference mechanism aiming at describing what is happening at the present time.

Effects of Clinical Disorders

Parkinson's disease, schizophrenia, and attention deficit hyperactivity disorder (ADHD) have been linked to abnormalities in dopamine levels in the brain as well as to noticeable impairments in time perception. Neuropharmacological research indicates that the internal clock, used to time durations in the seconds-to-minutes range, is linked to dopamine function in the basal ganglia. Studies in which children with ADHD are given time estimation tasks shows that time passes very slowly for them. Children with Tourette's Syndrome, in contrast, who need to use the pre-frontal cortex to help them control their tics, are better at estimating intervals of time just over a second than other children.

Dopamine is also theorized to play a role in the attention deficits present with attention deficit hyperactivity disorder. Specifically, dopaminergic systems are involved in working memory and inhibitory processes, both of which are believed central to ADHD pathology. Children with ADHD

have also been found to be significantly impaired on time discrimination tasks (telling the difference between two stimuli of different temporal lengths) and respond earlier on time reproduction tasks (duplicating the duration of a presented stimulus) than controls.

Along with other perceptual abnormalities, it has been noted by psychologists that schizophrenia patients have an altered sense of time. This was first described in psychology by Minkowski in 1927. Many schizophrenic patients stop perceiving time as a flow of causally linked events. It has been suggested that there is usually a delay in time perception in schizophrenic patients compared to normal subjects.

These defects in time perception may play a part in the hallucinations and delusions experienced by schizophrenic patients according to some studies. Some researchers suggest that "abnormal timing judgment leads to a deficit in action attribution and action perception."

Sleep

The perception of time is temporarily suspended during sleep, or more often during REM sleep. This can be attributed to the altered state of consciousness associated with sleep that prevents awareness of the surroundings, which would make it difficult to remain informed of the passing of time — new memories are rarely made during sleep. Therefore, upon waking up in the morning a person subjectively feels no time has passed but reasons that many hours have elapsed simply because it is now light outside. The passing of time must be inferred by observations of objects (e.g., the sun's location, the moon, a clock's time) relative to the previous evening. So, time may feel as passing "faster" during sleep due to the lack of reference points. Another experience sometimes reported is a long dream seeming to go on for hours when it actually lasted only a few seconds or minutes.

Task Management

Task management is the process of managing a task through its life cycle. It involves planning, testing, tracking, and reporting. Task management can help either individual achieve goals, or groups of individuals collaborate and share knowledge for the accomplishment of collective goals. Tasks are also differentiated by complexity, from low to high.

Effective task management requires managing all aspects of a task, including its status, priority, time, human and financial resources assignments, recurrence, dependency, notifications and so on. These can be lumped together broadly into the basic activities of task management.

Managing multiple individuals or team tasks may be assisted by specialized software, for example workflow or project management software. In fact, many people believe that task management should serve as a foundation for project management activities.

Task management may form part of project management and process management and can serve as the foundation for efficient workflow in an organization. Project managers adhering to task-oriented management have a detailed and up-to-date project schedule, and are usually good at directing team members and moving the project forward.

Task Life Cycle

The status of tasks can be described by the following states:

- Ready

- Assigned

- Terminated

- Expired

- Forwarded

- Started

- Finished

- Verified

- Paused

- Failed

The following state machine diagram describes different states of a task over its life cycle. This diagram is referenced from IBM.
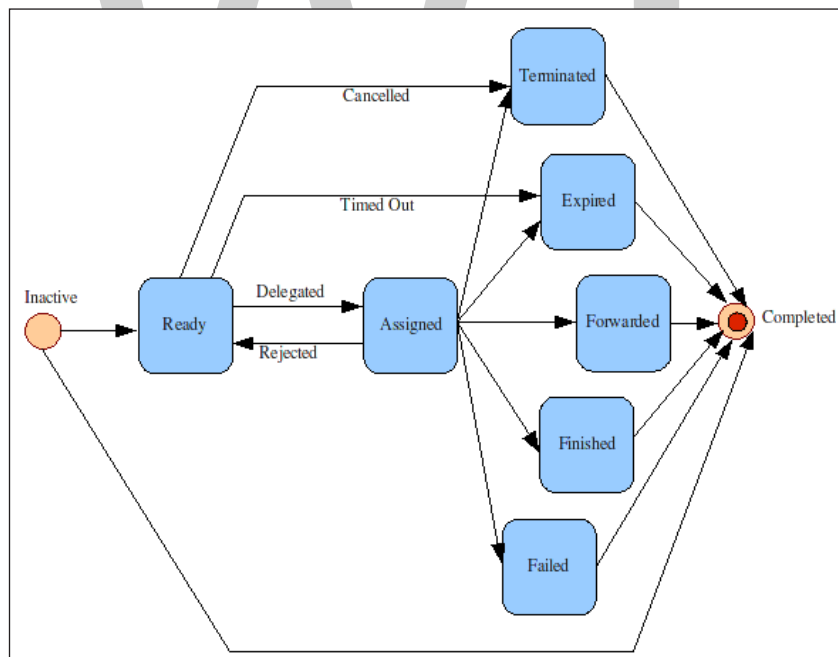
Activities Supported by Tasks

As a discipline, task management embraces several key activities. Various conceptual breakdowns exist, and these, at a high-level, always include creative, functional, project, performance and service activities.

- Creative activities pertain to task creation. In context, these should allow for task planning, brainstorming, creation, elaboration, clarification, organization, reduction, targeting and preliminary prioritization.

- Functional activities pertain to personnel, sales, quality or other management areas, for the ultimate purpose of ensuring production of final goods and services for delivery to customers. In context these should allow for planning, reporting, tracking, prioritizing, configuring, delegating, and managing of tasks.

- Project activities pertain to planning and time and costs reporting. These can encompass multiple functional activities but are always greater and more purposeful than the sum of its parts. In context, project activities should allow for project task breakdown also known as work breakdown structure, task allocation, inventory across projects, and concurrent access to task databases.

- Service activities pertain to client and internal company services provision, including customer relationship management and knowledge management. In context, these should allow for file attachment and links to tasks, document management, access rights management, inventory of client & employee records, orders & calls management, and annotating tasks.

- Performance activities pertain to tracking performance and fulfillment of assigned tasks. In context these should allow for tracking by time, cost control, stakeholders, and priority; charts, exportable reports, status updates, deadline adjustments, and activity logging.

- Report activities pertain to the presentation of information regarding the other five activities listed, including the graphical display.

Task Management Software

Task management software tools abound in the marketplace. Some are free; others intended for enterprise-wide deployment purposes. Some are simple to-do lists, while others boast enterprise-wide task creation, visualization, and notification capabilities - among others. Task management is used by small to Fortune 100 size companies. It does support simple individual projects to corporate task management activities.

Project management software, calendaring software and workflow software also often provide task management software with advanced support for task management activities and corresponding software environment dimensions, reciprocating the myriad project and performance activities built into most good enterprise-level task management software products.

Software dimensions crisscrossing nearly all lines of task management products include task creation, task visualization, notifications, assign resources, compatibility, configurability, scalability, and reporting:

- Task creation encompasses collaborative capabilities for turning ideas into actions (tasks). This includes activities involved in defining the task and encompasses the collaboration needed in the planning process.

- Task visualization encompasses presentation of tasks, most often through time and list forms. Priority visualization encompasses classification (e.g., budget, time, stakeholder)

and mechanism (e.g., color code or text). Calendaring covers scheduling (e.g., availability, meetings, appointments and other potential conflicts) and notifications.

•   Notifications encompass configurable settings for informing past, present and pending deadlines.

•   Assigning resources encompasses the ability to delegate tasks and tools to single or multiple people.

•   Compatibility encompasses the ability of a task management environment to connect to other systems, software and environments. It includes setting a structure and restrictions on communication going from the task management environment to other software, systems, and environments.

•   Configurability encompasses the ability to add, remove and manage functionality and usability in task management environments.

•   Scalability encompasses ability to perform a task properly when a change in the quantity of users is done to meet the specific task requirements.

•   Reporting encompasses presentation of information by displaying either in tabular or graphical display.

Mind Mapping

A mind map is a graphical way to represent ideas and concepts. It is a visual thinking tool that helps structuring information, helping you to better analyze, comprehend, synthesize, recall and generate new ideas. Just as in every great idea, its power lies in its simplicity.

In a mind map, as opposed to traditional note taking or a linear text, information is structured in a way that resembles much more closely how your brain actually works. Since it is an activity that is both analytical and artistic, it engages your brain in a much, much richer way, helping in all its cognitive functions. So, how does a mind map look like? Better than explaining is showing you an example.

This is a mind map about – conveniently enough – mind mapping itself. It presents, in a visual way, the core elements and techniques on how to draw mind maps.

Benefits and uses

Basically, mind mapping avoids dull, linear thinking, jogging your creativity and making note taking fun again.

But what can we use mind maps for?

- Note taking

- Brainstorming (individually or in groups)

- Problem solving

- Studying and memorization

- Planning

- Researching and consolidating information from multiple sources

- Presenting information

- Gaining insight on complex subjects

- Jogging your creativity

It is hard to make justice to the number of uses mind maps can have – the truth is that they can help clarify your thinking in pretty much anything, in many different contexts: personal, family, educational or business. Planning you day or planning your life, summarizing a book, launching a project, planning and creating presentations, writing blog posts -well, you get the idea – anything, really.

How to Draw a Mind Map

Drawing a mind map is as simple as 1-2-3:

- Start in the middle of a blank page, writing or drawing the idea you intend to develop. That you use the page in landscape orientation.

- Develop the related subtopics around this central topic, connecting each of them to the center with a line.

- Repeat the same process for the subtopics, generating lower-level subtopics as you see fit, connecting each of those to the corresponding subtopic.

Some more recommendations:

- Use colors, drawings and symbols copiously. Be as visual as you can, and your brain will thank you. I've met many people who don't even try, with the excuse they're "not artists". Don't let that keep you from trying it out.

- Keep the topics labels as short as possible, keeping them to a single word – or, better yet, to only a picture. Especially in your first mind maps, the temptation to write a complete phrase is enormous, but always look for opportunities to shorten it to a single word or figure – your mind map will be much more effective that way.

- Vary text size, color and alignment. Vary the thickness and length of the lines. Provide as many visual cues as you can to emphasize important points. Every little bit helps engaging your brain.

Work–life Balance

Work–life balance is the lack of opposition between work and other life roles. It is the state of equilibrium in which demands of personal life, professional life, and family life are equal. Work–life balance consists of, but it is not limited to, flexible work arrangements that allow employees to carry out other life programs and practices. The term 'work–life balance' is recent in origin, as it was first used in UK and US in the late 1970s and 1980s, respectively. Work–life balance is a term commonly used to describe the balance that a working individual needs between time allocated for work and other aspects of life. Areas of life other than work–life can include personal interests, family and social or leisure activities. Technological advances have made it possible for work tasks to be accomplished faster due to the use of smartphones, email, video-chat, and other technological software. These technology advances facilitate individuals to work without having a typical '9 to 5' work day.

The United States current lack of paid parental leave negates work-life balance for many American citizens. New parents fear that asking for paid time off to bond with their new families will lead to negative consequences professionally. If an employee seeks paid leave of absence for significant amounts of time, they could receive less training, lose out on promotions or may not become a candidate for hiring altogether. Support of paid parental leave by the US government, according to Heymann, reducing the chances of negative mental health outcomes, such as postpartum depression and indicate a "long term attachment to the labor force".

Those not currently in the predicament of deciding what level of absence they will require from employment responsibilities may feel singled out and expected to assume additional/unfair workloads, thereby attributing to unsatisfactory work-life balance. In theory, this outcome could lead to interpersonal conflicts between personnel in the latter term when the new parent resumes work. Not to mention, as pointed out by Adema, this could lead employers to intentionally or unintentionally discriminate against hiring women of child rearing age with motherhood being the determining factor.

Studies from the London Hazards Centre indicate that work today is more intense than it was a decade ago creating the need for a balance between work and life. Experiencing being over-worked, long working hours, and an extreme work environment has proven to affect the overall physical and psychological health of employees and deteriorate family-life. Britain's government recognized this reality and started making an effort to balance the work and home life of its employees by providing alternatives such as being able to use portable electronic equipment to do their jobs from a virtual office, or to work from their actual homes.

According to 2010 National Health Interview Survey Occupational Health Supplement data, 16% of U.S. workers reported difficulty balancing work and family. The findings were more prevalent among workers between 30–44 years old.

18% of workers with a bachelor degree and higher education have difficulties balancing work and life outside of work; compared with workers with a high school diploma or G.E.D., which is 16%. Workers without a high school education (15%). The results of workers in industries such as agriculture, forestry, fishing, and hunting are (9%) had a lower work–family imbalance ratio compared to adult employees in other industries (16%). Among other occupations, a higher prevalence rate of work–family imbalance was found in legal occupations (26%), whereas a lower prevalence rate was observed for workers in office and administrative support (14%).

Identity through Work

By working in an organization, employees identify, to some extent, with the organization, as part of a collective group. Organizational values, norms and interests become incorporated in the self-concept as employees increase their identification with the organization. However, employees also identify with their outside roles, or their "true self". Examples of these could include: parental/caretaker roles, identifications with certain groups, religious affiliations, align with certain values and morals, mass media etc.

Employee interactions with the organization, through other employees, management, customers, or others, reinforces (or resists) the employee identification with the organization. Simultaneously, the employee must manage their "true self" identification. In other words, identity is "fragmented and constructed" through a number of interactions within and outside of the organization; employees do not have just one self.

Most employees identify not only with the organization, but also other facets of their life (family, children, religion, etc.). Sometimes these identities align and sometimes they do not. When identities are in conflict, the sense of a healthy work–life balance may be affected. Organization members must perform identity work so that they align themselves with the area in which they are performing to avoid conflict and any stress as a result.

Causes of Work–life Imbalance

There are three moderators that are correlated with work–life imbalance: gender, time spent at work, and family characteristics.

Gender differences could lead to a work–life imbalance due to the distinct perception of role identity. It has been demonstrated that men prioritize their work duties over their family duties to provide financial support for their families, whereas women prioritize their family life.

Spending long hours at work due to "inflexibility, shifting in work requirements, overtime or evening work duties" could lead to an imbalance between work and family duties. It has been demonstrated "that time spent at work positively correlate with both work interference with family and family interference with work, however, it was unrelated to cross-domain satisfaction". This could be due to the fact that satisfaction is a subjective measure. This being said, long hours could be interpreted positively or negatively depending on the individuals. Working long hours affect the

family duties, but on the other side, there are financial benefits that accompany this action which negate the effect on family duties.

Family characteristics include single employers, married or cohabiting employers, parent employers, and dual-earning parents. Parents who are employed experience reduced family satisfaction due to their family duties or requirements. This is due to the fact that they are unable to successfully complete these family duties. In addition, parent workers value family-oriented activities; thus, working long hours reduces their ability to fulfill this identity, and, in return, reduces family satisfaction. As for the married and/ or dual-earning couples, it seems that "not only require more time and effort at home but also are a resource for individuals to draw from, both instrumentally through higher income and emotionally through increased empathy and support."

In addition to these moderators that could lead to an imbalance, many people expose themselves to unsolicited job stress, because they enjoy high social recognition. This aspect can also be the cause of an imbalance in the areas of life. However, other occupational activities could also lead to such an imbalance, for example, unpaid labor such as contribution to house and garden work, maintenance and support of family members or volunteer activities. All of these contribute to the perception of a chronic lack of time. Lacking time leads to pressure, which is experienced differently based on the individual's age, the age and number of children in the household, marital status, the profession and level of employment, and the income level. Strong pressure of time leads to increased psychological strain, which in turn affects health. Psychological strain is also affected by the complexity of work, the growing responsibilities, concerns for long-term existential protection, and more. The mentioned stresses and strains could lead in the long term to irreversible, physical signs of wear, as well as to negative effects on the human cardiovascular and immune systems.

Consequences of Work–life Imbalance

Stress

Steven L. Sauter, chief of the Applied Psychology and Ergonomics Branch of the National Institute for Occupational Safety and Health in Cincinnati, Ohio, states that recent studies show that "the workplace has become the single greatest source of stress". Michael Feuerstein, professor of clinical psychology at the Uniformed Services University of the Health Sciences at Bethesda Naval Hospital declares "seeing a greater increase in work-related neuroskeletal disorders from a combination of stress and ergonomic stressors". Seventy-five to ninety percent of physician visits are related to stress and, according to the American Institute of Stress, the estimated costs to industry is $200 billion–$300 billion a year.

Problems caused by stress have become a major concern to both employers and employees. Symptoms of stress are manifested both physiologically and psychologically. Persistent stress can result in cardiovascular disease, sexual health problems, a weaker immune system and frequent headaches, stiff muscles, or backache. It can also result in poor coping skills, irritability, jumpiness, insecurity, exhaustion, and difficulty concentrating. Stress may also perpetuate or lead to binge eating, smoking, and alcohol consumption.

The feeling that simply working hard is not enough anymore is acknowledged by many other American workers. "To get ahead, a seventy-hour work week is the new standard. What little time is left is often divided up among relationships, kids, and sleep." This increase in work hours over

the past two decades means that less time will be spent with family, friends, and community as well as pursuing activities that one enjoys and taking the time to grow personally and spiritually.

According to a survey conducted by the National Life Insurance Company, four out of ten U.S. employees state that their jobs are "very" or "extremely" stressful. Those in high-stress jobs are three times more likely than others to suffer from stress-related medical conditions and are twice as likely to quit. The study states that women, in particular, report stress related to the conflict between work and family.

In the study, Work–Family Spillover and Daily Reports of Work and Family Stress in the Adult Labor Force, researchers found that with an increased amount of negative spillover from work to family, the likelihood of reporting stress within the family increased by 74%, and with an increased amount of negative spillover from family to work the likelihood to report stress felt at work increased by 47%. Shepherd-Banigan, Basu, Booth & Harris conduct research on how stress can cause extremely negative effects on new parents. Between trying to balance a new schedule, managing additional responsibilities, and lacking flexibility and support, they can only increase stress, potentially causing depression to the employee.

Psychoanalysts diagnose uncertainty as the dominant attitude to life in the postmodern society. The pressure that society exerts on individuals can cause them to have an uncertain attitude. It is the uncertainty to fail, but also the fear of their own limits, not to achieve what the society expects, and especially the desire for recognition in all areas of life. In today's society, competition manifests itself in various settings. For example, appearance, occupation, education of the children are compared to a media-staged ideal. This idea of perfection is due to this deep-rooted aversion to all things average; the pathological pursuit to excellence. Whoever wants more from the job—from the partner, from the children, and from themselves—could one day burn out. The individual is then faced with the realization that perfection does not exist. To date, burnout is not a recognized illness. It has been noticed that a burnout affects those passionate people who seek perfection. This condition is not considered a mental illness but only a grave exhaustion that can lead to numerous sick days. It can benefit the term that it is a disease model which is socially acceptable and also, to some extent, the individual self-esteem stabilizing. According to experts in the field, the individuals who detain the following characteristics are more prone to burnouts: the hard-working, the perfectionist, the loner, the grim and the thin-skinned. All together, they usually have a lack of a healthy distance to work, leading to work–life imbalance.

Another example related to burnout is decision-makers in government offices and upper echelons. They are not allowed to show weaknesses or signs of disease, because this would immediately lead to doubts of their ability for further responsibilities. Only 20% of managers (e.g. in Germany) do sports regularly, and only 2% regularly attend preventive medical check-ups. In such a position other priorities seem to be set and the time is lacking for regular sports. The highest priority seems linked to the job, and it leads individuals to waive screening as a sign of weakness. Nonetheless, the burnout syndrome seems to be gaining popularity. Nothing seems shameful about showing weaknesses, but quite the opposite, the burnout is part of a successful career like a home for the role model family. In other terms, attributing the highest priority and allotted time to work leads to a higher chance for success, but also interrupts the balance between work and life. Since the description of burnout could be "socially recognized precious version of the depression and despair

that lets also at the moment of failure the self-image intact", it concludes that "only losers become depressed, burnout against it is a diagnosis for winners, more precisely, for former winners.".

Although burnout is linked to a more positive view, four out of five Germans complain about high stress levels. In fact, one in every sixth individual under the age of 60 consumes medication against insomnia, depression or to boost energy levels, at least once a week. The phases of burnout can be described first by great ambition, then the suppression of failure, isolation, and, finally, the cynical attitude towards the employer or supervisor. Often, those individuals seem to have anxiety disorders and depression as well, which are serious mental diseases. Depression is the predominant cause of nearly 10,000 suicides that occur each year in Germany. The consequences of high stress levels could lead to depression, which in turns affects the balance between work and life. For example, in Germany, early retirement due to mental illness represented 15.4 percent of all cases in 1993. In 2008, the percentage increased to 35.6 percent. The proportion of failures due to mental disorders seems to be increasing. In 2008, statisticians calculated 41 million absent days that were related to these crises, leading to 3.9 billion euros in lost production costs.

Role of Technology

According to Bowswell and Olson-Buchanan the recent changes in the work place are due to changes in technology. Greater technological advancements such as portable cellphones, portable computers, e-mail and cell phone have made it possible for employees to work beyond the confinement of their physical office space. This allows employees to answer e-mails and work on deadlines after-hours while not officially "on the job".

Having these technological resources at all times and everywhere increases the likelihood of employees to spend their "free time" or outside of work, family time doing work related tasks. Employees that consider their work roles highly important are more likely to apply all these technological advancements to work while outside of their work domain.

Some theorists suggest that this vague boundary of work and life is a result of technological control. Technological control unfolds from the physical technology provided by an organization". Companies use email and distribute smartphones to enable and encourage their employees to stay connected to the business even when they are not in the office. This type of control, as Barker argues, replaces the more direct, authoritarian control, or simple control, such as managers and bosses. As a result, communication technologies in the temporal and structural aspects of work have changed, defining a "new workplace" in which employees are more connected to the jobs beyond the boundaries of the traditional workday and workplace. The more this boundary is blurred, the higher work-to-life conflict is self-reported by employees. In a review of recent literature looking at the theory of technological control suggests employers and employees often communicate and continue to work during "off hours" or even periods of vacation. This added use of technology creates a confusion as to what the purpose of the technology poses for the individual using it. Questions such as "what is work usage media compared to non-work usage media look like" or "are we working more because it is easier and more accessible or because we want to work more?"

Employee assistance professionals say there are many causes for this situation ranging from personal ambition and the pressure of family obligations to the accelerating pace of technology.

According to a recent study for the Center for Work-Life Policy, 1.7 million people in the United States consider their jobs and their work hours excessive because of globalization.

Working from Home

Technology has also provided the opportunity to work from home rather than from the company's physical office. Working from home is an initiative that arose from the efforts of improving the work–life balance. One of the ways in which the UK government believes the desired work-life balance can be achieved is by working from home. The idea of working from home started in the UK and the number of people working from home is only increasing. By 2000 it was reported that a quarter of Britain's workforce worked from home at least part time. Working from home can be defined as any paid work that is done primarily from home. Working from home is also known as Telecommuting.

In 2017, it was reported that 8 million people in the US are working from home, that is 5% of the entire US work force. This increase has been in response to the demand for more flexibility work environments. A 2017 report by a polling company named Gallup found that allowing their employees to work from home decreases employee turnover and increases employee productivity. Trend suggests the type of workers leading the work from home wave are professionals in industries such as finance, designers, computer scientists, and other high-skill professionals.

Improving Work–life Balance

Responsibility of the Employer

Texas Quick, an expert witness at trials of companies who were accused of overworking their employees, states that "when people get worked beyond their capacity, companies pay the price." Although some employers believe that workers should reduce their own stress by simplifying their lives and making a better effort to care for their health, most experts feel that the chief responsibility for reducing stress should be management.

According to Esther M. Orioli, president of Essi Systems, a stress management consulting firm, "Traditional stress-management programs placed the responsibility of reducing stress on the individual rather than on the organization where it belongs. No matter how healthy individual employees are when they start out, if they work in a dysfunctional system, they'll burn out."

Work–life balance has been addressed by some employers and has been seen as a benefit to them. Indeed, employees report increased job satisfaction, greater sense of job security, better physical and mental health, reduced levels of job stress and enhanced control of their environment. In fact, work–life balance does not only benefit the employee, but also the organization. Once work–life balance has been introduced to the employee, the organization faces less absenteeism, lateness and staff turnover rates. In addition, there is an increase retention of valuable employees, higher employee loyalty and commitment towards the organization, improved productivity and enhanced organizational image.

In the literature, "work–family policies, family-friendly or family-responsive policies" are practices intended for work and life balances. In fact, "the primary way companies can help facilitate work–life balance for their employees is through work–life practices, that are usually associated

with flexible working and reductions in working time or family-friendly policies". According to Hartel et al., a variety of policies could be implemented to help manage work life balance just as "flexible working hour, job sharing, part-time work, compressed work weeks, parental leave, tele-commuting, on-site child care facility".

Studies from Canadian adjunct professor and psychology researcher Yani Likongo demonstrated that sometimes in organizations an idiosyncratic psychological contract is built between the employee and his direct supervisor in order to create an "informal deal" regarding work–life balance. These "deals" support the idea of a constructivist approach including both the employer and the employee, based on a give-and-take situation for both of them.

As of March 2011, paid leave benefits continued to be the most widely available benefit offered by employers in the United States, with paid vacations available to 91 percent of full-time workers in private industry. Access to these benefits, however, varied by employee and establishment characteristics. According to the data from the National Compensation Survey (NCS), paid vacation benefits were available to 37 percent of part-time workers in private industry. These benefits were available to 90 percent of workers earning wages in the highest 10th percent of employees and only to 38 percent of workers in the lowest 10 percent of private industry wage earners. Paid sick leave was available to 75 percent of full-time workers and 27 percent of part-time workers. Access to paid sick leave benefits ranged from 21 percent for the lowest wage category to 87 percent for the highest wage category. These data provide comprehensive measures of compensation cost trends and incidence and provisions of employee benefit plans.

"It is generally only highly skilled workers that can enjoy such benefits as written in their contracts, although many professional fields would not go so far as to discourage workaholic behaviour. Unskilled workers will almost always have to rely on bare minimum legal requirements. The legal requirements are low in many countries, in particular, the United States. In contrast, the European Union has gone quite far in assuring a legal work–life balance framework, for example pertaining to parental leave and the non-discrimination of part-time workers."

According to Stewart Friedman—professor of management and founding director of the Wharton School's Leadership Program and of its Work/Life Integration Project—a "one size fits all" mentality in human resources management often perpetuates frustration among employees. "It's not an uncommon problem in many HR areas where, for the sake of equality, there's a standard policy that is implemented in a way that's universally applicable—even though everyone's life is different and everyone needs different things in terms of how to integrate the different pieces. It's got to be customized."

Friedman's research indicates that the solution lies in approaching the components of work, home, community, and self as a comprehensive system. Instead of taking a zero-sum approach, Friedman's Total Leadership program teaches professionals how to successfully pursue "four-way wins"—improved performance across all parts of life.

Although employers are offering many opportunities to help their employees balance work and life, these opportunities may be a catch twenty-two for some female employees. Even if the organization offers part-time options, many women will not take advantage of it as this type of arrangement is often seen as "occupational dead end".

Even with the more flexible schedule, working mothers opt not to work part-time because these positions typically receive less interesting and challenging assignments; taking these assignments and working part-time may hinder advancement and growth. Even when the option to work part-time is available, some may not take advantage of it because they do not want to be marginalized. This feeling of marginalization could be a result of not fitting into the "ideal worker" framework.

Additionally, some mothers, after returning to work, experience what is called the maternal wall. The maternal wall is experienced in the less desirable assignments given to the returning mothers. It is also a sense that because these women are mothers, they cannot perform as "ideal workers". If an organization is providing means for working mothers and fathers to better balance their work–life commitments, the general organizational norm needs to shift so the "ideal worker" includes those who must manage a home, children, elderly parents, etc.

Maestro Concept

The Maestro concept is a time-management technique used in journalism in order to assist the newsroom work in a project-based, teamwork-intensive manner by "thinking like a reader".

The Maestro concept begins with a "great story idea" that is generated through collaborative idea-group meetings to shape stories before they are written and integrates writing, editing, photography, art, and design. The Maestro concept is not applied to all stories all the time. The concept applies only to those stories that are integrated with photographs, design elements, and infographics. It is a method designed to improve presentation of important stories through teamwork that brings the story to life and results in high impact and high readership.

The Maestro Concept was created by Leland "Buck" Ryan, director of the Citizen Kentucky Project of the Scripps Howard First Amendment Center and tenured associate professor of journalism at the University of Kentucky's School of Journalism and Telecommunications. Ryan created the concept in the early 1990s when he was an assistant professor at Northwestern University's Medill School of Journalism. The inspiration for the Maestro concept came from a 1991 Poynter Institute study by Mario Garcia and Pegie Stark called "Eyes on the News". That study followed the eyes of readers (tracked actual eye movements) in three cities and discovered that readers do not read a newspaper as journalists believed. This study and subsequent studies, including online publications, are used in newsrooms and classrooms today as a teaching model. The original study found that good indexing for busy readers is the key to successful publishing.

The Maestro concept was developed through an "approach to newsroom management, organization and operation that applies W. Edwards Deming's management principles used in manufacturing to the creative process". Striving for quality, in both product and management, is Deming's focal point. As a statistician, Deming noted that when management focused primarily on costs, that approach over the long run drove up costs and diminished quality. Deming found that a focus by management to increase quality while reducing costs through reduction of waste and rework lowered costs in the long run. Continual improvement of the system, and not by bits and pieces, is integral to Deming's principles.

The Maestro concept debuted in April 1993 at the American Society of News Editors convention in Baltimore, Maryland. After the debut, a list of 324 newspapers in the United States, in 59 newspaper groups, and more than 50 universities and high schools showed interest in the concept by purchasing a report and video called "The Maestro Concept: A New Approach to Writing and Editing for the Newspaper of the Future". The concept's impact covers 48 states and Washington, D.C., and 16 other countries.

A part of the international impact was a maestro workshop conducted in Hanoi for Vietnamese print and online journalists in December 2006 by Buck Ryan.

In June 2010, three Russian journalism organizations invited Ryan to speak on the concept during 12 days of seminars: one was in Barnaul for the Press Development Institute-Siberia, a second in Kirov for the Russian Union of Journalists, and a third in Rostov-on-Don for the Alliance of Independent Regional Publishers of Russia. The director of the Press Development Institute-Siberia in Barnaul wrote that Ryan's "ideas spurred numerous projects that our regional newspapers are eager to carry out as soon as possible". Then, in July, Ryan visited and served as the first journalism professor in residence as he taught two journalism courses in China for three weeks at Shanghai University.

High schools have increasingly used the Maestro concept to introduce students on how a newsroom operates. The online High School Journalism Initiative has lesson plans devoted to introducing high school students to the concept. One lesson plan titled "conducting the orchestra: how to implement maestro" details how students can be taught to build small teams that are able to motivate, be productive and encourage quality throughout the school year. High schools have reported that since the concept was introduced, students who have never before worked together find that they can coordinate fully reported stories and photos in one day. Besides meeting deadlines, students working together see that their story packages are of higher quality and often have a greater page presence.

Concept

The Maestro concept is a time-management technique for story planning and newsroom organization through team collaboration to shape stories early before they are written. The central concept is trying to anticipate readers' questions about news stories ("think like a reader") and then answering those questions as quickly as possible through visual aspects with high-visibility points such as photos, headlines, captions and information graphics. It is a management technique to encourage collaboration across news departments and ensure that quality work in a story package comes not from the traditional method of an assembly line, but from teamwork and good time-management from all players working on the story.

The Maestro concept has five points:

- Idea-group meetings: meeting of team members to brainstorm story ideas.

- The importance of coaching writers: editors act as the "maestro" to lead writers through story development.

- The challenges of hurdling newsroom traditions: avoid the "assembly line" approach to publication in favour of holistic, reader-focused writing.

- The maestro session in action: a short teamwork exercise to draft the presentation of a story, consisting of three parts – thinking like a reader, picturing the layout, and combining the work of all team members.

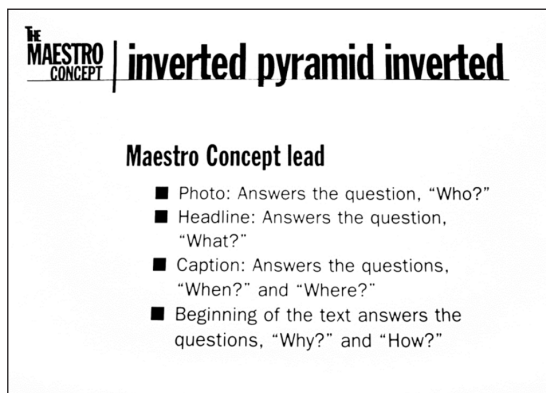- A lesson in critiquing: "maestro" conducts follow-ups to the story to review the process and its impact.

Four-graph Approach

Most Newsworthy Info
Who? What? When? Where? Why? How?

Important Details

Other General Info
Background
Info
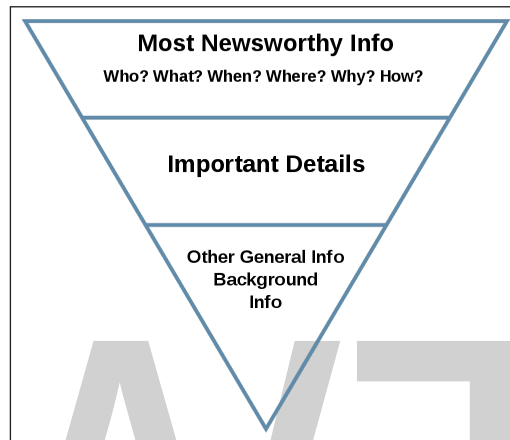
The inverted pyramid technique of journalism writing.

The four-graph approach to writing, editing, photography, and design is meant to efficiently create an article designed for the reader. The design is partly based on the findings in the "Eyes on the News" study that found readers typically look at photos first, headlines second, captions third, and text fourth. The goal of this approach is to engage the readers by presenting the primary factual information.

- Who? A photo or illustration shows the readers.

- What? A headline quickly gives reason to the visual.

- When and Where? A caption to further engage readers.

- The lead follows and eases the reader into the rest of story, summarizing in an inverted pyramid technique the who-what-when-where of journalism writing.

THE MAESTRO CONCEPT | inverted pyramid inverted

Maestro Concept lead
- Photo: Answers the question, "Who?"
- Headline: Answers the question, "What?"
- Caption: Answers the questions, "When?" and "Where?"
- Beginning of the text answers the questions, "Why?" and "How?"

Inverted pyramid inverted technique of journalism writing.

Productivity

Productivity is a measure of how much work is done in a given amount of time.

The more work a person gets done during this time, the more productive that person is. In order to get more done and be more productive, good time management skills are essential. We all have days that are less productive, but our overall productivity should be high from one day to the next.

To come up with a strategy for time management, you need to know yourself. You need to understand your personality, how well you prioritize and organize, and how self-disciplined you are. You also need to have a good grasp on which methods of organization work best for you in terms of scheduling your time.

Assess how you Spend your Time

When you're ready to determine how to make the most of your time and increase your productivity, you need to first understand how you currently spend your time. A useful tool is to create a time journal or time log. You can spend a week or two writing down what you have done in each 15-minute interval during your work day. Once you have this written down, you can go back over it and work out whether you accomplished everything you needed to get done during those periods of time and over the entire day. You can also see a number of other valuable pieces of information, including:

Where Distractions Crept into your Day

- The time of the day during which you are the most productive.

- What tasks or activities take the most time to complete.

- What in your life takes up the most time in your life, whether that is work, family, recreation, or something else, and what takes up most of your.

- time during your work day (meetings, project management, etc.).

- Whether you are using your time to complete the most important tasks/activities.

Determine your Priorities

You have recorded what you do each day and know what you are dealing with. Now you can choose the most important tasks and put them at the top of your list in terms of priority. Essentially, you need to go through everything you do on a regular basis and prioritize these things in terms of what is:

- Urgent.

- Important.

- Not important.

The best way to manage your time is to take time away from non-important tasks so you can focus on more important tasks, hopefully preventing them from becoming urgent. This will keep your urgent priorities to a minimum, reducing your stress.

Prep Time is Critical

Once you have the information on your current use of time, you can then make a plan. Preparing your schedule ahead of time each day will help you better manage your use of time. Some people do this at the end of the day, setting themselves up for the following day before they leave work. Other people choose to get up and have an early start to their day, using this time to plan ahead and set their schedule.

Scheduling

You need to schedule your time and record that schedule so you know what you are doing and when you are doing it. It's like a place for everything and everything in its place. You should determine what time of day you are most productive and make that the time when you get the most important tasks done.

Use a planning tool that works best for you. There are plenty of scheduling apps that will remind you of when you have appointments coming up or something is due. But, some people still work better with paper planners. You need to decide what is best for you and stick with it. Here are some tips to follow when scheduling your time:

Don't write notes you plan to transfer to your planner later on. This just increases the risk of disorganization and missed appointments or deadlines. Instead, record everything directly into your planner.

- Ensure that if you use both a planning app or electronic planner and a paper planner that the two are always synced.

- Make sure you look through your schedule/planner on a daily basis.

- Keep your planner with you at all times.

- Always have a list of your priorities in your planner.

- Remember to have a backup of your schedule, especially if you have an electronic version.

Keep Organized

Make sure your work environment is decluttered and that everything has a place. Getting rid of clutter is the first priority. Throw it away, give it away, or sell it if you don't need it. Once you have decluttered, you can then set up an organizational system. When you are organized, you give yourself the best opportunity to increase productivity.

Banish Distractions

Now that you have taken care of everything on your end, including assessing your use of time, preparing ahead of time, scheduling your time wisely, and getting organized, you will need to do something about the distractions that come from your surrounding environment. This includes electronic distractions and distractions that come from people in your life.

During your assessment of your time use, you listed all the distractions you found during your day. When it comes to the electronic distractions, you can uninstall or hide apps that are not necessary

for you to do your job. When you are in heavy work mode, close your email and turn your phone to silent. Whenever possible, keep yourself apart from people who will be a distraction.

Proper management of time will increase your productivity. Following the above steps will help you focus on the most important aspects of your schedule and you will be better able to manage your time so that you will be more productive than ever.

Human Multitasking

Laptop and mobile phone.

Human multitasking is an apparent human ability to perform more than one task, or activity, at the same time. An example of multitasking is taking a phone call while driving a car. Multitasking can result in time wasted due to human context switching and apparently causing more errors due to insufficient attention. If one becomes proficient at two tasks it is possible to rapidly shift attention between the tasks and perform the tasks well/proficiently.

Research

Since the 1960s, psychologists have conducted experiments on the nature and limits of human multitasking. The simplest experimental design used to investigate human multitasking is the so-called psychological refractory period effect. Here, people are asked to make separate responses to each of two stimuli presented close together in time. An extremely general finding is a slowing in responses to the second-appearing stimulus.

Researchers have long suggested that there appears to be a processing bottleneck preventing the brain from working on certain key aspects of both tasks at the same time. Many researchers believe that the cognitive function subject to the most severe form of bottlenecking is the planning of actions and retrieval of information from memory. Psychiatrist Edward M. Hallowell has gone so far as to describe multitasking as a "mythical activity in which people believe they can perform two or more tasks simultaneously as effectively as one."

Others have researched multitasking in specific domains, such as learning. Mayer and Moreno studied the phenomenon of cognitive load in multimedia learning and concluded that it is difficult,

if not impossible, to learn new information while engaging in multitasking. Junco and Cotten examined how multitasking affects academic success and found that students who engaged in high levels of multitasking reported significant issues with their academic work. A more recent study on the effects of multitasking on academic performance found that using Facebook and text messaging while studying were negatively related to student grades, while online searching and emailing were not.

The Brain's Role

Because the brain cannot fully focus when multitasking, people take longer to complete tasks and are predisposed to error. When people attempt to complete many tasks at one time, "or (alternate) rapidly between them, errors go way up, and it takes far longer—often double the time or more—to get the jobs done than if they were done sequentially," states Meyer. This is largely because "the brain is compelled to restart and refocus". A study by Meyer and David Kieras found that in the interim between each exchange, the brain makes no progress whatsoever. Therefore, multitasking people not only perform each task less suitably, but lose time in the process.

According to a study done by Jordan Grafman, chief of the cognitive neuroscience section at the National Institute of Neurological Disorders and Stroke, "the most anterior part (of the brain) allows a person to leave something when it's incomplete and return to the same place and continue from there," while Brodmann Area 10, a part of the brain's frontal lobes, is important for establishing and attaining long-term goals. Focusing on multiple dissimilar tasks at once forces the brain to process all activity in its anterior. Though the brain is complex and can perform a myriad of tasks, it cannot multitask well.

Another study by René Marois, a psychologist at Vanderbilt University, discovered that the brain exhibits a "response selection bottleneck" when asked to perform several tasks at once. The brain must then decide which activity is most important, thereby taking more time. Psychologist David Meyer of the University of Michigan claims that, instead of a "bottleneck," the brain experiences "adaptive executive control" which places priorities on each activity. These viewpoints differ in that while bottlenecking attempts to force many thoughts through the brain at once, adaptive executive control prioritizes tasks to maintain a semblance of order. The brain better understands this order and, as psychologists such as Dr. Meyer believe, can, therefore, be trained to multitask. It is not known exactly how the brain processes input and reacts to overstimulation.

Some research suggests that the human brain can be trained to multitask. A study published in Child Development by Monica Luciana, associate professor of psychology at the University of Minnesota, discovered that the brain's capability of categorizing competing information continues to develop until ages sixteen and seventeen. A study by Vanderbilt University found that multitasking is largely limited by "the speed with which our prefrontal cortex processes information." Paul E. Dux, the co-author of the study, believes that this process can become faster through proper training. The study trained seven people to perform two simple tasks, either separately or together and conducted brain scans of the participants. The individuals multitasked poorly at first but, with training, were able to adeptly perform the tasks simultaneously. Brain scans of the participants indicate that the prefrontal cortex quickened its ability to process the information, enabling the individuals to multitask more efficiently. However, the study also suggests that the brain is incapable of performing multiple tasks at one time, even after extensive training. This study further indicates

that, while the brain can become adept at processing and responding to certain information, it cannot truly multitask.

People have a limited ability to retain information, which worsens when the amount of information increases. For this reason, people alter information to make it more memorable, such as separating a ten-digit phone number into three smaller groups or dividing the alphabet into sets of three to five letters. George Miller, former psychologist at Harvard University, believes the limits to the human brain's capacity centers around "the number seven, plus or minus two." An illustrative example of this is a test in which a person must repeat numbers read aloud. While two or three numbers are easily repeated, fifteen numbers become more difficult. The person would, on average, repeat seven correctly. Brains are only capable of storing a limited amount of information in their short-term memories.

Laboratory-based studies of multi-tasking indicate that one motivation for switching between tasks is to increase the time spent on the task that produces the most reward. This reward could be progress towards an overall task goal, or it could simply be the opportunity to pursue a more interesting or fun activity. Payne, Duggan and Neth found that decisions to switch task reflected either the reward provided by the current task or the availability of a suitable opportunity to switch (i.e. the completion of a subgoal). A French fMRI study published in 2010 indicated preliminary support for the hypothesis that the brain can pursue at most two goals simultaneously, one for each frontal lobe (which has a goal-oriented area).

Sex Differences

Although the idea that women are better multitaskers than men has been popular in the media as well in conventional thought, there is very little data available to support claims of a real sex difference. Most studies that do show any sex differences tend to find that the differences are small and inconsistent.

A study by psychologist Keith Laws was widely reported in the press to have provided the first evidence of female multitasking superiority, although it was very focused in its sample (240 people that responded to advertisements online and in West Yorkshire, UK, averaged 27 years old, and sample controlled only for gender and age, and not for cultural background and education).

In another study, females were found to perform slightly better at coordinating a primary test with a secondary test, supporting the notion that females are better at multitasking. However, the authors concluded their tests may not reflect real-life multitasking and that further research was required.

Conversely, a Swedish study found that men outperformed women at handling multiple tasks simultaneously, with the performance gap being correlated to the female menstrual cycle.

And a 2018 Norwegian study that simulated everyday scenarios on a video game, found that "none of the multitasking measures (accuracy, total time, total distance covered by the avatar, a prospective memory score, and a distractor management score) showed any sex differences."

More recently, a new brain connectivity study from Penn Medicine, funded by in part by the National Institutes of Mental Health, published in the Proceedings of the National Academy of Sciences

found major differences in men and women's neural wiring that is leading researchers to believe in popular belief that sex plays a role in multitasking skills. "On average, men are more likely better at learning and performing a single task at hand, like cycling or navigating directions, whereas women have superior memory and social cognition skills, making them more equipped for multitasking and creating solutions that work for a group." The full text of the study can be found on the PNAS website. However, this study has been widely criticized because the differences that are seen, could easily have been caused by increased head movement. Moreover, the link between the DTI data and behavioral performance is speculative. Importantly, this study contains no such evidence of any superiority in multitasking in women.

While not many recent studies have evidence of female multitasking superiority, there have been attempts to produce evolutionary explanations for the popular belief. In 1992, Silverman and Eals created a hypothesis derived from the Hunter-Gatherer Hypothesis. Their hypothesis says that natural selection favored hunting-related skills and resulted in a difference in task performance for genders. Men focused on one task, hunting, while women were gatherers and took care of the children at home. The idea is that over time there was a strong selection for women who could multitask. We no longer have such rigid labor division, but the natural selection that took place in primitive societies is thought to have made modern females superior multitaskers.

Continuous Partial Attention

Author Steven Berlin Johnson describes one kind of multitasking: "It usually involves skimming the surface of the incoming data, picking out the relevant details, and moving on to the next stream. You're paying attention, but only partially. That lets you cast a wider net, but it also runs the risk of keeping you from really studying the fish." Multimedia pioneer Linda Stone coined the phrase "continuous partial attention" for this kind of processing. Continuous partial attention is multitasking where things do not get studied in depth.

Rapidly increasing technology fosters multitasking because it promotes multiple sources of input at a given time. Instead of exchanging old equipment like TV, print, and music, for new equipment such as computers, the Internet, and video games, children and teens combine forms of media and continually increase sources of input. According to studies by the Kaiser Family Foundation, in 1999 only 16 percent of time spent using media such as Internet, television, video games, telephones, text-messaging, or e-mail was combined. In 2005, 26 percent of the time these media were used together. This increase in simultaneous media usage decreases the amount of attention paid to each device. In 2005 it was found that 82 percent of American youth use the Internet by the seventh grade in school. A 2005 survey by the Kaiser Family Foundation found that, while their usage of media continued at a constant 6.5 hours per day, Americans ages 8 to 18 were crowding roughly 8.5 hours' worth of media into their days due to multitasking. The survey showed that one quarter to one-third of the participants have more than one input "most of the time" while watching television, listening to music, or reading. The 2007 Harvard Business Review featured Linda Stone's idea of "continuous partial attention," or, "constantly scanning for opportunities and staying on top of contacts, events, and activities in an effort to miss nothing". As technology provides more distractions, attention is spread among tasks more thinly.

A prevalent example of this inattention to detail due to multitasking is apparent when people talk on cell phones while driving. One study found that having an accident is four times more likely

when using a cell phone while driving. Another study compared reaction times for experienced drivers during a number of tasks, and found that the subjects reacted more slowly to brake lights and stop signs during phone conversations than during other simultaneous tasks. A 2006 study showed that drivers talking on cell phones were more involved in rear-end collisions and sped up slower than intoxicated drivers. When talking, people must withdraw their attention from the road in order to formulate responses. Because the brain cannot focus on two sources of input at one time, driving and listening or talking, constantly changing input provided by cell phones distracts the brain and increases the likelihood of accidents.

Supertasker

In 2010, a scientific study found that a small percent of the population appeared to be much better at multitasking than others, and these people were subsequently labeled "supertaskers". In 2015, a follow-up study was found examining the brain activities of these individuals.

Stephen Covey's Time Management Matrix

In a time where missing deadlines is not an option, the Covey time management grid can help you to manage your available time more efficiently. Covey's matrix allows you to organize your priorities much better than before. The idea of using four quadrants to determine the priority of a task was introduced by American keynote speaker Stephen Covey. Covey's system makes use of four different quadrants that allow you to prioritize tasks in relation to their importance and urgency, helping you to decide whether you need to address a task immediately or if you can postpone it.

As you can see from the graphic below, the time management matrix is separated into four quadrants that are organized by importance and urgency.

	URGENT	NOT URGENT
IMPORTANT	Quadrant I: Urgent & Important	Quadrant II: Not urgent & Important
NOT IMPORTANT	Quadrant III: Urgent & Not Important	Quadrant Iv: Not Urgent & Not Important

The matrix, also known as Eisenhower's Urgent-Important Principle, distinguishes between importance and urgency:

- Important responsibilities contribute to the achievement of your goals.

- Urgent responsibilities require immediate attention. These activities are often tightly linked to the accomplishment of someone else's goal. Not dealing with these issues will cause immediate consequences.

Here's a summary of the meaning of each quadrant:

- Quadrant I – important deadlines with high urgency.

  The first quadrant contains tasks and responsibilities that need immediate attention.

- Quadrant II – long-term development and strategizing.

  The second quadrant is for items that are important without requiring immediate action. Covey points out that this quadrant should be used for long-term strategizing.

- Quadrant III – distractions with high urgency.

  The third quadrant is reserved for tasks that are urgent, without being important. Covey recommends minimizing or even eliminating these tasks as they do not contribute to your output. Delegation is also an option here.

- Quadrant IV – activities with little to no value.

  The fourth and last quadrant focuses on tasks and responsibilities that do not yield any value—items that are unimportant and not urgent. These time wasters should be eliminated at any costs.

If you apply the Covey time management matrix to your own professional and private life, you will notice that the majority of your activities can be found within quadrant I and III. Experience shows that quadrant II is neglected by most people, especially in the area of their own personal development.

However, the importance of the second quadrant must not be underestimated. If you notice a big gap in this quadrant it means that your focus lies too much on the operative aspect, while the strategic perspective is left behind. For this reason, Covey addresses quadrant II as an exceptionally important part of the matrix. Without this quadrant, efficient time management would not be possible, as it requires strategic elements as well.

Explanation of Covey's Time Management Matrix

In the following, you can find a detailed explanation of all four quadrants that can be found in Covey's time management matrix:

The Four Time Management Quadrants

Quadrant 1 – Urgent and Important

The activities in quadrant 1 can be differentiated into items that could not have been foreseen, and those items that could. The latter can be avoided by developing plans and paying close attention to their execution.

The first quadrant should only contain those activities and responsibilities that require your immediate attention. The space is reserved for emergencies and extremely important deadlines. Should a major crisis arise you will have to postpone other tasks.

- Crises

- Pressing problems

- Projects that are deadline driven

- Emergencies

- Last-minute preparations

Quadrant 2 – Not Urgent but Important

The items found in quadrant 2 do not have a high urgency but can play an important role in the future. This quadrant is not only reserved for strategic planning, but also to items related to health, education, exercise, and career. Investing time in these areas might not be urgent at the present day, but in the long term, it will be of the greatest importance.

Pay close attention that you have scheduled enough time for quadrant 2 activities, in order to avoid them to become quadrant 1 items. During so will allow you to increase your capability of finishing your tasks in time.

- Planning

- Preparing

- Training

- Exercise, health, and recreation

Quadrant 3 – Urgent but not Important

The third quadrant summarizes items that appear to have a high urgency, but are not at all important. Some of these activities might be entirely ego-driven, without contributing any value. In fact, these activities are obstacles that stand in-between you and your goals. If possible, try to delegate these items or consider rescheduling them.

If another person is causing you quadrant 3 tasks it could be appropriate to decline their request politely. If this is not an option, try to avoid being constantly interrupted by appointing timeslots to those that often need your help. This way, you can address all their issues at once, without regularly interrupting your concentration.

- Interruptions

- Meetings

Quadrant 4 – Not Urgent and not Important

The fourth and last quadrant contains all those activities that do not contribute any value at all—the obvious time wasters. All the activities contained therein are nothing more than distractions; avoid them as much as you can. You should also try to eliminate all the items in this list, no matter how entertaining.

- Trivia

- Time wasters

- Surfing the Internet without purpose

- Watching TV for hours

How to Apply the Time Matrix?

When using the Important-Urgent matrix it is recommended to try to maximize the time spent with quadrant II activities. This will allow you (in the long run) to reduce quadrant I activities, as many of them could have been quadrant II activities—if better planning had been implemented.

The objective of using the time management matrix is to question whether a certain activity brings you closer to your goals or not. If this is the case, these responsibilities need to be prioritized over those tasks that might demand your time but do not contribute to your goals. Delay activities that do not contribute any significant output until more important tasks are finished.

Covey's time management grid has many possible applications, two of which will be explained in the following:

Reprioritizing your Current 'to-do' List

The time matrix can be applied as a tool that allows you to reprioritize the importance and urgency of your current and upcoming tasks. By sorting the tasks and responsibilities into the appropriate grid you will be able to quickly identify activities that need your immediate attention.

One Week Assessments

The second approach of using the time management matrix requires a weekly assessment. You will need six blank copies of the matrix, five for each workday and one for your weekly assessment. At the end of each workday, you list all tasks and responsibilities and the amount of time spent. At the end of the week, you summarize the five days of your week in one matrix. Make sure to summarize the amount of time spent on a given task.

After you have summarized the week you can then evaluate how well the time was spent and whether or not you need to make any adaptations.

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3
Techniques and Methods of Time Management

There are a number of techniques and methods that are used in time management. A few of them include POSEC method, Eisenhower method, ABC method, Pomodoro technique and ALPEN method. The diverse applications of these techniques and methods have been thoroughly discussed in this chapter.

POSEC Method
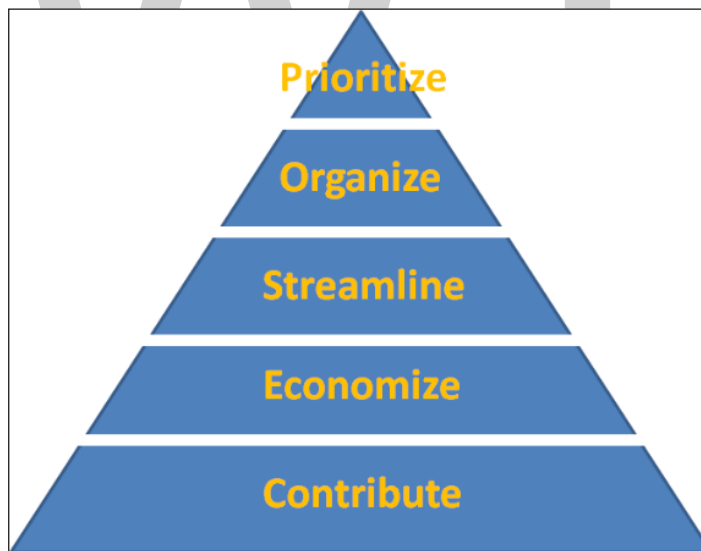
POSEC stands for "Prioritizing by Organizing, Streamlining, Economizing and Contributing."

Prioritizing – means to put first things first. That is what's most important down to the least. This is about how you use your time with your tasks in relation to your goals.

It is loosely based around the theory of Abraham Maslow regarding the "hierarchy of needs." It gives you a realistic tool for setting your priorities as they pertain to your own unique needs and goals in life.

The second part of the POSEC method of time management is "Organizing." The way you organize involves making your plan to work on goals that will help you feel more stable and secure. This involves the things you must do regularly so you will eventually succeed.

You should know that this is a plan for meeting your most basic needs such as food, clothing, shelter and safety. This should include acceptance and love of other people.

The third part of the method is "Streamlining" which is about the things you may not like to do but you must do somehow.

Streamlining applies to those "dirty" little jobs such as work and chores which are important for being able to live properly. It involves your managing and maintenance of your personal stability and security.

The fourth part of the POSEC method of time management is "Economizing" which refers to the things that should be done or things that are enjoyable. This includes activities like pastimes and socializing activities.

They may be fun and entertaining but they're not urgent, such as submitting reports on deadlines. These are the ones that should be the least on your priorities of tasks.

The last and fifth part of the method of POSEC is "Contributing." Contributing is about your social obligations. What you give back to the world. This involves giving or paying attention to the few remaining things that creates a difference.

According to Maslow's understanding of the human psyche this becomes more feasible when your other goals are achieved.

Deeper Purpose of POSEC Method

This method of time management does offer you a clear guidance for assisting in prioritizing your goals in life. In theory, this method should encourage movement upward on the "hierarchy" charts.

This method was created on purpose of building your personal efficiency and for better effectiveness of a team working together. Also, this method gives guidelines for helping the management set their employee's goals in order of significance so they can do their work better. However, correct use and execution of this method determines the proper outcome.

The POSEC method of time management can be defined overall as a way to break down your main goals into smaller tasks and minor goals. This makes it easier to handle one minor goal after another until the major goals are finally accomplished.

Other advantages of this personal time management method are that it also gives you some prioritization of your social obligations and pastime activities aside from your focus on prioritizing tasks at your workplace. However, some people would prefer simply focusing much of their priorities at work but work-life balance should not be forgotten.

Maslow's theories are much related to this method of personal time management and it is helpful if the individual applying this method is familiar with his research regarding "the Hierarchy of Needs."

Pareto Principle of Time Management
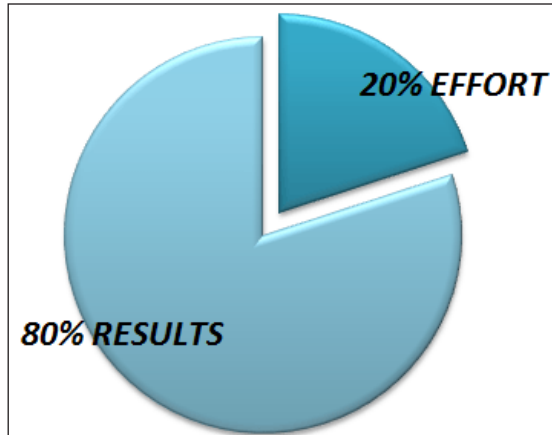
The Pareto principle was a theory by Vilfredo Pareto which is now a popular concept of personal time management.

He was an economist who theorized that 80 percent of all the problems that people encounter results from 20 percent of all causes.

This may look like a theory that is too difficult to apply when it comes to the subject of personal time management. However, the term "Pareto 80-20 rule" can be very beneficial to you when applied to problem solving of any form.

Throughout history, man has sought to develop new ways in order to record, track and make use of time better. From the invention of the sundial to the creation of the modern day calendar, the need to responsibly understand and manage time has been a concern for people.

That is both in their personal and professional lives, that's why different techniques and principles of time management were invented such as the Pareto principle.

A Significant Step

In order for you to effectively utilize your time, you must know this one significant step for doing it. This is important for the Pareto principle to work. You must learn this with wisdom to identify the "repeated patterns" in your daily schedule that may be causing problems to your productivity.

If you're using a time journal or a time planner such as daily planners and weekly planners you may notice in your records that certain blocks of time are not being used to their fullest potential.

Once you identify and know these blocks of time, you can begin to make some important changes in your daily routine. It would be better for you to start with your morning routines as it may affect the rest of your day.

You should identify the possible things that may be taking your time and slowing down your progress. It can be physical problems such as a lack of means or resources. It can be emotional and psychological problems like stress and anxiety or even depression. Or it can be about spiritual matters.

Pareto Principle is a Basic Rule

The principle of Pareto for effective time management is a rule that simply means that if you can properly identify and change only 20 percent of the causes of your problems. That is in your present personal time management system and you can eventually fix the 80 percent of those problems that make it difficult for you.

Here's a good example, try to identify two 15 minute blocks of your time within your average day when you can observe that you are being less productive. By effectively changing the way you presently use these 2 small blocks of time, in theory according to the Pareto principle you should be able to increase your personal productivity by up to a huge 80 percent.

So you should work out in making the right solution to whatever is causing you problems and troubles. This should be your priority because it affects everything eventually as you work on different tasks and activities throughout the day.

If you can fix these causes of your problems, then you can have more "inner peace," less distractions in mind and worries. As a result you can work better, faster and more inspired. You'll even experience less tiredness at the end of the day too.

What Better Time Management is?

Effective time management doesn't mean you should give up all your free times or all the time that you currently spend for relaxation and enjoying your life. The purpose of the Pareto principle is to make things easier for you.

Better personal time management helps you to set proper priorities for managing your time, eliminate wasted time and gain more control over how you can use this irreplaceable valuable resource.

The modern methods of time management use different ways of recording time to help you identify the barriers to effective use of time.

You are encouraged to develop short, medium and long term goals so you can organize your time and tasks well.

The tools used in time management may include either digital or traditional sources such as organizers, planners and calendars.

However, you need proper discipline and dedication to maximize your time in order for these tools to work well.

Time management techniques such as "time boxing" may also assist you in pinpointing and eliminating the bad habits that interfere with your productive use of time.

Methods like the Pareto principle, provide insight and encouragement in the development of new and better habits. This can improve the rate of performance and achievement. This will enable you to reach goals on a more regular basis.

The Pareto principle is a basic time management technique that can increase your performance by simply starting on solving your personal and non-personal problems first so that things can work

out better and smoother. This is a principle that is not usually thought of by those who want to improve their time management.

Pareto Analysis
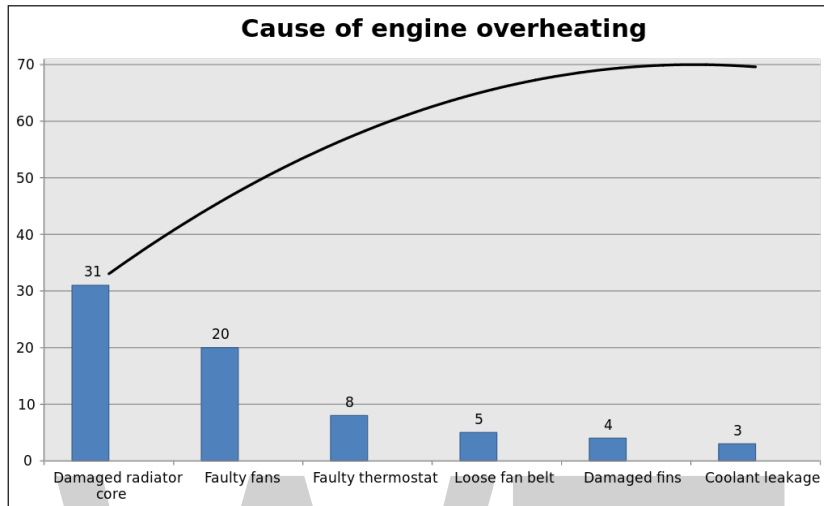
A Pareto analysis in a diagram showing which cause should be addressed first.

Pareto analysis is a formal technique useful where many possible courses of action are competing for attention. In essence, the problem-solver estimates the benefit delivered by each action, then selects a number of the most effective actions that deliver a total benefit reasonably close to the maximal possible one.

Pareto analysis is a creative way of looking at causes of problems because it helps stimulate thinking and organize thoughts. However, it can be limited by its exclusion of possibly important problems which may be small initially, but which grow with time. It should be combined with other analytical tools such as failure mode and effects analysis and fault tree analysis for example.

This technique helps to identify the top portion of causes that need to be addressed to resolve the majority of problems. Once the predominant causes are identified, then tools like the Ishikawa diagram or Fish-bone Analysis can be used to identify the root causes of the problems. While it is common to refer to pareto as "80/20" rule, under the assumption that, in all situations, 20% of causes determine 80% of problems, this ratio is merely a convenient rule of thumb and is not nor should it be considered an immutable law of nature.

The application of the Pareto analysis in risk management allows management to focus on those risks that have the most impact on the project.

Steps to Identify the Important Causes using 80/20 Rule

- Form a frequency of occurrences as a percentage.

- Arrange the rows in decreasing order of importance of the causes (i.e., the most important cause first).

- Add a cumulative percentage column to the table, then plot the information.

- Plot (#1) a curve with causes on *x*- and cumulative percentage on *y*-axis.

- Plot (#2) a bar graph with causes on *x*- and percent frequency on *y*-axis.

- Draw a horizontal dotted line at 80% from the *y*-axis to intersect the curve. Then draw a vertical dotted line from the point of intersection to the *x*-axis. The vertical dotted line separates the important causes (on the left) and trivial causes (on the right).

- Explicitly review the chart to ensure that causes for at least 80% of the problems are captured.

Time and Attendance
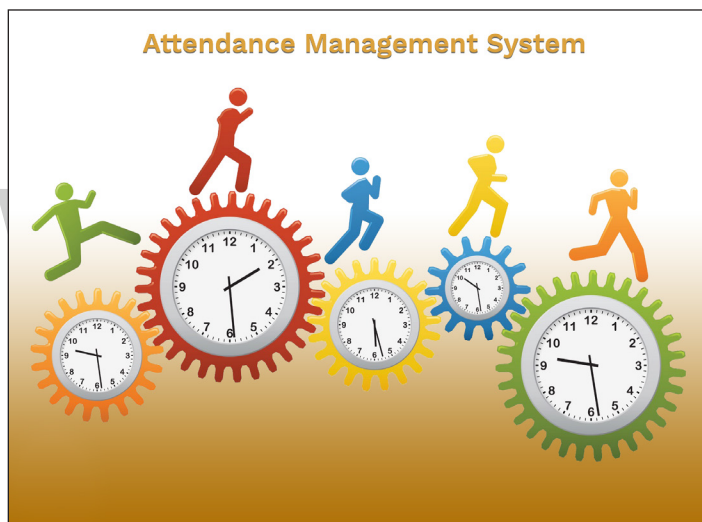
Time and attendance systems (TNA) are used to track and monitor when employees start and stop work. A time and attendance system enables an employer to monitor their employees working hours and late arrivals, early departures, time taken on breaks and absenteeism. It also helps to control labor costs by reducing over-payments, which are often caused by paying employees for time that are not working, and eliminates transcription error, interpretation error and intentional error. TNA systems can also be used to ensure compliance with labor regulations regarding proof of attendance.

Manual Systems

Traditionally manual systems were used that rely on paper cards which have times stamped onto them using a time stamping machine. Such machines were used for over a century but have since been phased out and replaced with cheaper automated systems which eliminate the need for payroll staff to manually input employee hours.

Automated Systems

Modern automated time and attendance systems require employees to touch or swipe to identify themselves and record their working hours as they enter or leave the work area. Originally this

consisted of using a RFID electronic tag or a barcode badge but these have been replaced by biometrics (vein reader, hand geometry, fingerprint, or facial recognition), and touch screens devices.

Eisenhower Method

Most people spend a lot of their time managing "situations" and "crisis". They react to other's priorities. And feel completely drained of energy every day wthout accomplishing anything of real significance to them. Time is distributed equally to everyone. But our choices separate the most productive people from everyone else.

Dwight D. Eisenhower was the 34th President of the United States from 1953 until 1961. Before becoming President, he served as a general in the United States Army and as the Allied Forces Supreme Commander during World War II. He also later became NATO's first supreme commander.

Dwight made tough decisions continuously about which of the many tasks he should focus on each day. This finally led him to invent the world-famous Eisenhower Method, which today helps us prioritize by urgency and importance.

The "Eisenhower Method" stems from a quote attributed to Dwight D. Eisenhower:

"I have two kinds of problems, the urgent and the important. The urgent are not important, and the important are never urgent."

It's a useful time management tool for getting things done. It's a prioritization framework. It focuses on radical or extreme prioritization. This simple model helps shift your thinking to long-term strategic planning and productivity.

A lot of things that take up mental energy, waste time, and rarely move you toward your goals can easily be eliminated if you apply the Eisenhower Principle. It's a simple decision-making tool you can use right now. It's meant to help you question whether an action is really necessary.

Excessive inability to manage your time effectively can result in trouble getting started, difficulty getting organised, and ultimately under achievement.

How to use the Eisenhower Method

You can only benefit from the Eisenhower Method if you can commit yourself to making radical categorization of your daily tasks. This Method requires that you group your tasks and activities into four priorities:

- Priority 1 tasks are both urgent and important.

- Priority 2 tasks are important but not urgent.

- Priority 3 tasks are urgent but not important.

- Priority 4 tasks are neither urgent nor important.

THE EISENHOWER BOX

	URGENT	NOT URGENT
IMPORTANT	**DO** *Do it now.* Write article for today.	**DECIDE** *Schedule a time to do it.* Exercising. Calling family and friends. Researching articles. Long-term biz strategy.
NOT IMPORTANT	**DELEGATE** *Who can do it for you?* Scheduling interviews. Booking flights. Approving comments. Answering certain emails. Sharing articles.	**DELETE** *Eliminate it.* Watching television. Checking social media. Sorting through junk mail.

"What is important is seldom urgent and what is urgent is seldom important."
-Dwight Eisenhower, 34th President of the United States

Here is how you can handle your tasks based on the Principle above:

- Important/Urgent quadrant are done immediately and personally e.g. crises, deadlines, problems.

- Important/Not Urgent quadrant get an end date and are done personally e.g. relationships, planning, recreation.

- Unimportant/Urgent quadrant are delegated e.g. interruptions, meetings, activities.

- Unimportant/Not Urgent quadrant are dropped e.g. time wasters, pleasant activities, trivia.

The end goal of the Eisenhower Method is to help you filter the noise from your decisions and concentrate on what really matters to you.

If you are serious about improving your time management and productivity, take care of the most important and urgent tasks everyday first. Do them in the first 90 minutes of your work day if you can, using the first 90 minutes rule.

Spend greater percentage of your time on tasks in the top two quadrants. But make sure you are not just reacting to tasks that need your attention but getting actual work done. Plan your work and actions ahead of time, before the next productive day. That way, when you are focusing on Priority I, you can get real work sorted.

You should always have start date and a completion date on tasks in Priority 2. This will help you build your activity plan/calendar ahead of time. Ideally, most of your tasks should be priority 2 tasks.

You will be tempted to spend a lot of your time sorting Priority 3 because sometimes the tasks will require your immediate attention, but you don't necessarily have to do them yourself. Delegate more if you can. Otherwise don't spend too much time on tasks that do not directly advance your goals. Do not let others define your priority. Move tasks to Priority 4 if you can't delegate them.

Most tasks in Priority 4 provide no real value. They are mostly a waste of time. Don't hesitate to drop certain tasks in Priority 4 if they don't move you closer to your vision or dream. Instead of aiming to completely rid yourself of Not Urgent and Not Important tasks, try to only spend a very limited amount of time on them. 5% or less of your waking hours is a good goal.

ABC Method
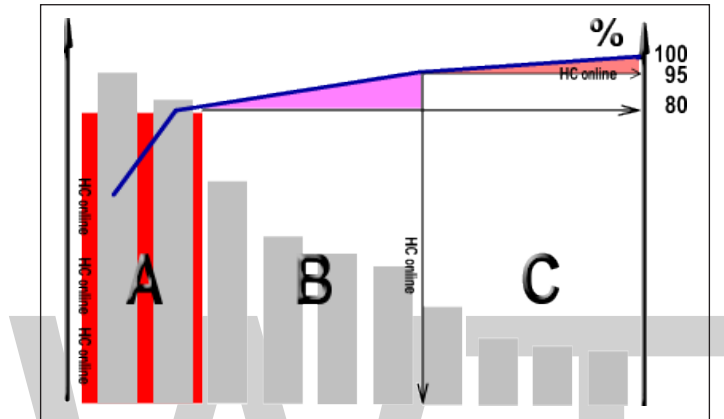
The ABC Method is a powerful priority setting technique that you can use every single day. This technique is so simple and effective that it can, all by itself, make you one of the most efficient and effective people in your field.

The power of this technique lies in its simplicity. You start with a list of everything you have to do for the coming day. Think on paper. You then place an A, B, or C before each item on your list before you begin the first task.

Determine your Top Priorities

An "A" item is defined as something that is very important. This is something that you must do. This is a task for which there can be serious consequences if you do it or fail to do it, like visiting a key customer or finishing a report for your boss that she needs for an upcoming board meeting. These are the frogs of your life.

If you have more than one "A" task, you prioritize these tasks by writing A-1, A-2, A-3, and so on in front of each item. Your A-1 task is your biggest, ugliest frog of all.

Decide on your Secondary Tasks

A "B" item is defined as a task that you should do. But it only has mild consequences. These are the tadpoles of your work life. This means that someone may be unhappy or inconvenienced if you don't do it, but it is nowhere as important as an "A" task. Returning an unimportant telephone message or reviewing your email would be a "B" task. The rule is that you should never do a "B" task when there is an "A" task left undone. You should never be distracted by a tadpole when there is a big frog sitting there waiting to be eaten.

Analyze the Consequences of doing it

A "C" task is defined as something that would be nice to do, but for which there are no consequences at all, whether you do it or not. "C" tasks include phoning a friend, having coffee or lunch with a coworker or completing some personal business during work hours. This sort of activity has no affect at all on your work life.

After you have applied the ABC Method to your list, you will now be completely organized and ready to get more important things done faster.

Start on your A-1 Task

The key to making this ABC Method work is for you to now discipline yourself to start immediately on your "A-1" task and then stay at it until it is complete. Use your willpower to get going and stay going on this one job, the most important single task you could possibly be doing. Eat the whole frog and don't stop until its finished completely.

Your ability to think through, analyze your work list and determine your "A-1" task is the springboard to higher levels of accomplishment, and greater self-esteem, self-respect and personal pride.

When you develop the habit of concentrating on your "A-1," most important activity, you will start getting more done than any two or three people around you.

Pomodoro Technique

Pomodoro Technique is this popular time-management method can help you power through distractions, hyper-focus and get things done in short bursts, while taking frequent breaks to come up for air and relax.

The Pomodoro Technique was invented in the early 1990s by developer, entrepreneur, and author Francesco Cirillo. Cirillo named the system "Pomodoro" after the tomato-shaped timer he used to track his work as a university student. The methodology is simple: When faced with any large task or series of tasks, break the work down into short, timed intervals (called "Pomodoros") that are spaced out by short breaks. This trains your brain to focus for short periods and helps you stay on top of deadlines or constantly-refilling inboxes. With time it can even help improve your attention span and concentration.

Pomodoro is a cyclical system. You work in short sprints, which makes sure you're consistently productive. You also get to take regular breaks that bolster your motivation and keep you creative.

How the Pomodoro Technique Works

The Pomodoro Technique is probably one of the simplest productivity methods to implement. All you'll need is a timer. Beyond that, there are no special apps, books, or tools required (though plenty of them out there if you'd like to go that route—more on that later).

Repeat that process a few times over the course of a workday, and you actually get a lot accomplished—and took plenty of breaks to grab a cup of coffee or refill your water bottle in the process.

It's important to note that a pomodoro is an indivisible unit of work—that means if you're distract-ed part-way by a coworker, meeting, or emergency, you either have to end the pomodoro there (saving your work and starting a new one later), or you have to postpone the distraction until the pomodoro is complete. If you can do the latter, Cirillo suggests the "inform, negotiate and call back" strategy:

• Inform the other (distracting) party that you're working on something right now.

• Negotiate a time when you can get back to them about the distracting issue in a timely manner.

• Schedule that follow-up immediately.

• Call back the other party when your Pomodoro is complete and you're ready to tackle their issue.

Of course, not every distraction is that simple, and some things demand immediate attention—but not every distraction does. Sometimes it's perfectly fine to tell your coworker "I'm in the middle of something right now, but can I get back to you in ten minutes?" Doing so doesn't just keep you in the groove, it also gives you control over your workday.

Get Started with the Pomodoro Technique

Since a timer is the only essential Pomodoro tool, you can get started with any phone with a timer app, a countdown clock, or even a plain old egg timer. Cirillo himself prefers a manual timer, and says winding one up "confirms your determination to work.

• Marinara Timer (Web) is a webapp we've highlighted before that you can keep open in a pinned tab. You can select your timer alerts so you know when to take a break, or reconfigure

the work times and break times to suit you. It's remarkably flexible, and you don't have to install anything.

- Tomighty (Win/Mac/Linux) is a cross-platform desktop Pomodoro timer that you can fire and forget, following the traditional Pomodoro rules, or use to customize your own work and break periods.

- Eggcellent (Formerly Pomodorable (OS X) is a combination Pomodoro timer and to-do app. It offers more visual cues when your tasks are complete and what you have coming up next, and it integrates nicely with OS X's Reminders app. Plus, you can estimate how many pomodoros you'll need to complete a task, and then track your progress.

- Focus Timer (iOS) used to be called PomodoroPro, and is a pretty feature-rich timer for iPhone and iPad. You can customize work and break durations, review your work history to see how your focus is improving, easily see how much time is left in your work session, and the app even offers a star-based rating system to keep you motivated. You can even customize the sounds, and hear the clock ticking when you lock your phone so you stay on task.

These are just a few good tools to choose from. You can also use Google as a timer. Don't hesitate to experiment with others, but remember, the focus of the Pomodoro Technique is on the work, not the timer you use. If you would like an actual tomato timer like Cirillo uses, this one is available for $7 at Amazon. Alternatively, you can buy a tomato timer and a copy of the book together from him directly. If you want Kindle or ePub versions of the book, grab them directly from Cirillo's store as well.

Pomodoro Technique Works Best for

The Pomodoro Technique is often championed by developers, designers and other people who have to turn out regular packages of creative work. Essentially, people who have to actually produce something to be reviewed by others.

However, it's also useful for people who don't have such rigid goals or packages of work. Anyone else with an "inbox" or queue they have to work through can benefit as well. If you're a system's engineer with tickets to work, you can set a timer and start working through them until your timer goes off. Then it's time for a break, after which you come back and pick up where you left off, or start a new batch of tickets. If you build things or work with your hands, the frequent breaks give

you the opportunity to step back and review what you're doing, think about your next steps, and make sure you don't get exhausted. The system is remarkably adaptable to different kinds of work.

It's important to remember that Pomodoro is a productivity system—not a set of shackles. If you're making headway and the timer goes off, it's OK to pause the timer, finish what you're doing and *then* take a break. The goal is to help you get into the zone and focus—but it's also to remind you to come up for air. Regular breaks are important for your productivity. Also, keep in mind that Pomodoro is just one method, and it may or may not work for you. It's flexible, but don't try to shoehorn your work into it if it doesn't fit. Productivity isn't everything —it's a means to an end, and a way to spend less time on what you *have* to do so you can put time to the things you *want* to do. If this method helps, go for it. If not, don't force it.

ALPEN Method
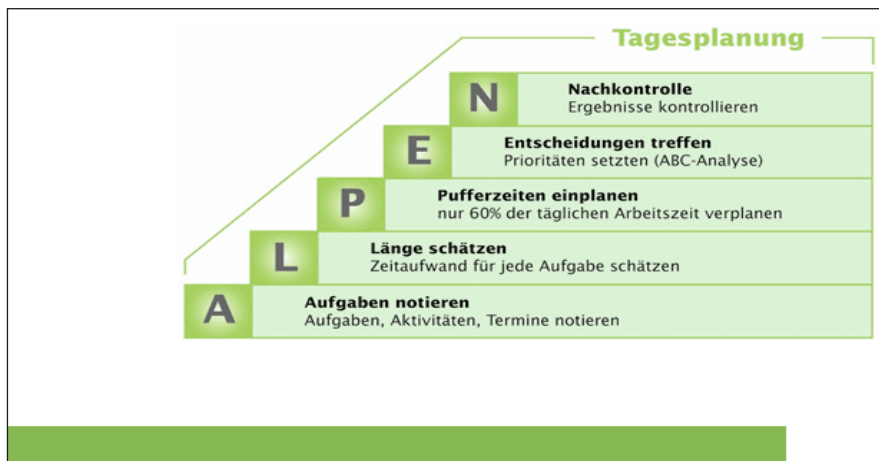
The ALPEN method is aimed at managers and executives who wonder every evening why they are so exhausted and why their to-do lists simply don't get smaller despite hard work. Constant stress and ever faster processing of to-do lists do not lead to the desired goal. Many people have to struggle with this dilemma. In search of more efficiency and some freedom in everyday working life, it is worth taking a look at the ALPEN method.

Gain Back Control of the Day

The ALPEN method is about creating a plan for the day within a few minutes, which makes it easier to structure the day and keep track of it. The goal is to increase performance while significantly reducing stress. Many managers swear by this simple but effective method. So it is definitely worth a try. One of the best things about the ALPEN method is that it is so simple. There is no complex and complicated system with diagrams and tables to learn. The time management can be created every morning in a few minutes and still has a great effect. As mentioned above, ALPEN is an acronym and stands for A = tasks (which means all appointments and activities), L = length), E = decisions and N = follow-up check. These five steps define the ALPEN method and must be performed every morning. The only things you really need are pen, paper and some self-discipline.

Tips for Successful Planning with the ALPEN Method

To be able to write down the tasks and activities, you first have to get an overview of everything you have to do or want to do on the respective day. Don't be careless and record all tasks, including standard tasks such as reading and answering e-mails. Writing down all tasks gives you a first impression of what is due. The second step is to estimate how long it will take you to complete each task. It is advisable to estimate realistically, but to keep time a little tighter. Experience has shown that tasks tend to expand if you give them more time from the outset. The tightness of the time windows forces you to say goodbye to all too perfectionist ideas. There should be no stress, but also no idling.

The scheduling of buffer times is closely related to the estimation of the task duration. Plan small buffer periods between the individual tasks, because they simply do not exist, these days on which nothing unforeseen occurs. With a little practice, most project managers will soon be able to assess buffer times very realistically. It all depends on what kind of workstation you have. A classic guide is to plan for 30-40% of the day as a buffer. The next step is to make decisions based on the available list and the times. It is often necessary to admit that there will be no time left for some tasks. Priorities must be set. Decide consciously for the urgent and important tasks. It is best to schedule the most important tasks right at the beginning, so that you are still full of energy and can be sure that these tasks will actually be completed. Extensive tasks should be divided into small bits. A valuable tip for all those who always have a low after lunch: routine tasks with a lower priority are best suited for this period. Finally, there is the follow-up check, which would have brought us to the last letter of the ALPEN. Ask yourself every evening how well your daily planning has worked and try to learn from it. How realistic was the assessment of the lengths and was the buffer sufficient? What do I have to do better or differently tomorrow?

The ALPEN Method on the way to more Productivity

The ALPEN method is therefore very simple and still helps so much to divide the day. With the ALPEN method you don't go home every evening anymore and have the feeling that you haven't managed anything. Productivity is increased and well-being is equally enhanced. You devote your time specifically to the individual tasks and can always tell your superiors and your team exactly what you will achieve and what will remain for tomorrow, next week or for someone else. This also makes planning easier for everyone in your environment.

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4

Strategic Time Management

The strategic management of time includes strategic planning, effective scheduling, prioritization of tasks, time audit, eliminating unnecessary tasks and organization of work. The topics elaborated in this chapter will help in gaining a better perspective about these aspects of strategic time management.

Effective Scheduling

Everybody is busy these days with hectic schedules Faced with endless meetings, frequent interruptions, and urgent last-minute tasks, you can easily be busy all day without making any progress on high-priority projects and goals. That's why it's so important to know how to schedule the time properly.

The Importance of Scheduling

Scheduling is the art of planning the activities so that you can achieve the goals and priorities in the time you have available. When it's done effectively, it helps you:

- Understand what you can realistically achieve with the time.

- Make sure you have enough time for essential tasks.

- Add contingency time for "the unexpected."

- Avoid taking on more than you can handle.

- Work steadily toward the personal and career goals.

- Have enough time for family and friends, exercise and hobbies.

- Achieve a good work-life balance.

Time is the one resource that we can't buy, but we often waste it or use it ineffectively. Scheduling helps you think about what you want to achieve in a day, week or month, and it keeps you on track to accomplish the goals.

How to Schedule the Time

Set a regular time to do the scheduling – at the start of every week or month, for example.

There are a number of different tools to choose from. A simple and easy way to keep a schedule is to use a pen and paper, organizing the time using a weekly planner.

The most important thing when choosing the planner is that it lets you enter data easily, and allows you to view an appropriate span of time (day/week/month) in the level of detail that you need.

Once you have decided which tool you want to use, prepare the schedule in the following way:

Step 1: Identify Available Time

Start by establishing the time you want to make available for the work.

How much time you spend at work should reflect the design of the job and the personal goals in life.

For example, if you're pushing for promotion, it might be prudent to work beyond normal hours each day to show the dedication. If, on the other hand, you want to have plenty of time for out-of-work activities, you might decide to do the allocated hours and no more.

Step 2: Schedule Essential Actions

Next, block in the actions you absolutely must take to do a good job. These will often be the things you are assessed against.

For example, if you manage people, make sure that you have enough time available to deal with team members' personal issues, coaching, and supervision needs. Also, allow time to communicate with the boss and key people around you.

Step 3: Schedule High-priority Activities

Review the To-Do List, and schedule in high-priority and urgent activities, as well as essential maintenance tasks that cannot be delegated or avoided.

Try to arrange these for the times of day when you are most productive – for example, some people are at their most energized and efficient in the morning, while others focus more effectively in the afternoon or evening.

Step 4: Schedule Contingency Time

Next, schedule some extra time to cope with contingencies and emergencies. Experience will tell you how much to allow – in general, the more unpredictable the job, the more contingency time you'll need. (If you don't schedule this time in, emergencies will still happen and you'll end up working late.)

Strategic Planning

Strategic planning is an organization's process of defining its strategy, or direction, and making decisions on allocating its resources to pursue this strategy. It may also extend to control mechanisms for guiding the implementation of the strategy. Strategic planning became prominent in corporations during the 1960s and remains an important aspect of strategic management. It is executed by strategic planners or strategists, who involve many parties and research sources in their analysis of the organization and its relationship to the environment in which it competes.

Strategy has many definitions, but generally involves setting strategic goals, determining actions to achieve the goals, and mobilizing resources to execute the actions. A strategy describes how the ends (goals) will be achieved by the means (resources). The senior leadership of an organization is generally tasked with determining strategy. Strategy can be planned (intended) or can be observed as a pattern of activity (emergent) as the organization adapts to its environment or competes.

Strategy includes processes of formulation and implementation; strategic planning helps coordinate both. However, strategic planning is analytical in nature (i.e., it involves "finding the dots"); strategy formation itself involves synthesis (i.e., "connecting the dots") via strategic thinking. As such, strategic planning occurs around the strategy formation activity.

Process

Strategic planning is a process and thus has inputs, activities, outputs and outcomes. This process, like all processes, has constraints. It may be formal or informal and is typically iterative, with

feedback loops throughout the process. Some elements of the process may be continuous and others may be executed as discrete projects with a definitive start and end during a period. Strategic planning provides inputs for strategic thinking, which guides the actual strategy formation. Typical strategic planning efforts include the evaluation of the organization's mission and strategic issues to strengthen current practices and determine the need for new programming. The end result is the organization's strategy, including a diagnosis of the environment and competitive situation, a guiding policy on what the organization intends to accomplish, and key initiatives or action plans for achieving the guiding policy.
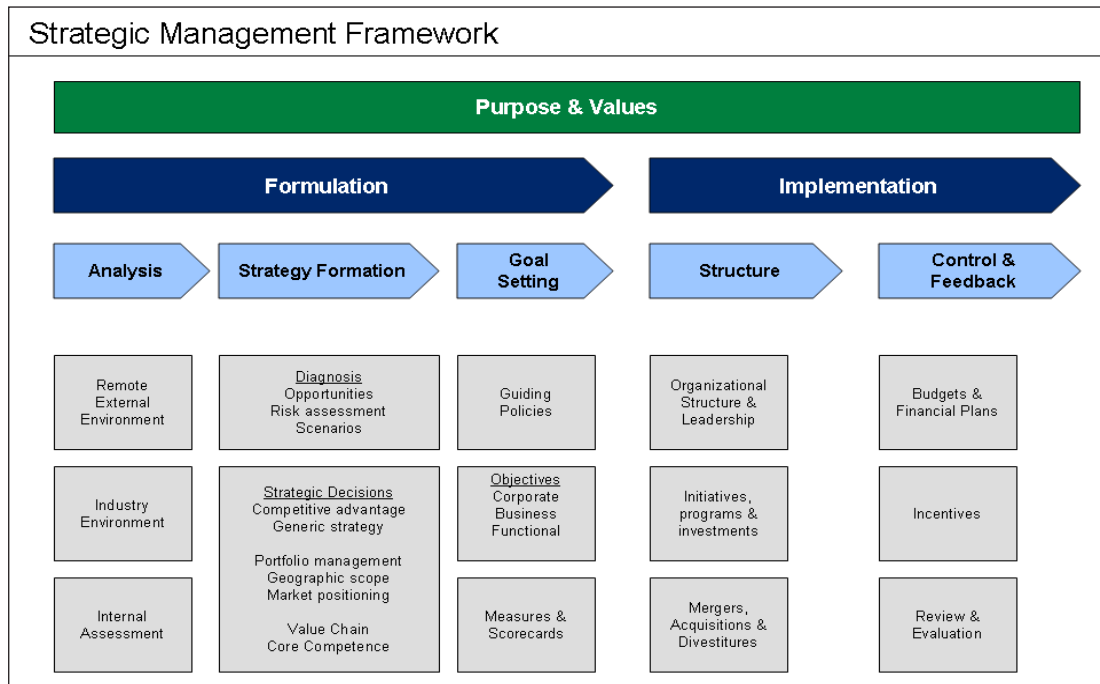
Strategic management processes and activities.

Michael Porter wrote in 1980 that formulation of competitive strategy includes consideration of four key elements:

- Company strengths and weaknesses;

- Personal values of the key implementers (i.e., management and the board);

- Industry opportunities and threats; and

- Broader societal expectations.

The first two elements relate to factors internal to the company (i.e., the internal environment), while the latter two relate to factors external to the company (i.e., the external environment). These elements are considered throughout the strategic planning process.

Inputs

Data is gathered from a variety of sources, such as interviews with key executives, review of publicly available documents on the competition or market, primary research (e.g., visiting or observing

competitor places of business or comparing prices), industry studies, etc. This may be part of a competitive intelligence program. Inputs are gathered to help support an understanding of the competitive environment and its opportunities and risks. Other inputs include an understanding of the values of key stakeholders, such as the board, shareholders, and senior management. These values may be captured in an organization's vision and mission statements.

Activities

Strategic planning activities include meetings and other communication among the organization's leaders and personnel to develop a common understanding regarding the competitive environment and what the organization's response to that environment (its strategy) should be. A variety of strategic planning tools may be completed as part of strategic planning activities.

The organization's leaders may have a series of questions they want to be answered in formulating the strategy and gathering inputs, such as:

- What is the organization's business or interest?

- What is considered "value" to the customer or constituency?

- Which products and services should be included or excluded from the portfolio of offerings?

- What is the geographic scope of the organization?

- What differentiates the organization from its competitors in the eyes of customers and other stakeholders?

- Which skills and resources should be developed within the organization?

Outputs

The output of strategic planning includes documentation and communication describing the organization's strategy and how it should be implemented, sometimes referred to as the strategic plan. The strategy may include a diagnosis of the competitive situation, a guiding policy for achieving the organization's goals, and specific action plans to be implemented. A strategic plan may cover multiple years and be updated periodically.

The organization may use a variety of methods of measuring and monitoring progress towards the strategic objectives and measures established, such as a balanced scorecard or strategy map. Companies may also plan their financial statements (i.e., balance sheets, income statements, and cash flows) for several years when developing their strategic plan, as part of the goal-setting activity. The term operational budget is often used to describe the expected financial performance of an organization for the upcoming year. Capital budgets very often form the backbone of a strategic plan, especially as it increasingly relates to Information and Communications Technology (ICT).

Outcomes

Whilst the planning process produces outputs, as described above, strategy implementation or execution of the strategic plan produces Outcomes. These outcomes will invariably differ from the

strategic goals. How close they are to the strategic goals and vision will determine the success or failure of the strategic plan. There will also arise unintended Outcomes, which need to be attended to and understood for strategy development and execution to be a true learning process.

Tools and Approaches

A variety of analytical tools and techniques are used in strategic planning. These were developed by companies and management consulting firms to help provide a framework for strategic planning. Such tools include:

- PEST analysis, which covers the remote external environment elements such as political, economic, social and technological (PESTLE adds legal/regulatory and ecological/environmental);

- Scenario planning, which was originally used in the military and recently used by large corporations to analyze future scenarios. The flowchart to the right provides a process for classifying a phenomenon as a scenario in the intuitive logics tradition.
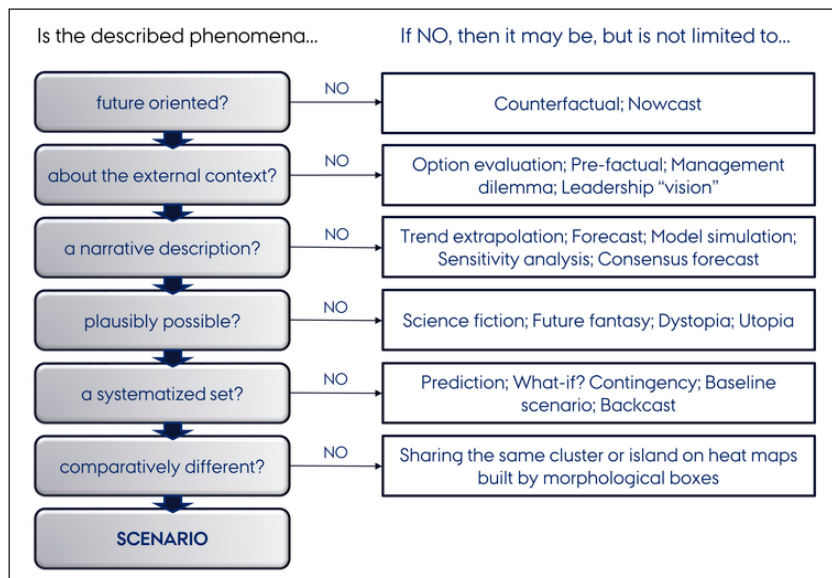
Process for classifying a phenomenon as a
scenario in the Intuitive Logics tradition.

- Porter five forces analysis, which addresses industry attractiveness and rivalry through the bargaining power of buyers and suppliers and the threat of substitute products and new market entrants;

- SWOT analysis, which addresses internal strengths and weaknesses relative to the external opportunities and threats;

- Growth-share matrix, which involves portfolio decisions about which businesses to retain or divest; and

- Balanced Scorecards and strategy maps, which creates a systematic framework for measuring and controlling strategy.

- Responsive Evaluation, which uses a constructivist evaluation approach to identify the outcomes of objectives, which then supports future strategic planning exercises.

Strategic Planning vs. Financial Planning

Simply extending financial statement projections into the future without consideration of the competitive environment is a form of financial planning or budgeting, not strategic planning. In business, the term "financial plan" is often used to describe the expected financial performance of an organization for future periods. The term "budget" is used for a financial plan for the upcoming year. A "forecast" is typically a combination of actual performance year-to-date plus expected performance for the remainder of the year, so is generally compared against plan or budget and prior performance. The financial plans accompanying a strategic plan may include 3–5 years of projected performance.

McKinsey & Company developed a capability maturity model in the 1970s to describe the sophistication of planning processes, with strategic management ranked the highest. The four stages include:

- Financial planning, which is primarily about annual budgets and a functional focus, with limited regard for the environment;

- Forecast-based planning, which includes multi-year financial plans and more robust capital allocation across business units;

- Externally oriented planning, where a thorough situation analysis and competitive assessment is performed;

- Strategic management, where widespread strategic thinking occurs and a well-defined strategic framework is used.

Categories 3 and 4 are strategic planning, while the first two categories are non-strategic or essentially financial planning. Each stage builds on the previous stages; that is, a stage 4 organization completes activities in all four categories.

For Michael C. Sekora, Project Socrates founder in the Reagan White House, during the cold war the economically challenged Soviet Union was able to keep on western military capabilities by using technology-based planning while the U.S. was slowed by finance-based planning, until the Reagan administration launched the Socrates Project, which should be revived to keep up with China as an emerging superpower.

Criticism

Strategic Planning vs. Strategic Thinking

Strategic planning has been criticized for attempting to systematize strategic thinking and strategy formation, which Henry Mintzberg argues are inherently creative activities involving synthesis or "connecting the dots" which cannot be systematized. Mintzberg argues that strategic planning can help coordinate planning efforts and measure progress on strategic goals, but that it occurs "around" the strategy formation process rather than within it. Further, strategic planning

functions remote from the "front lines" or contact with the competitive environment (i.e., in business, facing the customer where the effect of competition is most clearly evident) may not be effective at supporting strategy efforts.

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Prioritization of Tasks

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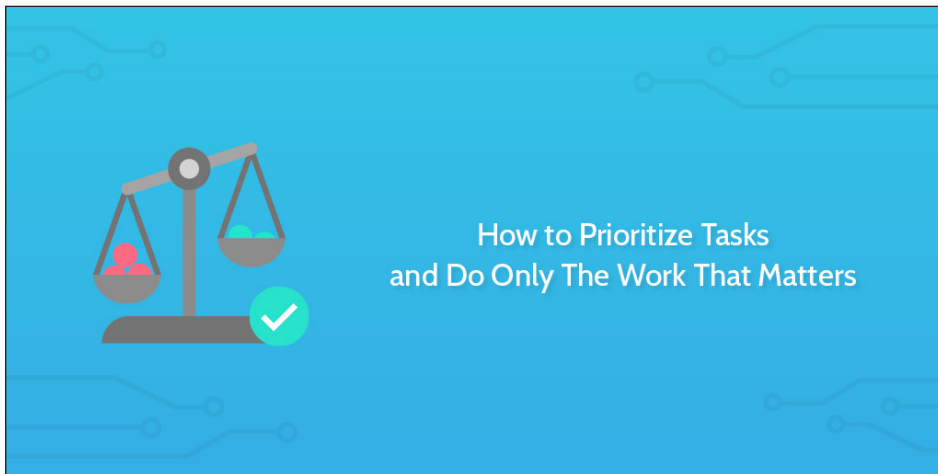
When you take steps to prioritize your work, you can be proactive rather than reactive—and will ultimately increase your productivity, meet your deadlines, and better manage your time at work.

Start by Gathering your to-do's and Create a List

You can't decide how to prioritize tasks if you don't have a single view of everything you need to get done in the first place. This may seem rudimentary, but it's something that's often skipped in the rush to dive into projects. Instead, take the time to list out what you need to work on across all of your projects. Be sure to break down bigger tasks into subtasks to feel less overwhelmed.

Once your tasks are listed in one place, add additional information, such as the amount of time it'll take to complete, level of importance, or urgency. With all of your tasks in one place, you'll be able to see an overall view of what needs to get done, get a sense of how much work you're dealing with, and what most likely needs your attention now. Don't worry about organizing your tasks quite yet; just get them all in the same spot to start.

My Tasks is a feature of Asana that automatically aggregates all the tasks assigned to you in a single view. It serves as the master checklist that keeps you focused on the right pieces of work.

Adopt a Prioritization Method to Organize your Work to do List

How you ultimately prioritize your tasks will depend on the nature of your job and your personal work style, but there are a few common task prioritization methods that might work for you. Let's take a look at a few methods for prioritizing tasks.

Eat the Frog

The Eat the Frog method is not a literal suggestion, but rather a system based on a quote from the ever-wise Mark Twain who said, "If it's your job to eat a frog, it's best to do it first thing in the morning." In the world of work management, that translates to tackling big or complex tasks first.

Those that serve the highest purpose and are tied to top-level objectives should be first on the priority list. Once you've eaten your frog for the day, you can slot in other tasks based on factors such as deadlines.

Eat the Frog in action: Finish up that big presentation you'll be making to the management team at the end of the week before you reply to emails, work on your review form, call clients, or iron out contract revisions.

Eisenhower Decision Matrix

Another method based on a quote from a famous person, the Eisenhower Decision Matrix matrix method starts by organizing tasks into four quadrants, based on whether they are important, urgent, both, or neither.

This approach helps you decide what to do now (important and urgent), what you need to plan for (important but not urgent), what you may be able to delegate (not important but urgent), and what can possibly delete (not important and not urgent).

Eisenhower Decision Matrix in action: A colleague has just sent you an email asking for help with a sales presentation. This request is urgent because it has to be done today, but is it important enough (to you) to postpone other work? Measure each of the tasks on your own daily list for importance and urgency to decide whether you can shift tasks to help your colleague, or if it needs to be deferred to later. Knowing your commitments also helps you say no when you need to.

ABCDE Method

With the ABCDE method, you take that task list you've created, assign each task a letter value according to its level of importance, and then tackle tasks accordingly. This is comparable to giving grades to your tasks, from A (very important), down to E (eliminate whenever possible). Make sure you're always working on your A and B tasks first, because those are the ones that will make or break your success at work.

ABCDE in action: You have eight working hours available today, but fifteen hours worth of tasks on your list. When you give each task a letter, though, only two qualify as A tasks, and most are D tasks that you can delegate or reschedule. Now you know to focus only on those A tasks, and leave the D tasks until later or pass off to another teammate. You've just gone from being overwhelmed to having a prioritized task list that focuses on the must-do items of the day.

Chunking

For the chunking method, a chunk is defined as a focused work activity. It can be self-contained (emptying your inbox), a slice of a larger project (completing the first draft of a document), or a collection of small, unrelated tasks. Your key here is to make these chunks focused, uninterrupted

blocks of time. Turn off outside distractions and signal to others that you are unavailable. Taking breaks in between chunks is also important to relax and refresh.

Chunking in action: You might start your day with one hour of design work followed by a coffee break. Then, two hours of scheduled meetings, lunch, and thirty minutes of email response time ends with one hour of research on a new client. You take a short social media break, head to the team update meeting and finish up with a final hour of design work.

If you're using a website to manage your tasks, you can create custom fields to add additional information, such as a letter grade (if you're using the ABCDE method), urgency and importance (if you're using the Eisenhower Decision Matrix), priority level (if you're going with Eat the Frog), or estimates on how long it will take to complete.

Use your Calendar to Schedule your Tasks

Whether a task takes you minutes or weeks to complete, it always has a beginning and an end. So, once you have your list, add a start and end date to each task. Doing this will make sure nothing falls through the cracks as new things come up and priorities need to shift.

If a task is assigned to you without clear start or end dates, be sure to ask for that information so you can schedule a time to work on it. Once you know these dates, you might even set your personal end date earlier than the actual deadline to account for unexpected issues or to turn in work early.

Think of your work as a puzzle: You need to know the pieces will fit together, and start and end dates are the edges of those puzzle pieces. If tasks are puzzle pieces, with start and end dates noting their edges, then your calendar is the puzzle board where you assemble the bigger picture. Use it to schedule work, balance high-effort and high-priority tasks in a way that won't overload you, and make sure you meet deadlines. If you're adopting one of the prioritization methods above, use that framework to help fill your schedule.

Using the calendar view in a website, you'll be able to spot days when you might be overloaded and also see open blocks of time. Take advantage of this view to shift tasks and spread your work out more evenly.

Communicate Task Progress with your Teammates

Finally, don't forget to loop in teammates who may be waiting on you to complete a task, or vying for some of your time. By proactively giving teammates updates on task progress, when you plan to complete it, or any delays or blockers that come up, you can cut down on the amount of update requests you receive. Instead of constantly responding to those requests, you can keep doing your work productively and efficiently.

Website's task comments feature lets you share updates and ask follow-up questions directly on a task to keep communication connected with the actual work you're doing.

Prioritized Work is Productive Work

When you clearly prioritize your work, you can increase productivity, better manage your time, and feel confident that you'll hit your deadlines—every time. Boost your productivity even more

by using a work management tool, to organize and manage all of your tasks—no matter how big or small—in one place.

Time Audit

A time audit helps you look at exactly how your time is being used so you can better understand where your time is going. One form of a time audit is to simply keep a log of your time. This works to a certain extent, but it tends to better show how you want to spend your time instead of how your time is actually spent.

You can think of a time audit as an investigation – a deep dive into what it is that you do and how long it takes you to do it. You need quantifiable and measurable results, so you have to be accurate as you track and record your time.

When it's done, you'll be able to see where time is being lost, and you'll have the framework needed to build an optimized schedule. Evening opening up 10 minutes of time can have a huge impact on your day.

What you Need to do a Complete Time Audit

Most people aren't able to estimate their own time usage, so in order to get accurate data, you'll need a time tracking app. With a tracker or a tracking app, you can get the data you need in order to produce accurate results.

Your time audit should be done over a 30 day period, so you'll also need to have a calendar on hand. And before you can start, you'll need to make a thorough to-do list.

Your to-do list should include everything you need to get done during your time auditing period. Don't forget the time it takes to eat lunch, take breaks, and chat with your coworkers. Once we get further into the process, you'll need to track the time for every single task that you need to do, whether it's work-related or personal.

Steps to Completing a Time Audit

Write down your Goals for the Month

Make a list of your main goals for the month. These overarching goals, combined with your to-do list, are what you'll use to measure your success.

If you're doing your time audit at work, make sure you include any major projects that are due in the upcoming month. If you decide to do your audit at home, your big goals might include cleaning your basement or purging your closet.

Track all Time for a Complete Month

To do a proper time audit, you have to track every single thing you do. There are many time tracking apps that can give you a good overall view of how you're spending your time. If you decide to use a stopwatch instead, create a spreadsheet and record your data with precision.

Don't think you can track every minute of every day for an entire month? It's okay to start small and track your time for one week, but the longer you track yourself, the better your results will be.

Analyze your Time Audit Results

Whether you track your time for a week or a month, once the results are in, it's time to analyze your data. Take a detailed look at how you spent your time. It's helpful to review your results by the amount of time spent on a particular task. Look at how long each task took you and ask yourself the following questions:

- What tasks took longer than I thought they would?

- What tasks took less time than expected?

- Aside from my biggest goals and projects, are there items that took up a lot of time? Look for things such as checking your social media, browsing the internet, and chatting with coworkers.

- What items did I not account for at the beginning of the month or week? Did I account for eating lunch? Commuting? Enjoying happy hour or having dinner with friends?

- Did I complete the big goals I set forth at the beginning of the month?

Once you identify which tasks took the longest and which ones are eating up most of your time, you're ready to move on to the next step.

Set a Schedule for Times Blocked out based on your Results

When you have a good understanding of how long it takes you to do certain things, get your calendar out. Set aside time every day and/or every week to meet your biggest goals and make time for everything you need to do. Use the average times from your tracking app to plan out every single thing on every day of the week.

Don't be surprised if you find that your days fill up quickly with all the things you have to do. This is how you'll learn to set realistic goals that you can actually meet and exceed in future weeks and months.

Block out Times for Breaks, Meetings and Interruptions

Set your schedule in a way that will make it possible to meet your goals. Account for time to commute, have lunch, and take breaks – and pay special attention to where you're wasting your time.

If you find a task that takes you hours to do but doesn't put your closer to your goals, see if you can cut back on that time. When in doubt, ask coworkers for some assistance. It's crucial that you set time for breaks and unavoidable interruptions. Without them, you'll be less productive.

Set Realistic Goals for Next Month

With a proper time audit, you can set yourself up for success. There's no point in telling your boss you can accomplish something in two days if you know it's going to take you two weeks to work it into your schedule. Keep your goals and schedule realistic and you're certain to enjoy more success.

By setting realistic goals and identifying wasted time, you should be able to create more time in your schedule for the important things. When you know what you can do and what you have time for, you can identify a problem before it arises and take a proactive approach. In some cases, it may be necessary to bring in outside help to assist you in your workload.

Putting it all Together

Doing an accurate time audit is the only way to know how you're really spending your time. And when you know how you're spending your time, you can adjust your schedule to accomplish what's important.

Get a calendar. Download a time tracking app. Make a to-do list. Write down your biggest goals for the month.

Track everything you do throughout a week or month period and take some time to analyze your tracking results. Once you know how you're spending your time and wasting your time, you can set realistic goals that you can actually meet next week or next month. Block out next month's goals based on the time results of your audit – and don't forget to schedule downtime for lunch and breaks.

The hardest part of time auditing is tracking every single thing you do. You have to be diligent. You have to be thorough. You can't leave anything out. There's no point in doing a time audit if you don't end up with accurate results.

Eliminating Unnecessary Tasks

It's commonly known that the one commodity you cannot have more of is time — once it's gone, you ain't getting any more of it. But that's only partly true — you can find a lot of extra time if you look in the right places.

First, think about how many hours you spend online these days. There's a host of ways that people spend their time online. A time audit might be quite surprising.

Now think about how much value these sites and activities really give you. Is this really what you want to be doing with your life? Or are there other things that are more important to you, that are a better use of your time, that you wish you could be doing but just don't have the time? Claim that time — redesign your life so that you have time to do those things.

- Design your perfect day: First, wipe your day clean. Your schedule is now blank. Now design your ideal day — what would you do in the morning, afternoon, evening? What great activities would you place there to fulfill you, give you value, and produce the most amount of money for the least amount of time worked. The sky's the limit: exercise, leisure, education, creating a new business empire, creative outlets whatever you want.

- Now find the time: What activities could you cut out so that you have the time to make this ideal day a reality? Most likely, cutting out online time and TV would do most of the job. For the hours where you are going to do work, be sure that you are focusing on the most important and valuable tasks that you could be doing, so that you get the most value out of your work hours.

- Go on an email diet: You could free up huge amounts of time by being less connected, and having less online distractions. Instead of checking your email 20-30 times a day, and having your IM or Twitter on, turn these things off and check email twice a day. Schedule those times, and let people know that those are the times you'll respond to email. It won't be easy, but if you focus your energy on changing your online habits, you can do it. Focus on what you want to be doing instead. Don't let yourself be sidetracked. This diet might apply to not only email, but any other time consumer, online or off. Kick the habit.

- Make your dreams a reality: With all the free time that you've found, you now have time to make your ideal day come true, and to pursue your dreams and your passion. Stick to your schedule, go online less, work less but on more productive tasks, and you'll now have time to do everything you always wanted to do. In fact, with this plan, you could become much more productive with fewer hours worked.

- Focus on the big tasks really focus: By identifying which tasks produce the most income or value for you, you can work more on those tasks to the exclusion of all others. Most of the rest of the tasks on your list aren't necessary. Drop them or delegate them. And when you do work on those big tasks, work with intense focus, eliminating all distractions, not allowing yourself to switch to other tasks. Don't multi-task — work with focus and you can complete your tasks faster.

Your dreams can become a reality, if you can eliminate the unnecessary and work on the important. That will mean you'll suffer some withdrawal pains, but the rewards are well worth it.

Organization of Work

Organization is a key component of productivity. When clutter accumulates, our attention diminishes and performance can suffer as a result. When your brain, time, workspace and projects are

organized, it becomes easier to streamline both your actions and thoughts. We looked into some of the most effective ways to get organized, in every sense of the word, so that productivity will come naturally.

Follow the tips below to help get yourself in the right mindset so organization becomes second nature at the office:

Organize your Brain

Get enough sleep – Sleep deprivation does a number on our grey matter. Anyone who has experienced a restless night can tell you that mental acuity diminishes with every hour of sleep we lose. Aim to get around seven hours of sleep each night and consider working in power naps during the afternoon to reenergize at the end of the workday.

Make an effort not to multitask: Going back and forth between various tasks does nothing but slow our brains down and cloud our judgment. Trying to do two or more things at once can even release the stress hormone cortisol in the brain, which can impact your ability to concentrate and make decisions.

Take breaks: David Levitin, suggests that people should take breaks at work to allow the brain to daydream. It's during these periods that our brains are most creative and it helps give us a productivity boost.

Organize your Time

Start with goals: When organizing your time, the first thing you should do is identify your goals. Goals help us focus our energy and serve as a starting point for identifying what we need to get done.

Outline your priority: Once goals are identified, your priority will become clear. Your priority is the most important task that you need to complete in order to accomplish your most important goal and move things forward.

Time block each day: A lot of emphasis gets put on time blocking because it works. The concept is simple – create a schedule for each day squaring away time for every task you need to complete. This creates deadlines and puts time limits to tasks, making it an automatic time organizer.

Organize your Workspace

Have everything you need within reach: Take a careful inventory of everything you use on a regular basis to get things done at the office. Keeping these items at your desk or on your computer will maximize productivity and make organization easier.

Get rid of the non-essentials: Clutter is a distraction. We're not saying that your desk needs to be a fun-free zone, but cutting out non-essentials will make a workspace more functional and productive. If you haven't used something in the past six months, get rid of it or store it away somewhere off your desk and out of eyesight.

Put paperwork in its place: Piles of paperwork are one of the biggest organization pitfalls. Instead of letting paperwork stack up, create a filing system that is based on the one-touch method. Make different files for each project or client, and when a document comes across your desk either act on it, trash it or file it away. Once the project is complete go back through the file and get rid of anything that isn't essential.

Organize your virtual workspace: Your e-mail is its own workstation. Organize it the same way you would organize your paperwork – files and a one-touch system. Apply the filing system to your electronic files as well. Another strategy to consider is to develop a time block for checking your e-mail only two or three times a day so it doesn't become a time-sucking distraction.

Organize your Projects

Throw out your to-do list: To-do lists trick people into thinking they are organized and productive. While having things down on paper can help with organization, to-do lists often bog us down with a lot of non-essentials and don't help us focus on prioritization. Instead, create success lists that are stripped down and purpose-driven. The 411 worksheet is a template for making weekly, monthly and annual success lists.

Keep current projects front and center: Having all of your current projects out in the forefront can help you stay focused on the tasks that matter most right now.

Map out milestones: When you are handed a project one of your first tasks should be working backward from your desired end point to create milestones. Like high-level time blocking, this will help provide you with vision and a sense of priority in the short and long term.

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5

Time Management Tools

There are various tools that are used for the effective management of time. A few of these tools are to-do lists, schedule, google calendar, personal digital assistant, time management software, online calendar and task scheduling tool. The diverse applications of these time management tools have been thoroughly discussed in this chapter.

To-do Lists

A to-do list is a list of errands and other tasks – often written on a piece of paper as a memory aid – that one needs or intends to accomplish.

One simple way to improve your productivity is to keep an agenda, whether by hand or via a day by day to-do list app. It may not sound like brilliant advice, but this small change can have effect that cannot be overstated.

Organizing your Life

Beyond achieving your everyday chores, a to-do list helps you get a handle on management of more long-term projects and plan ahead for the future.

Let's use an example. Say you have a long-term goal to reorganize your house, shifting furniture between rooms and making it feel more like the home you want it to be. Without a way to track what you're getting done, it can be easy to keep putting off tasks like this indefinitely. But with a proper agenda, you can slip smaller pieces into different dates.

Between your regular tasks, put in an entry for cleaning the living room one day, then shifting the layout the next, then moving onto the bedroom, and so on. After a week, you'll find that you've made serious progress on your goals. Within a month, you'll be finished!

And that's just one example. Whatever your goals are, this method can help you get closer to it one step at a time. Here are a few tips for other long-term events you can work on:

- Plan a birthday party.

- Schedule a vacation.

- Tackle major project management at work.

- Work toward a romantic getaway with your significant other.

- Balance your checkbook and begin working on a route to pay off debt.

Coordinating with Others

Keeping an agenda benefits other people as well. Especially if you're using apps, you should have the option to use a shared to-do list via email. This is perfect for looping in colleagues for project management at work.

You can also use it for home, though! If you need to get your family active on that house reorganization project make sure they're able to view your calendar. Or maybe you want to keep a to-do list with your best friend, allowing each other to keep track of what the other is up to on any given evening.

No matter who you're sharing with, this can increase your communication and mutual productivity. It's also a great way to keep a spouse or significant other involved and aware of your schedule. There's nothing to lose.

Holding yourself Accountable

This one goes hand-in-hand with sharing your agenda. By giving others access, you're also taking responsibility. It's a way of, essentially, promising that you're going to take action and get something done. There's no hiding behind your memory or excuses of more important things to do. You can no longer cancel plans at the last second. Your friends, colleagues, and family will know exactly what you've done, and what you're supposed to do on top of that.

This can be scary and stressful, but it's also freeing in a sense. If you're able to deliver on these promises consistently, you'll feel better and enjoy more respect from the people who have access to the shared agenda. This responsibility can also help ensure that you're realistic about the number and scope of tasks you're tracking.

Never Forget

The older and busier we get, the easier it is to forget important things. The world is full of distractions, and it's all too easy to fall into procrastination. Don't let your memory get in the way of you being productive.

By keeping a to-do list, you can make sure to track even the things you normally don't remember. Remind yourself to pick up milk from the grocery store, or to switch out laundry in an hour, or to make that important business phone call. These may seem small, but if it's something you have a tendency to forget, it's worth writing down. You can also set alarms for deadlines or milestones that you need to hit.

Reducing Stress

Is there anything worse than getting to the end of a long, stressful workday, laying your head down on the pillow, and suddenly realizing that you forgot some small but crucial task that absolutely must get done before tomorrow? What a headache! By sticking to an agenda, you can avoid this nightmare scenario.

This is about more than just remembering to do stuff, but also the boost to mental health that comes with remembering. Not only will this lessen your immediate stress from realizing you didn't finish something and freaking out, but it will allow you to sleep better and face tomorrow with more energy, better prepared to handle anything.

Not only that, but if you're using your to-do lists to help with work, it might put you in the good graces of your boss and colleagues, or of your wife or husband at home. You can improve your business relationships and make your partner happier.

Making Sure you have Downtime

To-do lists aren't just about working all the time. If you handle things right, you'll increase your efficiency, which means you should actually find yourself with more free time. And that free time is absolutely critical to self-care.

You can use this time to read, to exercise, to go for a walk, or even just to spend time with your family. Whatever brings you peace and calms you down, you should try to fit some of it into every day.

Whether you add it to your agenda explicitly or not, it's imperative that you find and embrace time for yourself. Everyone needs moments of the day to decompress and stop stressing out. If you're constantly concerned about what needs to get done, you'll never be able to relax. But if your listed agenda is helping you be more efficient in how you finish tasks, you should be able to spend less time worrying and more time enjoying life.

Keeping Priorities Straight

Without any sort of visual design, it can be difficult to order things in your head in order of importance. The decision about which task you tackle first can be left up to chance or whatever happens to be in your head at the time. Once it's all written out, it's a lot easier to move things around and plan accordingly.

By keeping a well-structured to-do list, you can make sure that the most important things are getting done first and not being put off in favor of smaller, easier stuff. You can keep focusing on the items that are essential and not get distracted. And every night, you have the opportunity to look at what you accomplished and make modifications to what you want to prioritize for tomorrow.

Taking Stock

Building off that last point, an agenda is a great method for providing yourself an honest mirror of your days. If you build your next day's agenda each evening, you can take that time to look back at what you've accomplished.

If it doesn't feel good enough, start thinking about how to modify things and improve on it. Start considering what would make you feel accomplished, and how you can realistically squeeze that into your days. Don't be too mean to yourself, though! There's a difference between being honest and being overly critical.

As you practice and experiment with this, eventually you should find yourself slipping into a groove. One night, you'll realize that you're looking back on what you've done that day, and you

actually feel great about it. That's a wonderful feeling, and it can provide a serious sense of one of the most important keys to productiveness: motivation which leads us to the final and most important reason.

Staying Motivated

Sometimes the problem isn't remembering to get stuff done or even finding the time to do it. Sometimes it's as simple as not feeling like it. Keeping a daily or even hourly to-do list can improve your motivation in surprising ways.

There are two ways this works. The first, and simplest, is that it just feels good. Completing items and checking them off provides a burst of satisfaction to your brain that can be a shockingly strong psychological motivator.

Beyond that, you can stay motivated by tracking an overall goal to your tasks. As an example, let's say you're keeping an agenda for work, and your overall goal is to get a big promotion. Every item you place under that goal can be viewed as helping to get you closer to it. And every time you start to feel unmotivated, all you need to get going again is to look to the top of the list, where you have that goal written out, and remember what it's all for.

Schedule

A volunteer adjusts the schedule board at Wikimania 2007. The board indicates the times and locations at which events will take place, thus assisting participants in deciding which events they can attend.

A schedule or a timetable, as a basic time-management tool, consists of a list of times at which possible tasks, events, or actions are intended to take place, or of a sequence of events in the chronological order in which such things are intended to take place. The process of creating a schedule — deciding how to order these tasks and how to commit resources between the variety of possible tasks — is called scheduling, and a person responsible for making a particular schedule may be called a scheduler. Making and following schedules is an ancient human activity.

A train schedule informs travelers of the trains going to
various locations, and indicates the times of departure.

Some scenarios associate "this kind of planning" with learning "life skills". Schedules are necessary, or at least useful, in situations where individuals need to know what time they must be at a specific location to receive a specific service, and where people need to accomplish a set of goals within a set time period.

Hours of operation posted at a FEMA office following a disaster inform
the public of when FEMA employees will be available to assist them.

Schedules can usefully span both short periods, such as a daily or weekly schedule, and long-term planning with respect to periods of several months or years. They are often made using a calendar, where the person making the schedule can note the dates and times at which various events are planned to occur. Schedules that do not set forth specific times for events to occur may instead list algorithmically an expected order in which events either can or must take place.

In some situations, schedules can be uncertain, such as where the conduct of daily life relies on environmental factors outside human control. People who are vacationing or otherwise seeking to

reduce stress and achieve relaxation may intentionally avoid having a schedule for a certain period of time.

Bookstore Weekly Schedule   Week of : May 1-7

	Sun 5/1	Mon 5/2	Tue 5/3	Wed 5/4	Thu 5/5	Fri 5/6	Sat 5/7
Bourne, M.	9am-6pm	9am-6pm	9am-1pm				
Brown, M.	11am-8pm	11am-8pm	7am-11am		9am-6pm	9am-6pm	
Gatsby, A.		11am-8pm	11am-8pm	7am-11am			
Gordon, A.				11am-8pm	11am-8pm	7am-11am	
Hender, V.							
Lawson, N.		11am-8pm	11am-8pm	7am-11am			
Shiro, I.					9am-6pm	9am-6pm	9am-1pm
Smith, T.	9am-6pm	9am-6pm				9am-6pm	9am-6pm
Talbot, P.						9am-6pm	9am-6pm
Tate, L.				9am-6pm	9am-6pm		
Vasquez, A.	11am-8pm	11am-8pm	7am-11am				

A weekly work schedule indicates which employees of a business are going to work at which times, to ensure the effective distribution of labor resources.

Kinds of Schedules

Publicly Available Schedules

Certain kinds of schedules reflect information that is generally made available to the public, so that members of the public can plan certain activities around them. These may include things like:

- Hours of operation of businesses, tourist attractions, and government offices, which allow consumers of these services to know when they can obtain them.

- Transportation schedules, such as airline timetables, train schedules, bus schedules, and various public transport timetables are published to allow commuters to plan their travels. From the perspective of the organization responsible for making transportation available, schedules must provide for the possibility of schedule delay, a term in transport modeling which refers to a difference between a desired time of arrival or departure and the actual time. Despite the use of "delay", it can refer to a difference in either the early or late direction.

- In broadcast programming, the minute planning of the content of a radio or television broadcast channel, the result of that activity is the generation of a list of shows to be broadcast at regular times or at specific times, which is then distributed to the public so that the potential audience for the show will know when it will be available to them.

- Concerts and sporting events are typically scheduled so that fans can plan to buy tickets and attend the events.

Internal Schedules

An internal schedule is a schedule that is only of importance to the people who must directly abide by it. It has been noted that "groups often begin with a schedule imposed from the outside, but effective groups also develop an internal schedule that sets goals for the completion of micro-tasks". Unlike schedules for public events or publicly available amenities, there is no need to go to the time

and effort of publicizing the internal schedule. To the contrary, an internal schedule may be kept confidential as a matter of security or propriety.

An example of an internal schedule is a workplace schedule, which lists the hours that specific employees are expected to be in a workplace, ensure sufficient staffing at all times while in some instances avoiding overstaffing. A work schedule for a business that is open to the public must correspond to the hours of operation of the business, so that employees are available at times when customers are able to use the services of the business. One common method of scheduling employees to ensure the availability of appropriate resources is a Gantt chart. Another example of an internal schedule is the class schedule of an individual student, indicating what days and times their classes will be held.

Project Management Scheduling

A schedule may also involve the completion of a project with which the public has no interaction public prior to its completion. In project management, a formal schedule will often be created as an initial step in carrying out a specific project, such as the construction of a building, development of a product, or launch of a program. Establishing a project management schedule involves listing milestones, activities, and deliverables with intended start and finish dates, of which the scheduling of employees may be an element. A production process schedule is used for the planning of the production or the operation, while a resource schedule aids in the logistical planning for sharing resources among several entities.

In such cases, a schedule "is obtained by estimating the duration of each task and noting any dependencies amongst those tasks". Dependencies, in turn, are tasks that must be completed in order to make other tasks possible, such as renting a truck before loading materials on the truck (since nothing can be loaded until the truck is available for things to be loaded on). Scheduling of projects, therefore, requires the identification of all of the tasks necessary to complete the project, and the earliest time at which each task can be completed. In creating a schedule, a certain amount of time is usually set aside as a contingency against unforeseen days. This time is called scheduling variance, or float, and is a core concept for the critical path method.

In Computing

Scheduling is important as an internal process in computer science, wherein a schedule is a list of actions from a set of transactions in databases, and scheduling is the way various processes are assigned in computer multitasking and multiprocessing operating system design. This kind of scheduling is incorporated into the computer program, and the user may be completely unaware of what tasks are being carried out and when. Scheduling operations and issues in computing may include:

- The operation of a network scheduler or packet scheduler, an arbiter program that manages the movement of certain pieces of information in the computer.

- Open-shop scheduling, Job Shop Scheduling, Flow Shop Scheduling Problem, optimization problems in computer science.

- I/O scheduling, the order in which I/O requests are submitted to a block device in operating systems.

- Job scheduler, an enterprise software application in charge of unattended background executions.

In Wireless Communications

Wireless networks should have a flexible service architecture to integrate different types of services on a single air-interface because terminals have different service requirements. On top of the flexible service architecture, effective Quality of Service (QoS) management schemes are also needed. Therefore, wireless resources need to be shared among all terminals carefully and it is desirable to schedule the usage of wireless resources as efficiently as possible, while maximizing the overall network performance.

In Operations Research

The scheduling of resources, usually subject to constraints, is the subject of several problems that are in the area of research known as operations research, usually in terms of finding an optimal solution or method for solving.

For example, the nurse scheduling problem is concerned with scheduling a number of employees with typical constraints such as rotation of shifts, limits on overtime, etc. The travelling salesman problem is concerned with scheduling a series of journeys to minimize time or distance. Some of these problems may be solved efficiently with linear programming, but many scheduling problems require integer variables. Although efficient algorithms exist to give integer solutions in some situations, most problems that require integer solutions cannot yet be solved efficiently.

In Transportation Planning

Scheduling is useful in transportation planning. The important components of transportation improvement proposals include (a) comprehensive evaluations of the scope of work to be completed, (b) reasonably accurate cost estimates for finishing the task, and (c) a feasible project schedule. If any of these factors are not accurately defined, then there is a strong possibility of unexpected difficulties. Poor scoping and/or scheduling may result in serious budget problems, delays and cancellations of transportation improvements, and sometimes even a domino effect that can negatively impact the entire area's transportation planning.

In Education

In an educational institution, a timetable must be established that refers students and teachers to classrooms each hour. The challenge of constructing this schedule for larger institutions was addressed by Gunther Schmidt and Thomas Ströhlein in 1976. They formalized the timetable construction problem, and indicated an iterative process using logical matrices and hypergraphs to obtain a solution.

Google Calendar

Google Calendar is a time-management and scheduling calendar service developed by Google. It became available in beta release April 13, 2006, and in general release in July 2009, on the web and as mobile apps for the Android and iOS platforms.

Google Calendar allows users to create and edit events. Reminders can be enabled for events, with options available for type and time. Event locations can also be added, and other users can be invited to events. Users can enable or disable the visibility of special calendars, including Birthdays, where the app retrieves dates of births from Google contacts and displays birthday cards on a yearly basis, and Holidays, a country-specific calendar that displays dates of special occasions. Over time, Google has added functionality that makes use of machine learning, including "Events from Gmail", where event information from a user's Gmail messages are automatically added to Google Calendar; "Reminders", where users add to-do activities that can be automatically updated with new information; "Smart Suggestions", where the app recommends titles, contacts, and locations when creating events; and "Goals", where users enter information on a specified personal goal, and the app automatically schedules the activity at optimal times.

Google Calendar's mobile apps have received polarized reviews. 2015 reviews of the Android and iOS apps both praised and criticized the design. While some critics praised the design for being "cleaner", "bold" and making use of "colorful graphics", other reviewers asserted that the graphics took up too much space. The Smart Suggestions feature was also liked and disliked, with varying levels of success in the app actually managing to suggest relevant information upon event creation. The integration between Google Calendar and Gmail was praised, however, with critics writing that "all of the relevant details are there".

Features

Google Calendar allows users to create and edit events. Events have a set start time and stop time, with an option for an "All-day event". Users can enable a "Recurring" functionality with optional parameters for frequency. Users can add a color to an event for recognition or to distinguish the event from others. Users can optionally set notifications, with options for type (email, mobile push notification) and time. Locations can be added for easy understanding of an event's place. Events are viewable in different types of setups, including day, week, month, or schedule. Users can invite other people to events; for other Google Calendar users, the event becomes visible in their calendar, and for non-Google Calendar users, an email will have options for "Yes", "No", or "Maybe". Privacy settings allow the user to define the levels of public visibility of the entire calendar or individual events. Although the calendar defaults to showing users event times in their local time, users can specify a different time zone for an event. Users can enable or disable the visibility of special calendars, including a Birthdays calendar, that automatically retrieves dates of births from a user's Google contacts and displays the dates on a yearly basis, and a Holidays calendar, a country-specific calendar featuring dates of special occasions.

The user interface of Google Calendar was originally designed by Kevin Fox. Google Calendar allows the user to import events from a different calendar application, with notable support for both Microsoft Outlook and Apple iCloud calendars.

Updates

In December 2010, Google added the ability for users to select a time zone for an event, a notable feature that was previously missing; the feature's absence was criticized in the media.

In August 2015, Google added an "Events from Gmail" feature, where event information from a user's Gmail messages are automatically added to Google Calendar. The feature, enabled by default,

will also update events with new information based on new email messages received, such as flight delays.

In December 2015, Google added a "Reminders" feature, enabling users to add to-do activities as Reminders, with those activities being displayed in the calendar alongside regular events. Google also states that Reminders can automatically add additional, helpful information to Reminders based on known details, such as numbers or addresses. Reminders serves as a cross-service feature, meaning Reminders also show up in Inbox by Gmail, Google Now, and Google Keep.

In January 2016, Google added "Smart Suggestions" to Google Calendar on their mobile apps. Smart suggestions will recommend titles of events, as well as locations and contacts. At the same time as Smart Suggestions, Google also added holiday calendars for 54 new countries, adding up to a total of 143 country-specific holiday calendars.

In April 2016, Google added a "Goals" feature. Goals being activities the user wishes to complete. After answering brief questions, including "How often?" and "Best time?", Google Calendar will automatically "find the best windows to pencil in time for that goal", with the calendar adapting to the user's schedule over time, such as rescheduling a goal activity if an event is added that causes a direct conflict with the time of the goal. The feature was expanded in January 2017 with support for Google Fit and Apple Health, to see the progress made towards completing a goal.

In March 2017, the iOS app was updated to feature support for the iPad, and it was again updated in July to add a widget in the iOS "Today" panel.

In June 2017, following May's announcement of Google's new Family Groups feature across several of its services, Google began rolling out "family calendars" for users in Google Calendar. The feature lets family members create shared events visible in a "Family" calendar option.

G Suite

For users of Google's G Suite service, a subscription service for business, education and government customers that offers premium functionality, Google Calendar has a "Finding a time" feature that can suggest the best time for an event with a group of people, based on available times for each individual in the group. Additionally, the feature can also schedule the meeting room.

Platforms

Google Calendar entered a limited beta release on April 13, 2006, and exited the beta stage in July 2009. Initially only available on the web and on the Android operating system, an iOS app was released on March 10, 2015.

Personal Digital Assistant

A personal digital assistant (PDA), also known as a handheld PC, is a variety mobile device which functions as a personal information manager. PDAs have been mostly displaced by the widespread adoption of highly capable smartphones, in particular those based on iOS and Android.

Nearly all modern PDAs have the ability to connect to the Internet. A PDA has an electronic visual display, letting it include a web browser. Most models also have audio capabilities, allowing usage as a portable media player, and also enabling most of them to be used as telephones. Most PDAs can access the Internet, intranets or extranets via Wi-Fi or Wireless Wide Area Networks. Sometimes, instead of buttons, PDAs employ touchscreen technology. The technology industry has recently recycled the term personal digital assistance. The term is more commonly used for software that identifies a user's voice to reply to the queries.

The Palm TX.

The first PDA, the Organiser, was released in 1984 by Psion, followed by Psion's Series 3, in 1991. The latter began to resemble the more familiar PDA style, including a full keyboard. The term *PDA* was first used on January 7, 1992 by Apple Computer CEO John Sculley at the Consumer Electronics Show in Las Vegas, Nevada, referring to the Apple Newton. In 1994, IBM introduced the first PDA with full telephone functionality, the IBM Simon, which can also be considered the first smartphone. Then in 1996, Nokia introduced a PDA with telephone functionality, the 9000 Communicator, which became the world's best-selling PDA. Another early entrant in this market was Palm, with a line of PDA products which began in March 1996.

Apple Newton MessagePad (1993) – Computer History Museum.

Typical Features

A typical PDA has a touchscreen for navigation, a memory card slot for data storage, and IrDA, Bluetooth and/or Wi-Fi. However, some PDAs may not have a touchscreen, using softkeys, a directional

pad, and a numeric keypad or a thumb keyboard for input. To have the functions expected of a PDA, a device's software typically includes an appointment calendar, a to-do list, an address book for contacts, a calculator, and some sort of memo (or "note") program. PDAs with wireless data connections also typically include an email client and a Web browser, and may or may not include telephony functionality.

Touchscreen

PalmPilot organiser on display at the Musée Bolo, EPFL, Lausanne.

Many of the original PDAs, such as the Apple Newton and Palm Pilot, featured a touchscreen for user interaction, having only a few buttons—usually reserved for shortcuts to often-used programs. Some touchscreen PDAs, including Windows Mobile devices, had a detachable stylus to facilitate making selections. The user interacts with the device by tapping the screen to select buttons or issue commands, or by dragging a finger (or the stylus) on the screen to make selections or scroll.

Typical methods of entering text on touchscreen PDAs include:

- A virtual keyboard, where a keyboard is shown on the touchscreen. Text is entered by tapping the on-screen keyboard with a finger or stylus.

- An external keyboard connected via USB, Infrared port, or Bluetooth. Some users may choose a chorded keyboard for one-handed use.

- Handwriting recognition, where letters or words are written on the touchscreen, often with a stylus, and the PDA converts the input to text. Recognition and computation of handwritten horizontal and vertical formulas, such as "1 + 2 =", may also be a feature.

- Stroke recognition allows the user to make a predefined set of strokes on the touchscreen, sometimes in a special input area, representing the various characters to be input. The strokes are often simplified character shapes, making them easier for the device to recognize. One widely known stroke recognition system is Palm's Graffiti.

Despite research and development projects, end-users experience mixed results with handwriting recognition systems. Some find it frustrating and inaccurate, while others are satisfied with the quality of the recognition.

Touchscreen PDAs intended for business use, such as the BlackBerry and Palm Treo, usually also offer full keyboards and scroll wheels or thumbwheels to facilitate data entry and navigation. Many touchscreen PDAs support some form of external keyboard as well. Specialized folding keyboards, which offer a full-sized keyboard but collapse into a compact size for transport, are available for many models. External keyboards may attach to the PDA directly, using a cable, or may use wireless technology such as infrared or Bluetooth to connect to the PDA. Newer PDAs, such as the HTC HD2, Apple iPhone, Apple iPod Touch, and Palm Pre, Palm Pre Plus, Palm Pixi, Palm Pixi Plus, Google Android (operating system) include more advanced forms of touchscreen that can register multiple touches simultaneously. These "multi-touch" displays allow for more sophisticated interfaces using various gestures entered with one or more fingers.

Memory Cards

Although many early PDAs did not have memory card slots, now most have either some form of Secure Digital (SD) slot, a CompactFlash slot or a combination of the two. Although designed for memory, Secure Digital Input/Output (SDIO) and CompactFlash cards are available that provide accessories like Wi-Fi or digital cameras, if the device can support them. Some PDAs also have a USB port, mainly for USB flash drives. Some PDAs use microSD cards, which are electronically compatible with SD cards, but have a much smaller physical size.

Wired Connectivity

While early PDAs connected to a user's personal computer via serial ports or another proprietary connection, many today connect via a USB cable. Older PDAs were unable to connect to each other via USB, as their implementations of USB didn't support acting as the "host". Some early PDAs were able to connect to the Internet indirectly by means of an external modem connected via the PDA's serial port or "sync" connector, or directly by using an expansion card that provided an Ethernet port.

Wireless Connectivity

Most modern PDAs have Bluetooth, a popular wireless protocol for mobile devices. Bluetooth can be used to connect keyboards, headsets, GPS receivers, and other nearby accessories. It's also possible to transfer files between PDAs that have Bluetooth. Many modern PDAs have Wi-Fi wireless network connectivity and can connect to Wi-Fi hotspots. All smartphones, and some other modern PDAs, can connect to Wireless Wide Area Networks, such as those provided by cellular telecommunications companies. Older PDAs from the 1990s to 2006 typically had an IrDA (infrared) port allowing short-range, line-of-sight wireless communication. Few current models use this technology, as it has been supplanted by Bluetooth and Wi-Fi. IrDA allows communication between two PDAs, or between a PDA and any device with an IrDA port or adapter. Some printers have IrDA receivers, allowing IrDA-equipped PDAs to print to them, if the PDA's operating system supports it. Universal PDA keyboards designed for these older PDAs use infrared technology. Infrared technology is low-cost and has the advantage of being allowed aboard.

Synchronization

Most PDAs can synchronize their data with applications on a user's computer. This allows the user to update contact, schedule, or other information on their computer, using software such as Microsoft Outlook or ACT!, and have that same data transferred to PDA—or transfer updated information from the PDA back to the computer. This eliminates the need for the user to update their data in two places. Synchronization also prevents the loss of information stored on the device if it is lost, stolen, or destroyed. When the PDA is repaired or replaced, it can be "re-synced" with the computer, restoring the user's data. Some users find that data input is quicker on their computer than on their PDA, since text input via a touchscreen or small-scale keyboard is slower than a full-size keyboard. Transferring data to a PDA via the computer is therefore a lot quicker than having to manually input all data on the handheld device.

Most PDAs come with the ability to synchronize to a computer. This is done through synchronization software provided with the handheld, or sometime with the computer's operating system. Examples of synchronization software include:

- HotSync Manager, for Palm OS PDAs.

- Microsoft ActiveSync, used by Windows XP and older Windows operating systems to synchronize with Windows Mobile, Pocket PC, and Windows CE PDAs, as well as PDAs running iOS, Palm OS, and Symbian.

- Microsoft Windows Mobile Device Center for Windows Vista, which supports Microsoft Windows Mobile and Pocket PC devices.

- Apple iTunes, used on Mac OS X and Microsoft Windows to sync iOS devices (such as the iPhone and iPod touch).

- iSync, included with Mac OS X, can synchronize many SyncML-enabled PDAs.

- BlackBerry Desktop Software, used to sync BlackBerry devices.

These programs allow the PDA to be synchronized with a personal information manager, which may be part of the computer's operating system, provided with the PDA, or sold separately by a third party. For example, the RIM BlackBerry comes with RIM's Desktop Manager program, which can synchronize to both Microsoft Outlook and ACT. Other PDAs come only with their own proprietary software. For example, some early Palm OS PDAs came only with Palm Desktop, while later Palm PDAs—such as the Treo 650—have the ability to sync to Palm Desktop or Microsoft Outlook. Microsoft's ActiveSync and Windows Mobile Device Center only synchronize with Microsoft Outlook or a Microsoft Exchange server. Third-party synchronization software is also available for some PDAs from companies like CommonTime and CompanionLink. Third-party software can be used to synchronize PDAs to other personal information managers that are not supported by the PDA manufacturers (for example, GoldMine and IBM Lotus Notes).

Wireless Synchronization

Some PDAs can synchronize some or all of their data using their wireless networking capabilities, rather than having to be directly connected to a personal computer via a cable. Devices running

Palm's webOS or Google's Android operating system primarily sync with the cloud. For example, if Gmail is used, information in contacts, email, and calendar can be synchronized between the PDA and Google's servers. RIM sells BlackBerry Enterprise Server to corporations so that corporate BlackBerry users can wirelessly synchronize their PDAs with the company's Microsoft Exchange Server, IBM Lotus Domino, or Novell GroupWise servers. Email, calendar entries, contacts, tasks, and memos kept on the company's server are automatically synchronized with the BlackBerry.

Operating Systems of PDAs

The most common operating systems pre-installed on PDAs are:

- Palm OS.

- Microsoft Windows Mobile (Pocket PC) with a Windows CE kernel.

Other, rarely used operating systems:

- EPOC, then Symbian OS (in mobile phone + PDA combos).

- Linux (e.g. VR3, iPAQ, Sharp Zaurus PDA, Opie, GPE, Familiar Linux etc.).

- Newton.

- QNX (also on iPAQ).

Automobile Navigation

Some PDAs include Global Positioning System (GPS) receivers; this is particularly true of smart-phones. Other PDAs are compatible with external GPS-receiver add-ons that use the PDA's processor and screen to display location information. PDAs with GPS functionality can be used for automotive navigation. PDAs are increasingly being fitted as standard on new cars. PDA-based GPS can also display traffic conditions, perform dynamic routing, and show known locations of roadside mobile radar guns. TomTom, Garmin, and iGO offer GPS navigation software for PDAs.

Ruggedized

Some businesses and government organizations rely upon rugged PDAs, sometimes known as enterprise digital assistants (EDAs) or mobile computers, for mobile data applications. These PDAs have features that make them more robust and able to handle inclement weather, jolts and moisture. EDAs often have extra features for data capture, such as barcode readers, radio-frequency identification (RFID) readers, magnetic stripe card readers, or smart card readers. These features are designed to facilitate the use of these devices to scan in product or item codes.

Typical applications include:

- Access control and security.

- Capital asset maintenance.

- Facilities maintenance and management.

- Infection control audit and surveillance within healthcare environments.

- Medical treatment and recordkeeping in hospitals.

- Meter reading by utilities.

- Military (U.S. Army).

- Package delivery.

- Park and wildlife rangers.

- Parking enforcement.

- Route accounting.

- Supply chain management in warehouses.

- Taxicab allocation and routing.

- Waiter and waitress applications in restaurants and hospitality venues.

- Wildlife biologists.

Educational uses

PDAs and handheld devices are allowed in many classrooms for digital note-taking. Students can spell-check, modify, and amend their class notes on a PDA. Some educators distribute course material through the Internet or infrared file-sharing functions of the PDA. Textbook publishers have begun to release e-books, which can be uploaded directly to a PDA, reducing the number of textbooks students must carry. Brighton and SUSSEX Medical School in the UK was the first medical school to provide wide scale use of PDAs to its undergraduate students. The learning opportunities provided by having PDAs complete with a suite of key medical texts was studied with results showing that learning occurred in context with timely access to key facts and through consolidation of knowledge via repetition. The PDA was an important addition to the learning ecology rather than a replacement. Software companies have developed PDA programs to meet the instructional needs of educational institutions, such as dictionaries, thesauri, word processing software, encyclopedias, webinar and digital lesson planners.

Online Calendar and Task Scheduling Tool

In recent time, increased use of Internet-enabled mobile devices has given rise to the use of digital calendars. The useful features and intuitive designs of Online Calendar have caught attention of business owners, CEOs and employees alike. It is a most useful tool that a modern business can own to keep the workforce organized and efficient. Whether a person works as a freelancer or runs a company with 500 employees, having an online calendar simplifies task scheduling, catching up for meetings, booking time slot for appointments, making to-do lists, sharing a day's plan with clients or team, and do a lot more. Online calendar is a lifesaver, as it adds more to efficient running of an office.

Set up meetings and events in a centralized way by getting an overview of others' calendars. If a user is connected to the Internet, Online calendar will remain up-to-date regardless of which computer or hand-held device is used. All changes made on the calendar are accessible to all users in real-time. It is simple and easy to use and keeps a track of all upcoming events and tasks.

The users can perform following functions:

- Get a quick glance of all activities through the day – for themselves and the selected team members.

- Plan work for an entire day, week or month in advance.

- Identify availability of others for meetings, appointments and important discussions.

- Get reminders or alerts for specific events and tasks.

- Keep a track of complete and incomplete tasks.

- Effectively manage remote workers by remaining connected.

- Share the calendar with people in immediate work circle.

- Manage project-related tasks and meet deadlines efficiently.

- Put personal and family appointments on the calendar to balance personal and work life.

- Create recurring events and share with all participants in a click of a button.

- Schedule events and notify all stakeholders through email.

- Get notifications by email when any change occurs in the event schedule.

- Allow clients to access one's calendar and block time slot for meetings, if required.

Quick Glance at all Events Scheduled for a Specific Day

Any number of events can be set up for a specific day. Pick up a time that suits well for all the participants. The Upcoming Events section can be customized to view daily, weekly or monthly events, as per the needs.

Detailed View of the Calendar
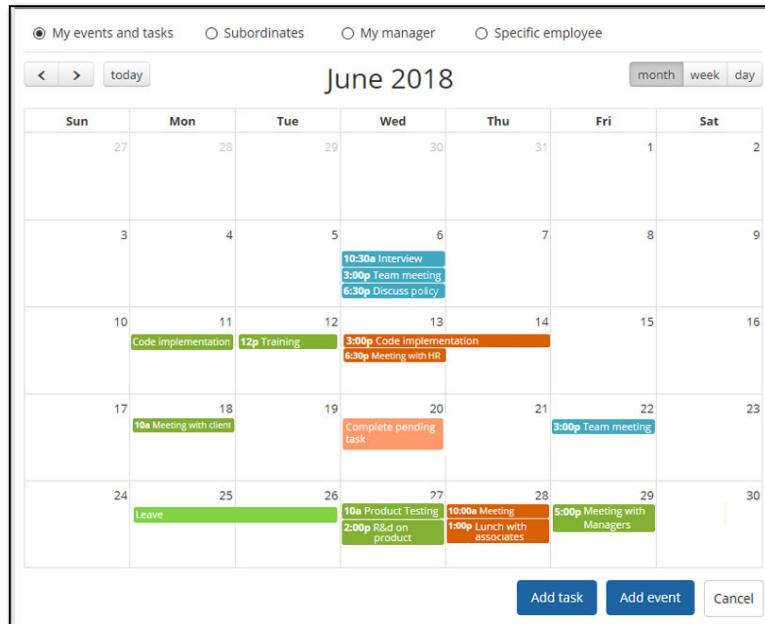
All the important events and tasks are mentioned on the respective dates. Users can select unique colour codes for specific tasks depending upon their preferences. A CEO can look through calendar of all Project Managers to check their availability and call for a meeting at a time that's suitable for all participants. The online calendar even allows managers to mark an event in their subordinate's list of events.

Add a New Event in the Calendar

Add an event in the calendar with details, including agenda, name of attendees, date, time and location. One can even notify all the participants through email. All you need to do is tick mark a check box.

List of Pending and Upcoming Tasks

Though employees use goal sheets to manage their day-to-day tasks, yet some of them never bother to open them and see what's needed to achieve. Managers can use Task Scheduler wisely to add tasks in their subordinates' to-do lists to draw their attention on goals, which are important and not yet achieved. This can keep employees productive and goal-oriented.

Easy Integration with all Email Clients

Online calendar can be integrated seamlessly with all email clients to increase productivity and greater transparency when trying to manage events and tasks efficiently. When setting up a meeting, the participants can be notified through an email too.

Access Control

Each user can allow other users to access their entire calendar or selected calendar items. Visibility and access rights can be controlled, as per the needs of individuals. For instance, a manager can see calendar details of their subordinates. However, the manager may use visibility rights to allow

subordinates to view the entire calendar or just few items (like time and event). The access rights can be customized for each member of the team depending upon the needs.

Benefits of Online Calendar and Task Scheduling Tool:

Save Time and Effort and Increase Employee Productivity

Every CEO or a manager has meetings and tasks that reoccur weekly, monthly or quarterly. Remembering them or putting reminders on cell phone isn't a good idea.

Create a recurring event and schedule it so that it is visible to all the participants. This task takes less than a minute. It even saves time to reschedule it each time and the need for everyone to remember the event.

This means a person can also block their time slot to keep others informed about their availability and schedule. For instance, when a manager blocks a time period of 2 hours (from 3 P.M. to 5 P.M.) on every Friday to discuss team goals, employees remain aware about this recurring event and they participate in the meeting accordingly. Through the calendar, they may even see feasibility to request or book some other time slot for having a discussion or quick chat with their manager on Friday, when needed.

Balance Work and Personal Life

In the last 20 years, work time has increased by 15% and leisure time has decreased by 33% in the corporate sector. This happens because people do not plan their work well in advance and spend their leisure time in completing pending work-related tasks.

Use online calendars to plan your work by scheduling tasks and setting deadlines. Automatic reminders prompt employees whenever a task is delayed or left unfinished even after the deadline. This way the calendar and task scheduler keep users on toes to finish their work on time and track achievements in a timely manner.

Prioritize Tasks

When it comes to work, every small task is important, and it takes up a significant amount of your time. A study found that 20% of the average workday is spent on "crucial" and "important" things, while 80% of the average workday is spent on things that have "little value" or "no value".

An online calendar and task scheduling tool can be used for prioritizing tasks. It ensures timely completion of high priority tasks, while assuring rest of the tasks are also done within the estimated

timelines. It eliminates the need to go back and forth through work emails and choose what needs to be done first.

Improve Communication

With an overview to others' calendar schedule, it negates the need to personally contact everyone for scheduling any meeting or an event. Just share your availability in online calendar to keep everyone in your immediate work circle informed.

Advantages of an Online Calendar

Calendars are important parts of our daily lives. But in addition to scratching out a calendar on a cave wall, there are lots of other more common kinds of calendars. There are large desk pad calendars, flip calendars for walls or desktops, and calendar appointment books of various sizes and styles.

In the last few years, one of the more popular kinds of calendars that have come into use is the online calendar. The most likely reasons this type of calendar has become a top choice of many people is because of these advantages of using an online calendar.

Use Easily Access from Multiple Devices

As so many of us hustle between work, home, family, and many other activities and obligations we must have a way to keep track of everything. Of course, we have phones, Fitbits and other methods of keeping track of time. But calendars need to be mobile too.

The online calendar has answered this need. It can be accessed from just about any mobile device you carry such as phones and laptops. This is just one advantage of an online calendar that makes it more convenient than the day planners of the past.

Schedule Meetings and Appointments

Another advantage of online calendars is the ability to schedule meeting and appointments from anywhere. If you are in a meeting, for instance, you can set up the next one using the online calendar right on your phone.

This allows everyone to coordinate schedules and saves time. It eliminates the need to go back and forth among all the meeting members over the following days trying to figure out when everyone can get together.

Set up Reminders

You can also set up reminders on your phone to prevent you from missing important appointments and meetings. This is just one more advantage of an online calendar.

Paper calendars can't compete with this great feature. To make it even more convenient you can set up the reminders in different time increments allowing you ample time to get to scheduled events on time.

Block Time in your Day

Online calendars can be used as a way to increase your productivity. One example of this is through time blocks.

You can schedule time to work on important projects allowing you to complete those that are a priority or have deadlines. You can use the online calendar as a tool to help you get done what is needed and stay on task.

Create Recurring Events in your Online Calendar

Do you have meetings or appointments that occur regularly? If so, you can schedule them as a recurring event right on your calendar. This is just another example of the advantages of an online calendar.

As you can see there are many advantages of using online calendars in both your work and home life. They are a great way to stay organized and get more done in your day.

Time Management Software

Time management tools help you keep track of the specific ways you use your time throughout the day.

Properly tracking time the time you or your team spent actually working is essential to determine how profitable certain projects are. You can also use these tools to identify problem areas and correct them before they become bigger problems in the long run.

Time management tools often come in the form of time trackers and time billing software. We looked for tools that focused more on the time tracking functionality over time billing. We also considered tools that are:

- Easy to use: If you spend more time trying to figure out your time tracking software, something is wrong.

- Flexible: The best time management tools allow you to track time by project or individual employee.

- Collaborative: Interacting with your employees or leaving comments on specific projects are both important for tracking time appropriately.

List of the Top time Management Tools:

Time Doctor

Time Doctor is made for remote teams and integrates with a variety of third-party project management apps like Asana, JIRA and more. It provides a ton of functionality that allows you to gain valuable insights into the way your employees are using their time so you can improve ROI and overall team performance.
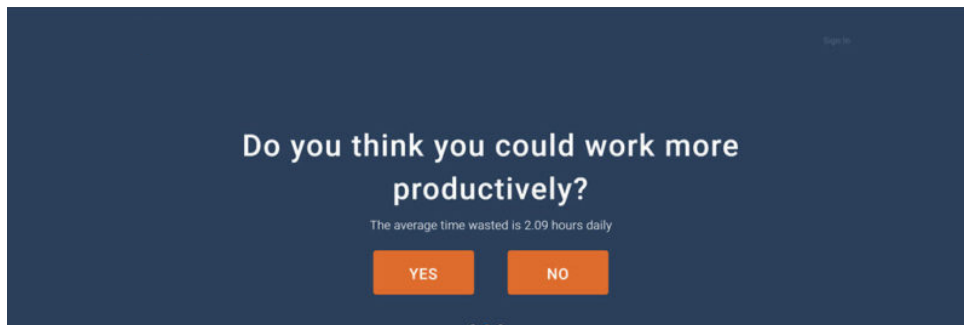
Time Doctor's features:

- Automate screenshots at customizable time intervals during working hours.

- Monitor how much time employees spend on chat software, phone calls or in meetings.

- Android and iOS apps for remote time tracking.

- Generate extensive, customizable reports by individual, team, client or project.

- Track what websites and apps your employees use most.

Rescue Time

RescueTime is geared toward individuals who want to improve their productivity. It gives you a personalized productivity score each day that helps you identify inefficiencies in your personal workflow. It also helps you disable or otherwise block distractions while you work for maximum productivity potential.
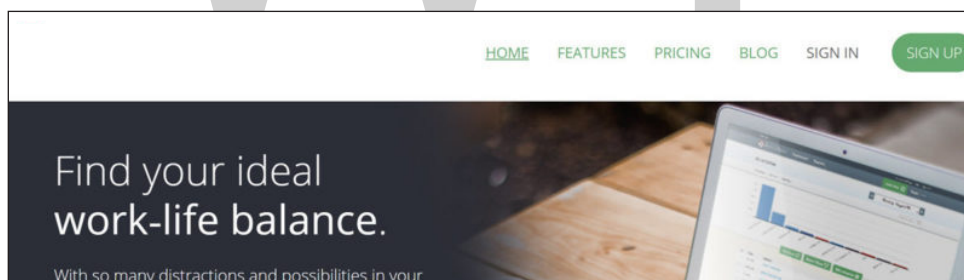
RescueTime's features:

- Set goals for yourself and track your progress throughout your day or week.

- Block access to any distracting websites to prevent yourself from getting off track.

- Track your offline activity like meetings and phone calls.

- Customize alerts that notify you of a variety of different things, ranging from too much time spent on a specific activity or for when you've been extra productive.

- Get detailed reports on goal completion, time spent on website and total time spent on projects.

Toggl

Toggl works best for small businesses and freelancers. Its free-tier product offers a lot more than other free solutions, and its paid plans offer business analytics. Toggl is intuitive and easy to use, making the transition into tracking time easier for everyone on the team.
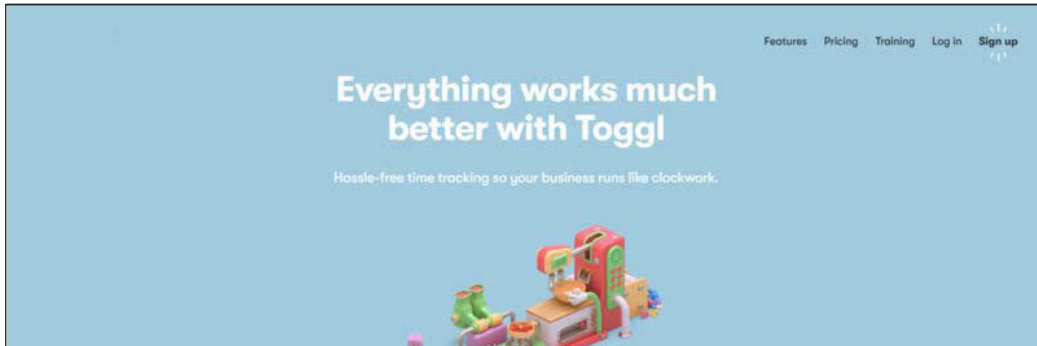
Toggl features:

- Browser integration runs seamlessly in the background.

- Start tracking time with a simple click of your mouse.

- Use Toggl on any of your devices, desktop or mobile, with over 80 online integrations.

- Includes project and team management functionality for greater collaboration.

- Send reports directly to your email inbox.

Timely

Timely is dedicated to ending manual time tracking. It uses a sophisticated AI called Memory AI to automate time tracking by following what you do on your computer or your phone. Employers can view a general overview of hours worked, while employees will be the only ones who can see specific details.
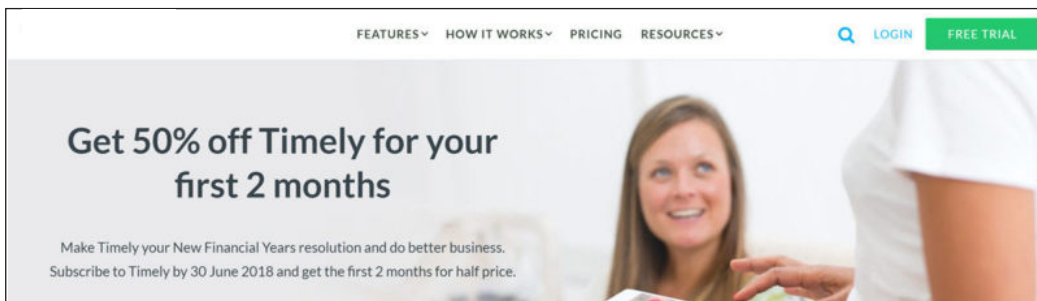
Timely features:

- Fully automated time tracking.

- Allocate hours and projects based on employee workload and availability.

- Generate helpful reports to measure team performance.

- Measure team capacity based on the projects and hours being worked.

Tick

Tick is a straightforward time tracking tool that simplifies the way you and your employees keep track of the hours you work. With a streamlined interface and the ability to track time across different platforms, this time management software is a great solution for both individual freelancers and large teams alike.
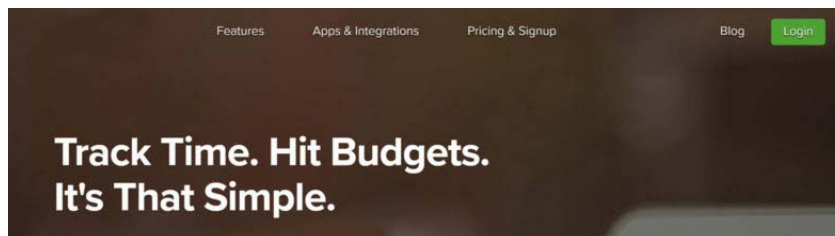
Tick features:

- In-app timers for comprehensive time tracking.

- Assign team members to specific projects for better collaboration.

- Create recurring projects to save you more time in the long run.

- Receive high-level reports that can be expanded for more in-depth details without creating a new report.

- Export reports to Excel, Freshbooks, or QuickBooks.

Hubstaff

Hubstaff is a comprehensive time tracking software that offers real-time tracking of everyone on the team. It's a lightweight tool that runs almost invisibly in the background so you and your employees don't get distracted during crucial productivity hours, all while providing extensive details into the ways you're working.
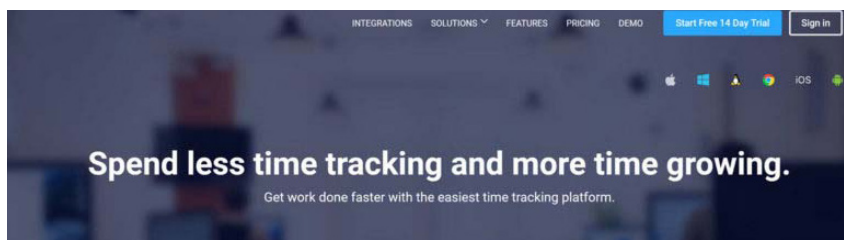
Hubstaff features:

- Integrate with over 30 different applications ranging from project management software to help desk tools.

- Track employee drive time.

- Take randomized screenshots to ensure employees aren't wasting time.

- Monitor the number of keystrokes and mouse clicks employees make, without revealing private or personal information.

- View high-level and detailed time breakdowns with the daily, weekly and monthly calendar.

DeskTime

DeskTime helps businesses increase their productivity and profits through instantaneous time tracking. With features that allow you to identify inefficiencies and monitor employee work habits, this time tracking tools is incredibly useful for today's fast-paced and budget-conscious world.
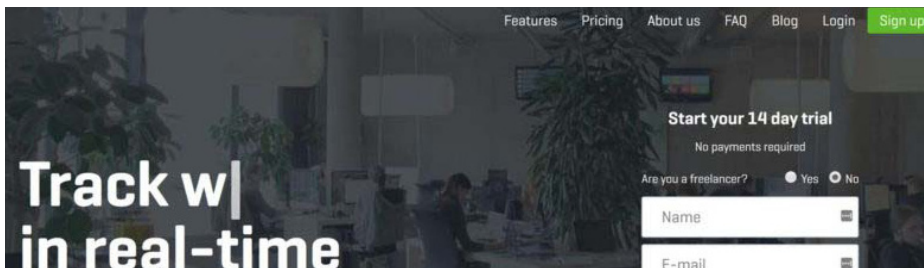
DeskTime features:

- Track the amount of time employees spend on individual applications and URLs on their computers.

- Create customizable reports to gain in-depth insights into your organization's overall working habits and inefficiencies.

- Coordinate employee time off in the Absence Calendar, which allows employees to create and edit their schedules.

- Use DeskTime on desktop or mobile applications.

- Track offline time like meetings or phone calls.

TSheets

Tsheets is an incredibly simple, but comprehensive time tracking tool that helps you manage your employees' productivity more efficiently. It includes tons of features that are meant to replace the outdated, traditional process of punching in and out on bulky hardware.
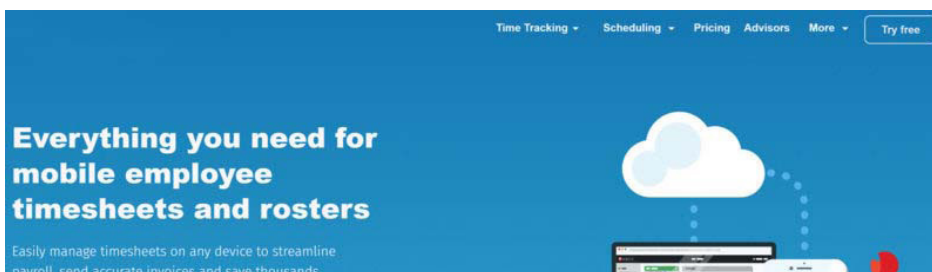
TSheets features:

- Track remote employees using GPS time tracking functionality.

- Schedule employee shifts using the built-in scheduling calendar.

- Create alerts that remind your employees to clock in and out on time to decrease overtime costs.

- View a real-time breakdown of who's currently clocked in and where they are working for the day.

- Use the app on mobile devices so employees are always connected to view alerts and schedule changes as they happen in real time.

Hours

Hours works best for individuals looking to track their own productivity, but the app also includes a team time tracking solution for those interested. Use timers to track the time you spend on any given project across any of your devices.
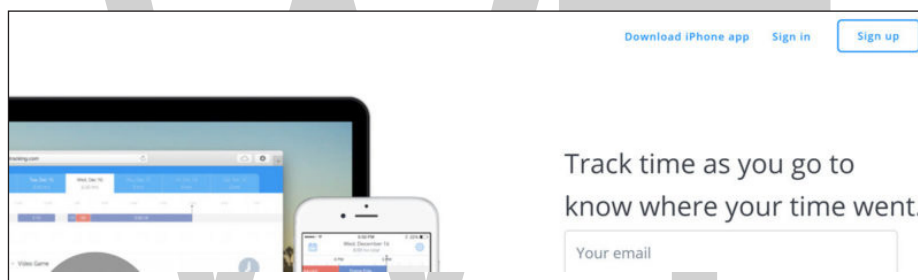
Hours features:

- Beautiful, simple interface that's incredibly easy to use.

- Access across all your devices, whether they be mobile or desktop.

- Flexible timeline view that allows you to easily correct any mistakes in the time you reported.

- View a breakdown of productivity in a streamlined and extra-visual reporting interface.

Timecamp

Timecamp is a free solution for individuals that offers simple time tracking tools. However, you can also choose to purchase the software for teams. The solo version only offers time tracking functionality, while the team versions offers interfaces and add-ons like invoicing and reporting.

Timecamp features:

- Track attendance and time off by user or by team, including when the employee logged in and out.

- Analyze employee and individual productivity by listing the most time-consuming websites and applications.

- Create productivity goals for employees and track their progress.

- Integrate with over 120 different project management apps and tools.

- If needed, bill clients and send them invoices based on time tracked.
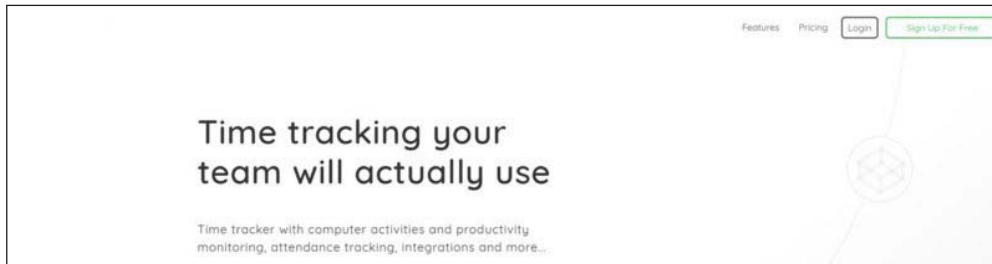
Qbserve

Qbserve is a Mac-only time tracking tool that works automatically in the background to provide you a seamless and productive time working. It allows you to accurately track your own productivity while keeping your data private. This tool is not made for teams.
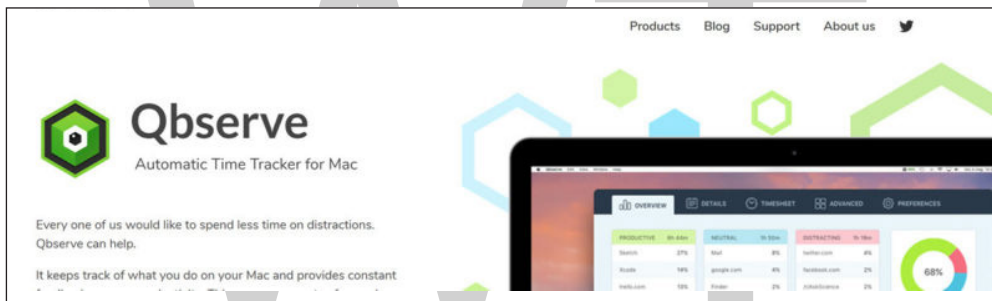
Qbserve features:

- Track your time and productivity seamlessly in the form of a browser integration.

- Receive real-time feedback in the form of a dynamic icon in your menu bar that lets you know how productive you're being.

- Customize notifications to alert you when you're spending too much time away from work.

- Track idle time to know how much time you spent away from your computer doing offline work.

- Export data and reports in both CSV and JSON formats.

ClickTime

ClickTime is a simple yet powerful time tracking tool made for teams. This time tracking tool helps you predict project needs and track budgetary concerns by tracking the amount of time your employees are spending on any given project.
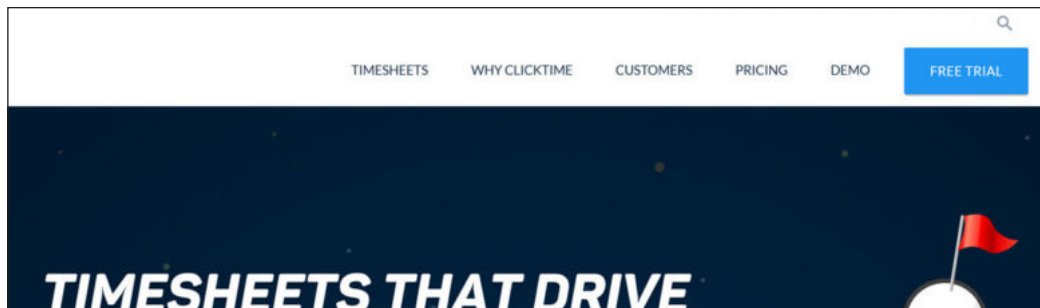
ClickTime features:

- Use the simple desktop or mobile interfaces to accurately track time for all your employees.

- Integrates with Google Calendar for easy meeting tracking.

- Manage employee performance through comprehensive reporting features that allow you to see an individual's profitability.

- View employee availability to plan better for upcoming projects.

- Track time off requests like vacations and sick time.

TopTracker

TopTracker is a completely free time tracking tool that works best for teams of freelancers or individuals. The creators of this tool are dedicated to keeping the tool free while providing all the functionality you need. TopTracker is simple and fully functional without all the complicated and high monthly pricing options.
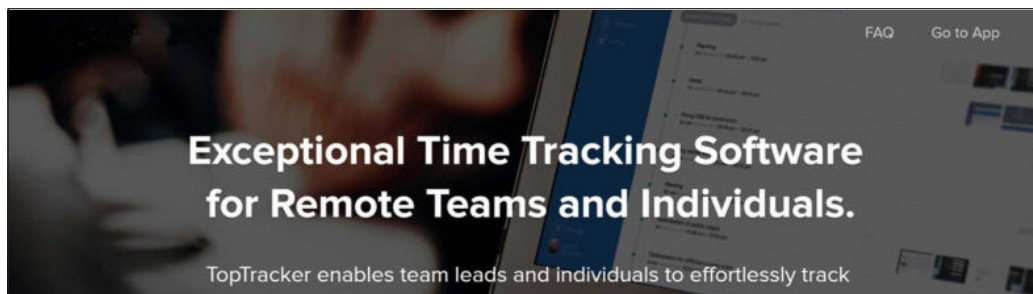
TopTracker features:

- Take timed screenshots of an employee's screen or even webcam shots.

- View a centralized dashboard of all the projects your team is working on, along with details about each employee working.

- Track time from both desktop and mobile devices.

- Control privacy settings so personal information is kept private for your employees.

- Create fully customizable productivity reports to identify areas where work can improve.

Freckle

Freckle is a web-based time tracking tool that aims to lessen the amount of time you and your team need to spend on tracking hours worked. Freckle is quick to install, with an advertised setup time of under three minutes.
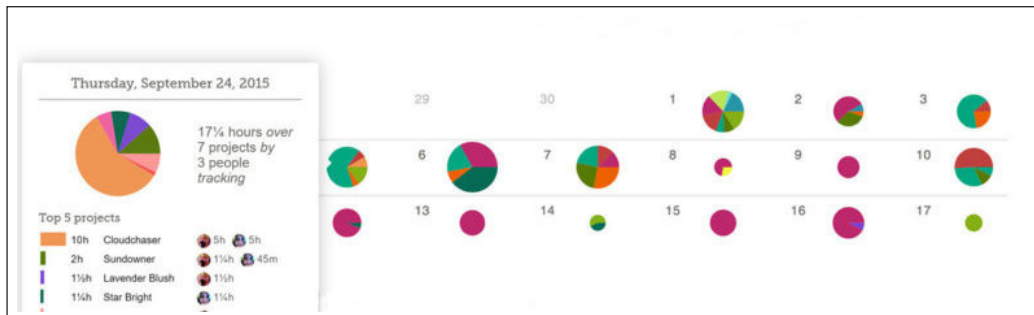
Freckle features:

- A unique, pie-chart view of the hours your employees are spending on individual projects.

- Create new projects or clients simply by typing the new name and initial time spent. No extra configuration needed.

- Generate comprehensive and detailed reports to track both team and individual performance.

- Get support from a team that actually uses the tool to track their own time.

Deputy

Deputy bills itself as an employee scheduling tool that incorporates a wide variety of time tracking functionality. It focuses on easy time tracking and collaboration features so your team stays connected all the time.
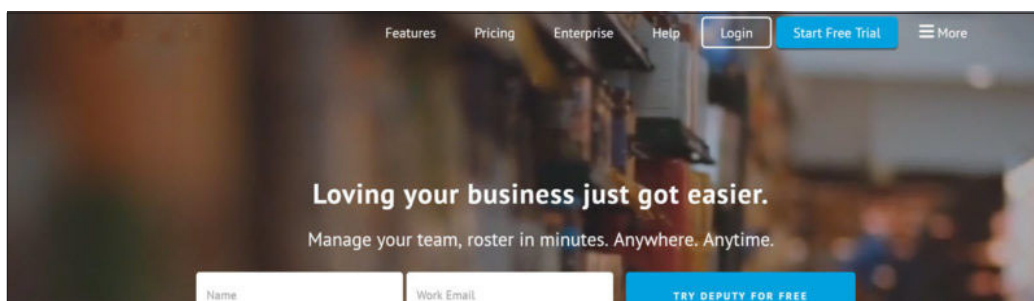
Deputy features:

- Super intuitive clocking in and clocking out functionality for all employees.

- Compatible with mobile devices and web browsers for easier time tracking.

- Create and assign tasks to employees, and track the time it takes for them to complete them.

- Use face detection to ensure employees are where they are supposed to be.

- Generate comprehensive reports to gain valuable insight into the productivity of your employees.

Scoro

As a whole, Scoro is a project management software that focuses heavily on time and team management functionality. Its most robust features are found in these areas, and it provides an incredibly simple way to view employee habits and productivity.

Scoro features:

- Use the feature-rich calendar to schedule meetings and track what everyone is doing.

- Create and assign tasks to teams or individual, and track them on the calendar.

- Customize the dashboard to create a truly unique experience that's specific to your needs.

- Plan budgetary needs based on previous time tracking.

- Customize reports to give you the information you need about your workforce.

Vericlock

Vericlock is a cloud-based time tracking tool that eliminates the need for complicated software or hardware to keep track of employee time. This tool is best used for large or small businesses. While it doesn't offer as much as other solutions, it performs well for simple punch in and punch out tracking.
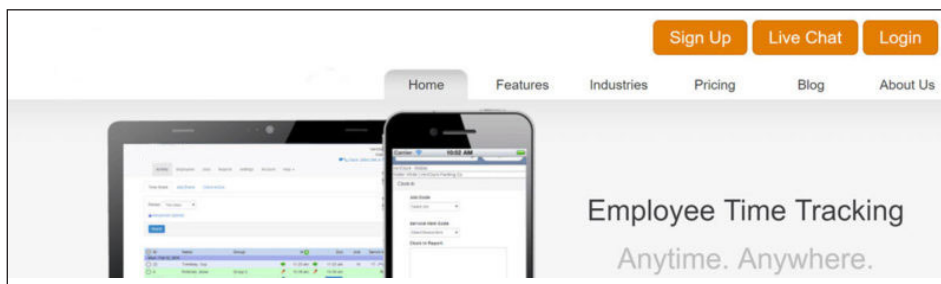
Vericlock features:

- Enable employees to clock in and out using their phones, tablets, or web browsers.

- Receive instant updates on your dashboard whenever employees clock in and out.

- Require employees to sign their time cards and manage disputes directly within the tool.

- Add notes and photos to track job progress more accurately and with better information.

- Configure email alerts to monitor employee time.

Time Tracking Software

Time-tracking software is a category of computer software that allows its employees to record time spent on tasks or projects. The software is used in many industries, including those who employee freelancers and hourly workers. It is also used by professionals who bill their customers by the hour. These include lawyers, freelancers and accountants. The tool could be used stand-alone or be integrated with other applications like project management software, customer support and accounting to name just a few. Time tracking software is the electronic version of the traditional paper timesheet. Tracking time can increase productivity, as businesses can track time spent on tasks and get a better understanding of what practices causes the employees to waste time. Time tracking software enhances accountability, by documenting the time it takes to finish given tasks. The data is collected in database and could be used for data analysis by the human resources departments. Features offered by time-tracking software include:

- Automatic generation of invoices to the professional's clients or customers based on the time spent.

- Tracking of cost overruns for fixed cost projects.

- workforce management packages which track attendance, employee absences, human resources issues, payroll, talent management, and labor analytics.

Types of Time-tracking Software

Timesheet

Allows users to manually enter time spent on tasks.

Time-tracking/Recording

Automatically records activities performed on a computer.

Time-tracking software can be:

- Standalone: Used only to record timesheets and generate reports.

- Integrated as part of:

  ◦ Accounting systems, e.g. timesheet data fed directly to company accounts.

  ◦ Billing systems, e.g. to generate invoices, especially for contractors, lawyers, etc.

  ◦ Project management systems, e.g. timesheet data used by project management software to visualize the effort being spent on projects or tasks.

  ◦ Payroll systems, e.g. to pay employees based on time worked.

◦   Resource scheduling, e.g. bi-directional integration allows schedulers to schedule staff to tasks, which, once complete, can be confirmed and converted to timesheets.

Timesheet Software

Timesheet software is software used to maintain timesheets. It was popularized when computers were first introduced to the office environment with the goal of automating heavy paperwork for big organizations. Timesheet software allows entering time spent performing different tasks.

When used within companies, employees enter the time they've spent on tasks into electronic timesheets. These timesheets can then be approved or rejected by supervisors or project managers.

Since 2006, timesheet software has been moving to mobile platforms (smartphones, tablets, smart watches, etc.) enabling better tracking of employees whose work involves multiple locations.

Time-tracking/Recording Software

Time-tracking/recording software automates the time-tracking process by recording the activities performed on a computer and the time spent on each of them. This software is intended to be an improvement over timesheet software. Its goal is to offer a general picture of computer usage. Automatic time-tracking/recording software records and shows the usage of applications, documents, games, websites, etc.

When used within companies, this software allows monitoring the productivity of employees by recording the tasks they perform on their computers. It can be used to help filling out timesheets.

When used by freelancers, this software helps to create reports for clients (e.g. timesheets and invoices) or to prove work that was done.

Time-tracking Methods

There are several ways companies track employee time using time tracking software:

Durational

Employees enter the duration of the task but not the times when it was performed.

Chronological

Employees enter start and end times for the task.

Automatic

The system automatically calculates time spent on tasks or whole projects, using a connected device or a personal computer, and user input using start and stop buttons. Users can retrieve logged tasks and view the duration, or the start and stop times.

Exception-based

The system automatically records standard working hours except for approved time off or LOA.

Clock-in Clock-out

Employees manually record arrival and departure times.

Monitoring

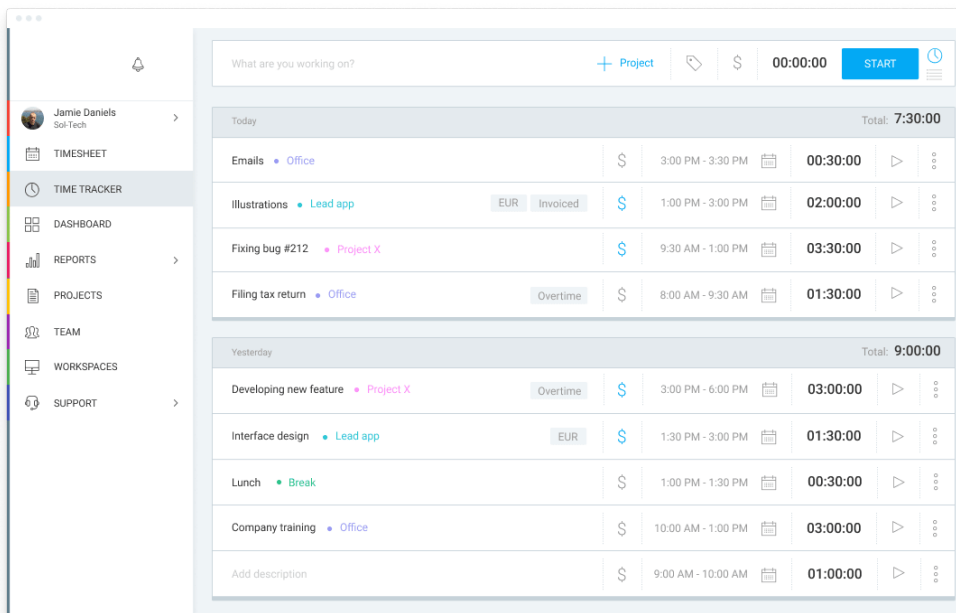The system records active and idle time of employees. It might also record screen captures.

Location-based

The system determines the working status of employees based on their location.

- Resource-scheduling: by scheduling resources in advance, employees schedules can be easily converted to timesheets.

Other Software

Clockify – Work Hours Tracker

Clockify is the ultimate tool meant to improve your time management – this time tracker enables you to track the time you spend on various activities, providing you with data meant to improve your work routine.

The Clockify time management software helps you track work hours, before calculating your billable hours and payroll. You'll also be able to assess whether you always spend your time at work on productive activities, or not.

Once you create an account, you can choose how you want to track time, on the Time Tracker page:

- Timer mode: just start the timer once you start working on an activity, and stop it as soon as you're done.

- Manual mode: enter the time you've spent working on an activity manually. Alternatively, you can enter time manually in the Timesheet view.

After you've logged all your time, you can generate Reports (Summary, Detailed or Weekly) indicating how productive you are with your work within a specific time period (week, month or year), and how much you need to invoice your clients.

Available: Firefox, Chrome, Android, iOS, macOS, Windows, Linux

Google Hangouts – Communication Platform
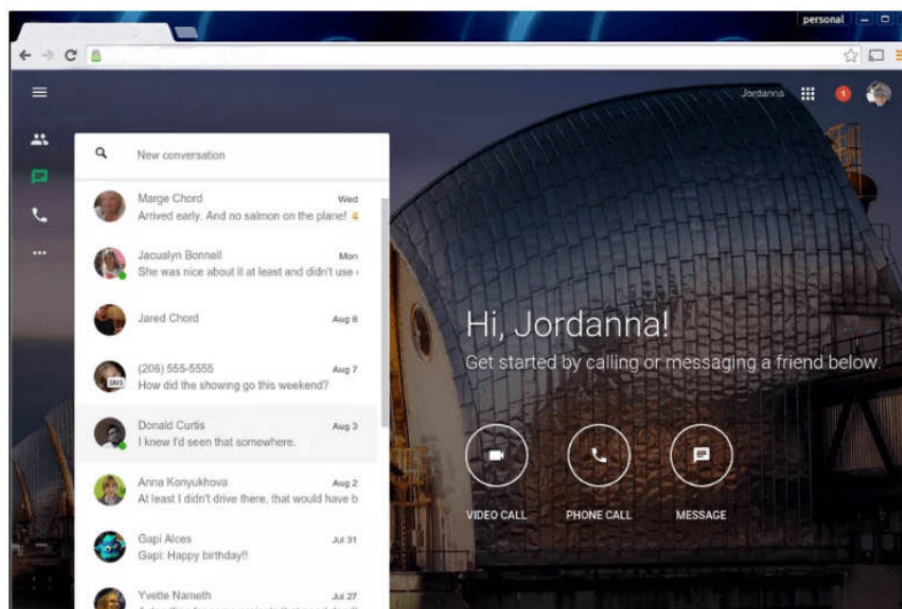
Google Hangouts is a powerful communications platform – you and your team can conduct video, audio and textual chats any time you need.

You'll be able to:

- message your coworkers

- conduct free video and voice calls

- take part in conversations with one person or an entire group, even when offline

You can also participate in group chats with up to 150 people, and group video calls with up to 10 people. For easier setup, you can start the group video call directly from your Gmail account.

In addition, you'll be able to share images, videos, maps, and many other formats meant to clarify your thoughts in a conversation.

If you connect Google Hangouts with Google Voice, you'll also be able to manage SMS messages, as well as access your voicemail.

Available: Web, Android, iOS, Chrome, Firefox

Remember the Milk – Task Manager
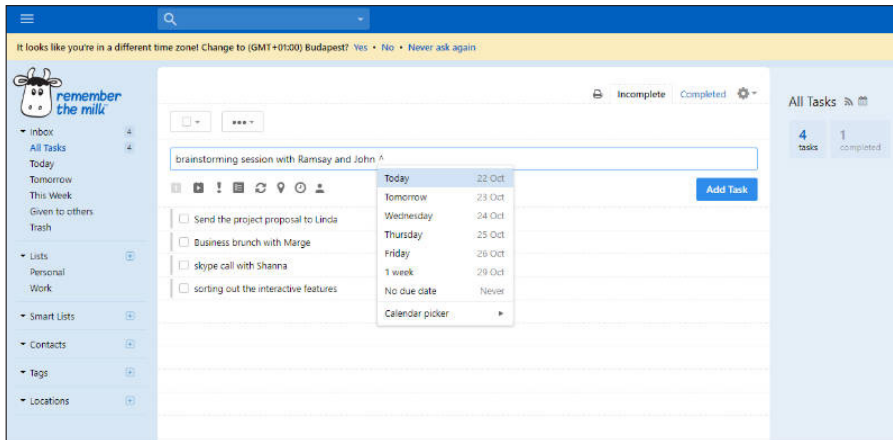
Remember the Milk is the perfect task manager among time management tools, one meant to help you remember (and be encouraged to tackle) items in your to-do list.

This simple virtual assistant allows you to:

- Add Tasks.

- Associate tasks with sub-tasks.

- Define due dates for everything you need to do today, tomorrow, this week, or any other time.

The system distinguishes between personal and business tasks, but you can also take your to-do list game further. Smart lists are created based on special criteria you've previously defined – they're updated automatically, once something about your tasks changes.

The number of platforms where Remember the Milk is available is another astonishing feature.

Available: Chrome, Firefox, Safari, Microsoft Edge, Mac, Windows, Linux, iOS, Android, Blackberry, Fire, Apple Watch.

Clara – Meeting Scheduler

Clara is an AI email time management software meant to streamline your meetings, by helping you schedule and coordinate them.

You'll be able to set up meetings easily by automating the process of arranging a meeting through email. Once you install Clara, each time you need to finalize agreements for a meeting, it will find a solution that fits well with everyone's schedule. It will also send out follow-ups and invites to attendees, before noting in everything in your calendar.

Considering that this time management software tackles all your meeting-related email correspondence automatically, you'll be able to:

- Enjoy a decluttered inbox.

- Focus on daily activities that really matter, instead of wasting a lot of your day on scheduling.

Available: Web
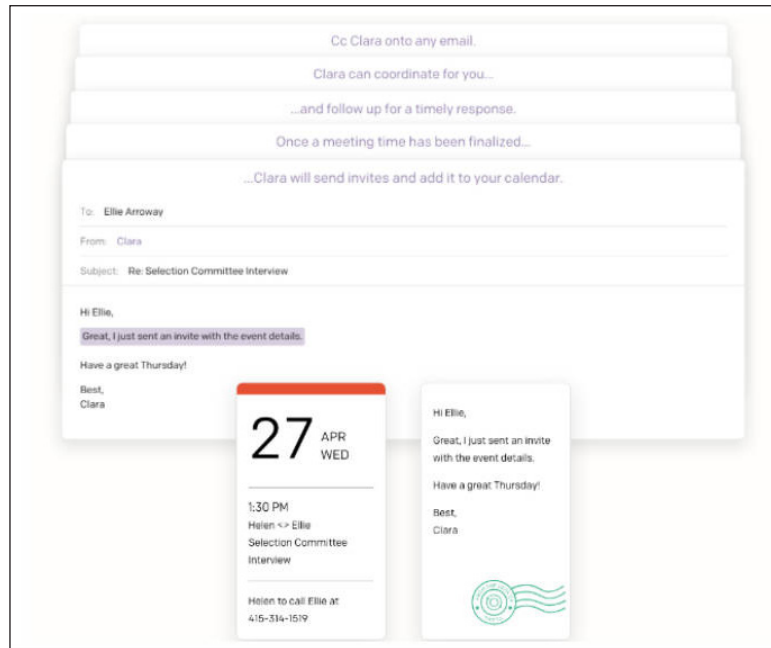
Forest – Focus App

Forest is the ultimate focus app that helps you save time, by encouraging you to pursue your tasks and avoid procrastinating on your phone.

The gist is simple:

- You blacklist websites you want to avoid.

- When you want to focus on a task, you plant a virtual seed – within the next 30 minutes, the seed grows into a virtual tree, but only if you stay focused on the task.

- If you falter on your task, and check a website you've previously blacklisted, your tree withers and dies instantly.

- If you manage to stay focused on all your tasks within their 30-minute time-frames, you cultivate an entire forest.

As an added bonus, if you spend the virtual coins you earn in the tool, the Forest team contacts their partners, Trees for The Future, and arranges for a real tree to be planted somewhere.

Available: Android, iOS, Chrome, Firefox.

Kiwake – Unconventional Alarm Clock
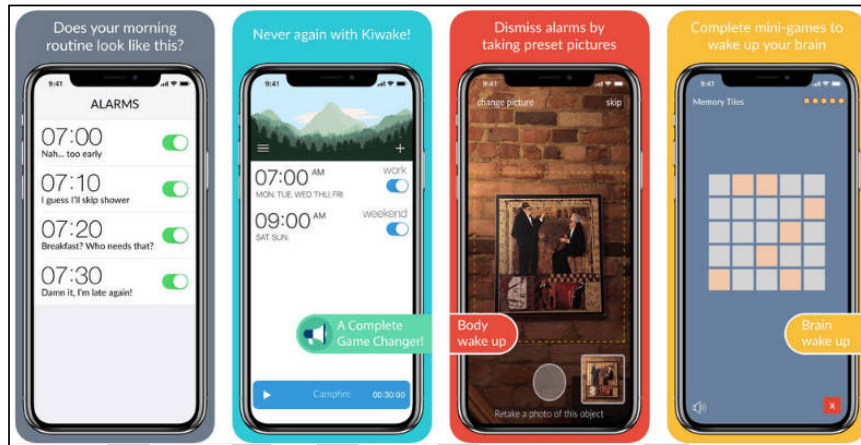
Kiwake is an interesting twist to the old alarm clock formula – you have to prove you've left your bed, and there is no snoozing option at all.

Once the first alarm goes off, you're prompted to get up and take a picture of a specific object located far from your bed.

Then, you have to complete a quick mini-game, in order to wake up your mind.

In the end, you're prompted to go over your schedule for the day and review your main goals.

Once you've completed all these steps, the alarm shuts down.

Luckily, Kiwake doesn't require you to jump upright straight away – if you set up a cooldown timer, you'll be allowed to stretch first. But, for no longer than 3 minutes.

Available: iOS, Android.

Nimbus Note – Note Manager

Nimbus Note is a simple note manager – you'll be able to create and edit notes, sort them in folders and subfolders, and then share them with coworkers.

The tool lets you sort and organize your notes, as well as add context to them, by labeling them with tags.

Nimbus Note also lets you add supporting material to your notes, in the form of audio, video and image files.

You can then turn your notes into comprehensive to-do lists, meant to help you keep track of your assignments.
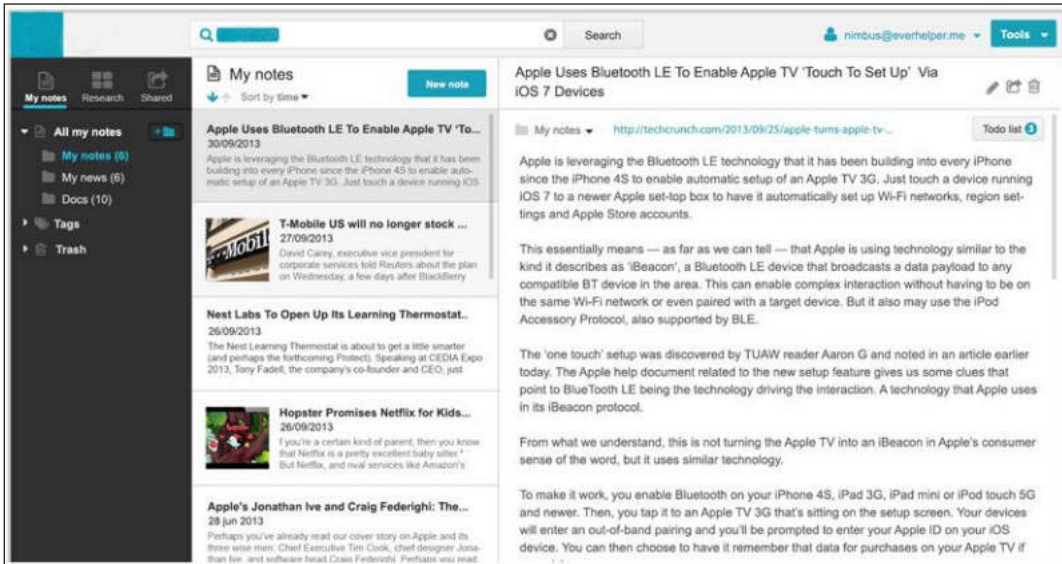
The standout feature is that you can digitize paper documents, such as business cards and pictures. Also, owing to the available text recognition component, you'll be able to manipulate text in the digitized documents as well.

Available: Online, Windows, Chrome, Opera, Android, iOS, Chrome.

Epic Win – RPG Game-style Task Manager

Epic Win takes keeping track of your to-do lists to a whole new level – by gamifying the entire process to a fun RPG game.

Once you open the tool, you'll be prompted to list your chores and reminders, before your avatar takes over – he'll suffer the consequences if you fail to complete a task, or gain a reward if you manage to power through.

You'll be able to tackle repeating tasks, track overdue events, and view reminders – each time you complete a task, your avatar destroys it, leveling up, improving its stats, and gaining riches in the process.

One interesting tidbit is that the avatar changes over time, in order to reflect your routine – it will differ depending on whether you barely manage to juggle your priorities, or have nothing but victories.

Available: Android, iOS.

Focus@Will – Collection of Neuroscience-based Music
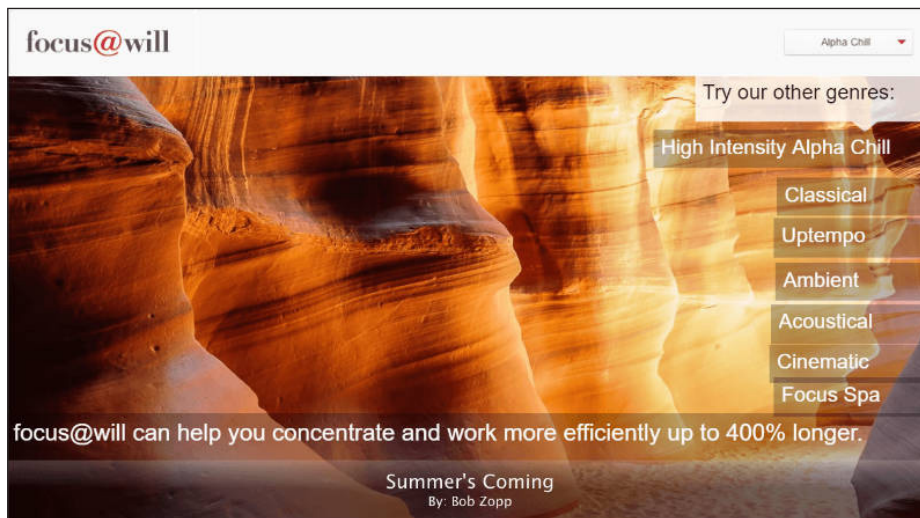
Focus@Will provides you with instrumental music meant to help you finish work faster and procrastinate less, by increasing your productivity and focus levels.

The app combines neuroscience and music – you get tens of thousands of hours of instrumental music, in 50 channels that are updated with new tracks every month.

The bonus channel of the app is the one specifically designed for people with ADD and ADHD – so, with this Focus@Will, focus isn't off limits for anyone.

According to its creators, this time management software eases you into productivity within 20 minutes, which is the time needed for the music to blend in with your thoughts.

Once you've grown accustomed to the music, it keeps you in focused state for a 200-minute session.

Available: Web, Android, iOS.

Join.me – Online Meetings Scheduler

Join.me is designed to help you set up online meetings and web conferences, as well as share your screen with collaborators. You'll save a lot of time you'd otherwise spend getting everyone from your team together in front of the same screen.

With this scheduling app, you'll be able to set up or join conference calls, participate in live text chats, and enjoy a number of sharing options:

- Sharing a screen.

- Sharing screen control.

- Multiple screen sharing.
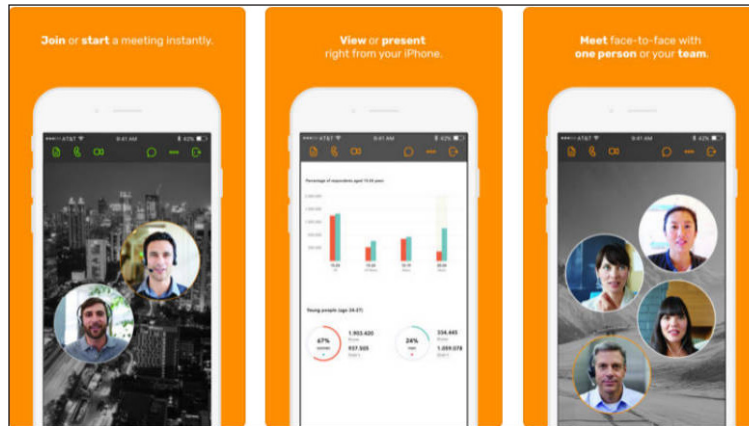
You'll also be able to manipulate meetings, by scheduling, annotating, recording, locking or exiting them when you see fit.

You can include 250 participants who can join in from over 40 countries, and then track who's in attendance, or even remove members who are disrupting your workflow.

Available: Android, iOS, Windows, Chrome.

Flow – Project and Team Manager
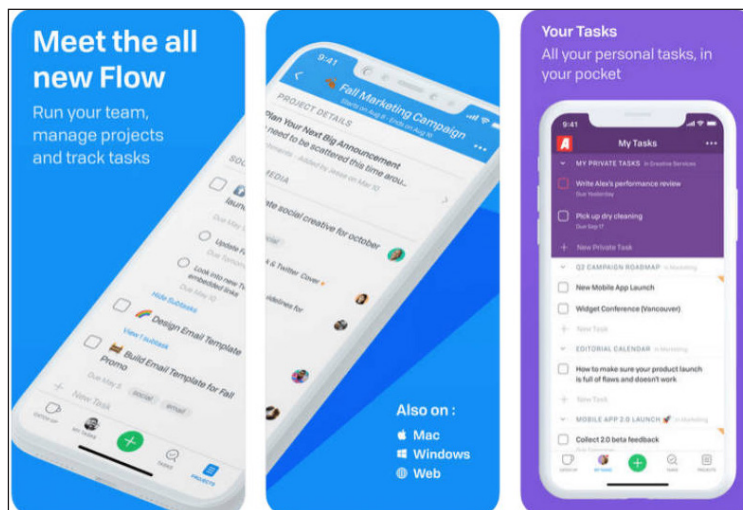
Flow is a straightforward management software meant to help you manage projects and teams, as well as track the tasks you're working on with your team.

You'll be able to plan and manage projects, keep track of everything through progress timelines, and visually organize your workflow through a drag & drop system.

Flow also allows you to:

- Track your task's progress.

- Associate tasks with notes, comments, and subtasks.

- Link tasks with specific start times and deadlines.

The tool also provides you with effective integration with Slack, so you can share project updates with your team, and even create tasks, through the/flow command in slackbot.

When it comes to team management, you'll be able to manage multiple teams separately, as well as define user permissions, by distinguishing between private and public projects.

Available: Android, iOS, Windows, macOS.

Loop – Habit Tracker – a Mobile Habit Tracker
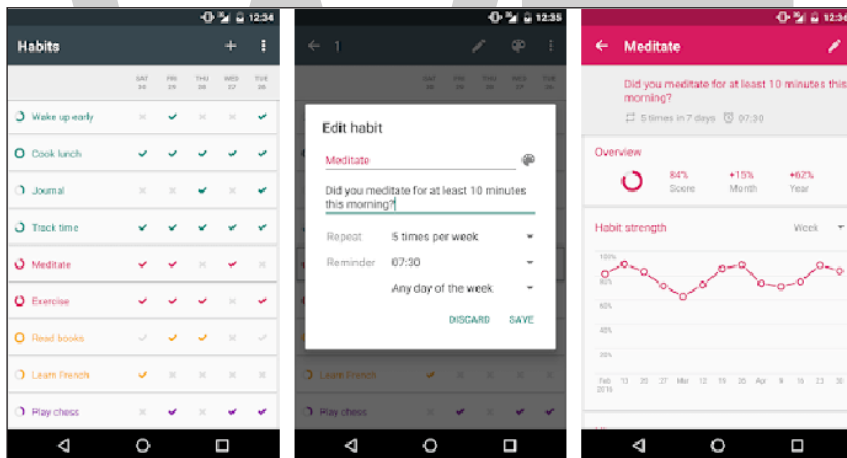
Loop – Habit Tracker is a straightforward, open-source habit tracker meant to help you sustain good habits and reach your goals – complete with graphs and charts showing your progress over time.

Once you decide to cultivate a habit, select an hour when you want to tackle it each day, one time a week, or 3 times a week, and then set a reminder within the app.

You'll then be able to check, dismiss, or snooze the habit directly from the received notification.

The app also allows you to track your habit score within graphs, charts, and statistics, and then it calculates the progress you've achieved with the said habit, through a specialized formula:

- If you follow your schedule, the habit becomes stronger.

- If you skip a few days, the habit becomes weaker – but the app doesn't annul the progress you've made so far.

For extra functionality, you can even install Loop – Habit Tracker on your Android Watch and manage habits and its reminders as easy as ever.

Available: Android.

TimeTree – Shared Calendar App
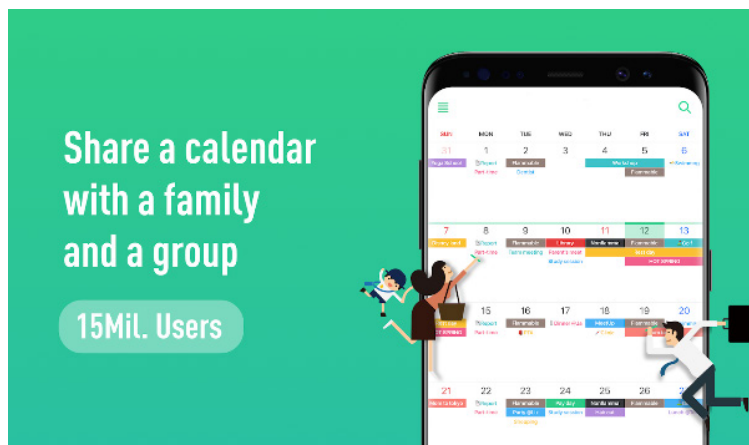
TimeTree is a shared calendar app meant to help you coordinate events in your calendar together with friends, colleagues, family, or whoever you need. You'll be able to plan family-oriented events, schedule your academic life, organize your work, delegate tasks, or even set-up romantic dates.

The TimeTree app lets you:

- Create calendars for each group of people.

- Add and chat with members.

- Share files and notes.

- Set reminders.

- Synchronize all calendars together to make sure nothing ever overlaps.

In essence, you'll be able to manage shopping lists, anniversaries, school schedules, daily meetings, inventory schedules, and much more, in 13 languages.

Available: Web, Android, iOS.

Mind42 – Online Mind Mapping Software

Mind42 is a free, browser-based mind mapping tool with collaboration features that allows you to make sense of and plan your thoughts, as well as visualize your work.

You'll be able to create structured diagrams to serve as your to-do lists, but also brainstorm ideas, organize events, and add an accompanying image to each branch – you can then keep these lists private or share them with others.

The thoughts and actions you can capture and link with Mind42 are numerous, so you can use this time management app for business and private plans – from brainstorming ideas for your newest project to compiling a list for your next movie marathon.

Available: Web.
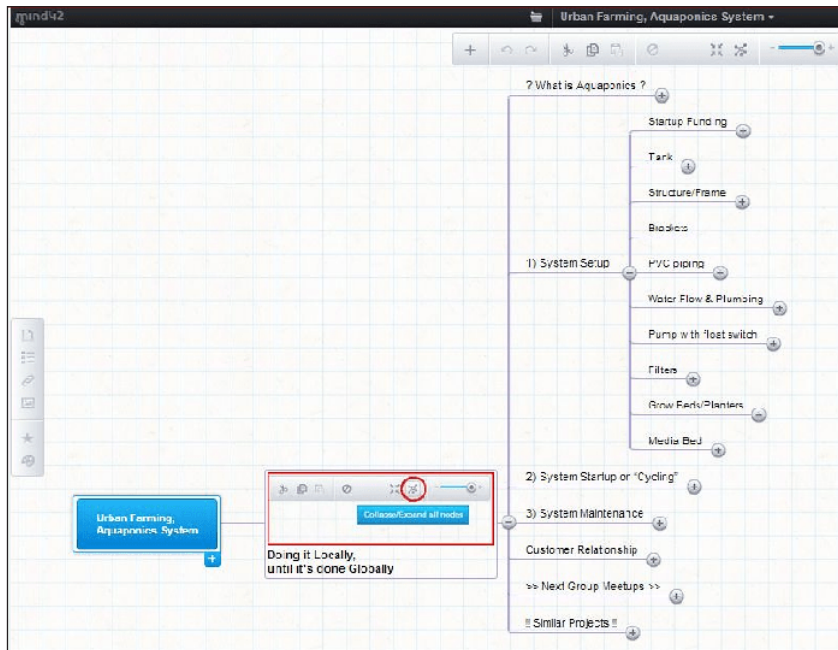
My Life Organized – GTD Task Organizer and Manager
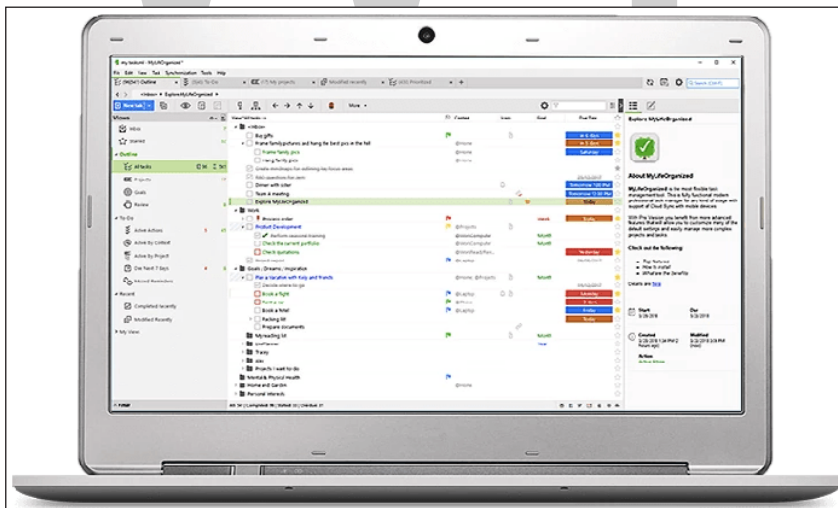
My Life Organized is a robust task organizer and manager that works on the principles of the Getting Things Done system, while also syncing all your to-do items across devices.
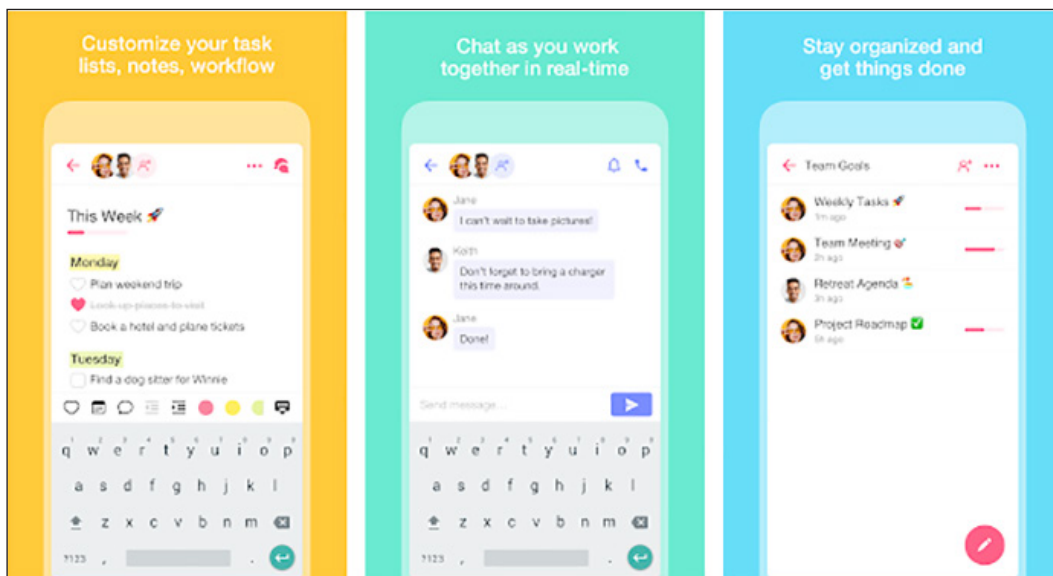
You'll be able to:

- Create tasks and group them into subtasks.

- Compile checklists in the drag & drop interface.

- Keep your work in order by creating hierarchical lists.

- Define dependencies between tasks.

Apart from that, the software also allows you to set up location-based reminders that recognize where you are (e.g. at a shopping mall) and notify you with a corresponding to-do list (e.g. a shopping list).

Available: Web, Windows, iOS, Android.

Taskade – Task Manager and Collaboration Tool

Taskade is a comprehensive task management tool with rich collaboration features – you'll be able to work on both short-term and long-term projects from a virtual workspace where all users can add tasks and create to-do lists.

The core of this task manager is its project progress system – all users will be able to view their tasks, and then mark them as complete. The more tasks you mark, the more the progress bar fills up, indicating how much more you need to do to finish the project.

You'll also be able to enjoy effective collaboration features, such as:

- Team and direct chat.

- Video conferencing.

- Deadlines and reminders.

- Recurring tasks and team permissions.

Available: Web, Windows, Mac, iOS, Android, Chrome, Firefox.

IFTTT – a Conditional Statements Creator
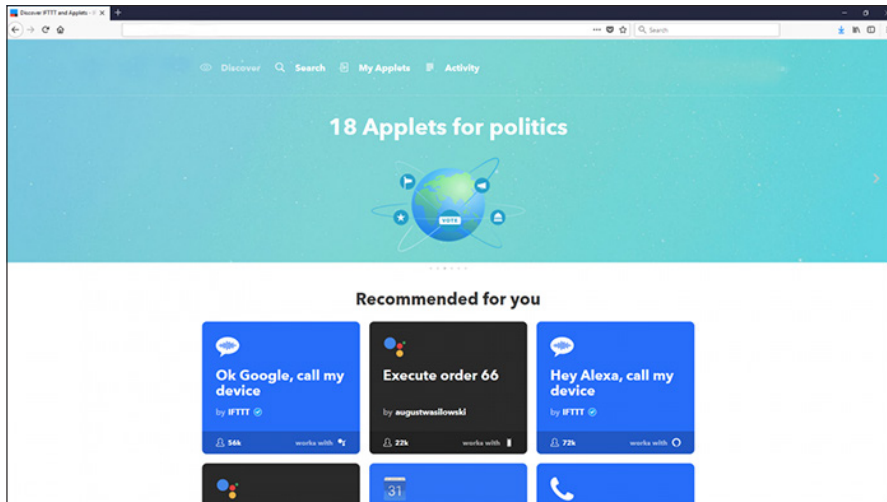
IFTTT is a conditional statements creator based on the famous "If this, then that" condition – you'll be able to connect devices, apps, and services, and then define automations that trigger linked actions within these devices, apps, and services.

For example, you can set to have IFTTT:

- Log all phone calls you make on your Android and add them to your Google Spreadsheet.

- Turn off the lights in your house when you set your Nest Thermostat to away.

- Mute your phone when Google Calendar recognizes you have a meeting scheduled.

- Create tasks in Todoist when you put a star next to an email in your Gmail inbox.

- Send missed Android phone call notifications to your Slack.

These automated "recipes" are called "applets" – there are over 30 groups of applets, from those for travelers to those for educators, and each group offers an array of software combinations and commands.

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Goal Setting

The development of an action plan which helps in guiding and motivating a person or group towards a goal is known as goal setting. Some of the various aspects of goal setting are goal modelling, goal orientation, GROW model and goal programming. This chapter discusses in detail all these aspects of goal setting.

Goal-setting theory refers to the effects of setting goals on subsequent performance. Researcher Edwin Locke found that individuals who set specific, difficult goals performed better than those who set general, easy goals. Locke proposed five basic principles of goal-setting: clarity, challenge, commitment, feedback, and task complexity.

One of the most effective ways to stay motivated is to set goals for yourself. However, the type and quality of goals you set affects how well they will work.

The simple act of setting an effective goal gives you a better chance of realizing that goal. In fact, listed below are several principles crucial to setting effective goals.

Effective goal-setting principles:

- Clarity: A clear, measurable goal is more achievable than one that is poorly defined. In other words, be specific! The most effective goals have a specific timeline for completion.

- Challenge: The goal must have a decent level of difficulty in order to motivate you to strive toward the goal.

- Commitment: Put deliberate effort into meeting this goal. Share your goal with someone else in order to increase your accountability to meet that goal.

- Feedback: Set up a method to receive information on your progress toward a goal. If losing 30 pounds in four months turns out to be too hard, it is better to adjust the difficulty of your goal mid-way through the timeline than to give up entirely.

- Task complexity: If a goal is especially complex, make sure you give yourself enough time to overcome the learning curve involved in completing the task. In other words, if a goal is really tough, make sure you give yourself some padding to give you the best chance at succeeding.

Setting a goal is a great way to encourage achievement and stay motivated. However, many of us set goals that are ineffective at pushing us to do our best. When you are helping your youthling with a project or trying to improve an aspect of your daily life, think carefully about the goals you set. Ensure that each goal accounts for some or all of the principles above: clarity, challenge, commitment, and feedback.
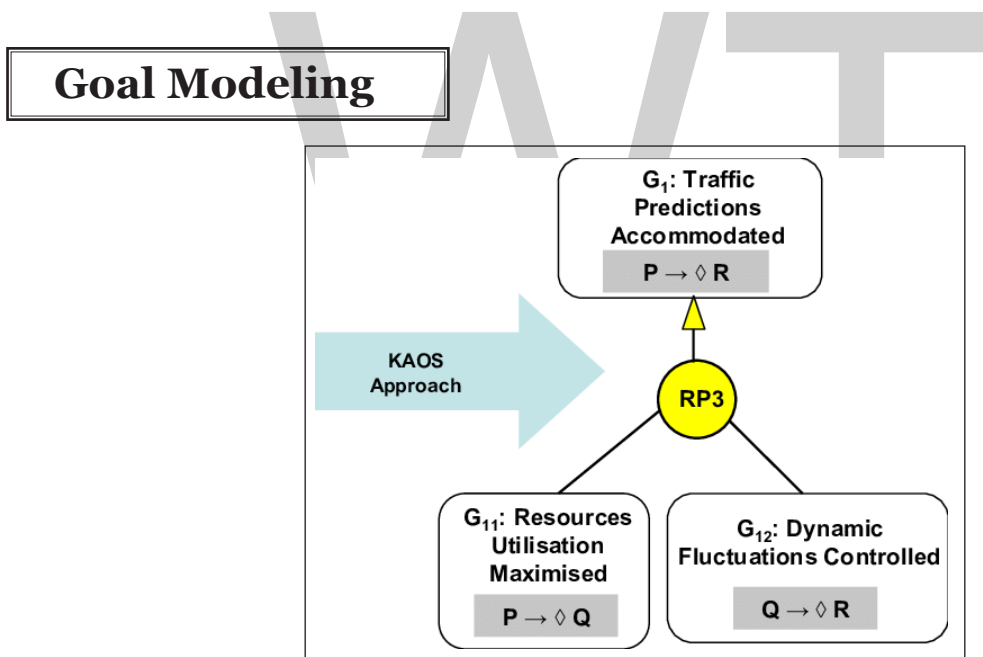
Goal Modeling

A goal model is an element of requirements engineering that may also be used more widely in business analysis. Related elements include stakeholder analysis, context analysis, and scenarios, among other business and technical areas.

Principles

Goals are objectives which a system should achieve through cooperation of actors in the intended software and in the environment. Goal modeling is especially useful in the early phases of a project. Projects may consider how the intended system meets organizational goals, why the system is needed and how the stakeholders' interests may be addressed.

A goal model:

- Expresses the relationships between a system and its environment (i.e. not only on what the system is supposed to do, but why). The understanding this gives, of the reasons why a system is needed, in its context, is useful because "systems are increasingly used to fundamentally change business processes rather than to automate long-established practices".

- Clarifies requirements: Specifying goals leads to asking "why", "how" and "how else". Stakeholders' requirements are often revealed in this process, with less risk of either missing requirements, or of over-specifying (asking for things that are not needed).

- Allows large goals to be analyzed into small, realizable goals.

- Deals with conflicts: Goal modeling can identify and help to resolve tradeoffs between cost, performance, flexibility, security and other goals. It can reveal divergent interests between stakeholders. It can identify conflicts because meeting one goal can interfere with meeting other goals.

- Enables requirement completeness to be measured: Requirements can be considered complete if they fulfil all the goals in the goal model.

- Connects requirements to design: for example, the i* "Non-Functional Requirements (NFR) framework" uses goals to guide the design process.

Notations

There are several notations in use for goal models in software development, including:

- i* and a variant, GRL

- KAOS

- UML Use Case diagram

Other notations have been proposed by researchers, while the Goal Structuring Notation (GSN) and GRL are sometimes used to make safety cases to satisfy the regulator in safety-related industries.

Goal Modeling in i*

The i* goal modeling notation provides two kinds of diagram:

- "Strategic Dependency" (SD), defining relationships between roles in terms of specific goals that one role depends on the other role to provide.

- "Strategic Rationale" (SR), analyzing the goals identified on the SD model into subsidiary goals and tasks.

i* shows each role (an actor, agent or position) as a large circle containing the goals, tasks, and resources which that role owns. Ownership in i* means that the role desires the satisfaction of its goals, either for its own benefit or for the benefit of some other role. Goals may be accompanied by "obstacles" (negative goals) to be surmounted. Non-functional goals can be modeled as "soft goals" in i*: they are diagrammed as clouds or indented ovals.

Goal Modeling in KAOS

The KAOS goal modeling notation provides a way of defining goals and obstacles, underpinned by a formal (mathematical) method of analysis.

Goal Modeling in UML

UML's use case diagram provides a simple goal modeling notation. The bubbles name functional goals, so a Use case diagram forms a simple functions-only goal model: as Cockburn writes, use cases cover only the behavioral requirements. Roles are shown as actors (stickmen on the diagram), linked to the use cases in which they take part. The use cases are drawn as elliptical bubbles, representing desired behavioral goals.

With the addition of misuse cases, the notation can model both desired goals and active threats. The misuse case notation shows negative (possibly hostile) stakeholders as the primary actors for the misuse cases; these may be grouped on the right-hand side of the diagram. The notation may assist in discovering suitable mitigating or preventative goals, shown as subsidiary use cases. These often have the aim of improving security, safety, or reliability, which are non-functional goals. Non-functional requirements can to some extent be described in use case style using misuse cases to define negative goals; but the (positive) goals thus discovered are often functional. For example, if theft is a threat to security, then fitting locks is a mitigation; but that a door can be locked is a functional requirement.

The counter point is that Use Cases are not from Cognitive Science roots, whereas i* and KAOS are. Indeed, the literature behind Use Cases does not include discussion Goal Intention, Goal Refinement, Ends-Means, does not call out Rasmussen et cetera. There may be a predilection to relate Use Cases to Goals because of the visual metaphor of Goals rather than the semantics of Goal Refinement per Cognitive Science.

Goal Orientation

Goal orientation is an "individual disposition toward developing or validating one's ability in achievement settings". Previous research has examined goal orientation as a motivation variable useful for recruitment, climate and culture, performance appraisal, and selection. Studies have

also used goal orientation to predict sales performance, goal setting, learning and adaptive behaviors in training, and leadership. Due to the many theoretical and practical applications of goal orientation, it is important to understand the construct and how it relates to other variables. In this entry, goal orientation will be reviewed in terms of its history, stability, dimensionality, antecedents, its relationship to goal setting and consequences, its relevance to motivation, and future directions for research.

State versus Trait

There has been great debate if goal orientation should be operationalized as a state or as a trait. Throughout the goal orientation literature, there are inconsistencies with regard to the conceptualization of the stability of the construct. For example, DeShon & Gillespie stated that in the literature, goal orientation has been conceptualized as a trait, quasi-trait, and state. They articulated that whether researchers conceptualize goal orientation as a trait or a state "depends on the breadth of the inference that the researcher is attempting to support". State goal orientation refers to the goal one has in a particular situation. It is similar to trait goal orientation in that it represents one's preference in an achievement situation. However, state goal orientation is "specific to the task and context at hand". For example, VandeWalle, Cron & Slocum stated that goal orientation can be domain specific. They stated that it is possible for an individual to have a strong learning goal orientation in their academic domain but not in their work domain. Trait goal orientation refers to the "consistent pattern of responses in achievement situations based on the individual's standing on goal orientation dimensions". This view of goal orientation treats the construct as a stable, individual difference characteristic. Button, Mathieu, & Zajac take an integrative view of the construct, stating that goal orientation is best categorized as a relatively stable individual difference variable that can be influenced by situational and contextual characteristics. These authors found that when few situational cues are present, individuals will adopt their dispositional goal orientations. However, when "dispositional goal orientations predispose individuals to adopt particular response patterns across situations, situational characteristics may cause them to adopt a different or less acute response pattern for a specific situation. Thus, trait and state goal orientation interact, so both operationalizations should be considered simultaneously.

Types

Since the realization that performance goal orientation is best split into two separate parts, researchers have conducted validation studies to demonstrate the statistical and conceptual distinction of these three dimensions to goal orientation. Conceptual and empirical work by Elliot and Church and VandeWalle demonstrated that the factor structure of Goal Orientation does indeed lend itself to three distinct dimensions, as summarized below. An explanation of the learning-approach and learning-avoidance goal orientations are also included for completeness.

Communications

In communications there is a theory that coincides with this overall concept. The theory is titled, the Theory of Goal-oriented communications. The idea behind it is that when communicating if individuals are concentrated on the goal at hand rather than the communication itself it will lessen confusion. Communication is not the goal in itself but something bigger, getting a planned idea across.

Communication is a goal Oriented. Communication can be effective if the sender and receiver both are aware of the goal of communication and there is congruence of their goals.

Learning

VandeWalle defines learning goal orientation as the "desire to develop the self by acquiring new skills, mastering new situations and improving one's competence". Persons with learning goal orientation seek feedback on past performance to evaluate current performance. These individuals focus on improving skills and acquiring knowledge, and are less concerned with making mistakes. Research shows that adoption of mastery goals leads to greater intrinsic motivation as opposed to performance approach or performance avoid which are associated with external motivation. One area where this can be seen as important is in the area of curriculum design. When designing learning environments for students, it is important to create opportunities that promote learning goals as opposed to performance goals. One possible implication for educators is the need to emphasize knowledge-centered classroom environments that encourage "doing with understanding".

Learning-approach and Learning-avoidance

Although learning goal orientation is most commonly conceptualized as a single construct, researchers have begun to make the approach and avoidance distinction that they have previously done with the performance goal orientation. According to Elliot, learning-approach goals "entail striving to develop one's skills and abilities, advance one's learning, understand material, or complete or master a task". This type of learning goal orientation is consistent with the way general learning goal orientation has been conceptualized previously. Alternatively, learning-avoidance goals "entail striving to avoid losing one's skills and abilities (or having their development stagnate), forgetting what one has learned, misunderstanding material, or leaving a task incomplete or unmastered"s. Individuals are likely to pursue learning-avoidance goals when they feel that their skills or abilities are deteriorating. For example, an elderly individual may notice that his/her physical and mental capacity is declining, and as a result may focus his/her goals on sustaining or improving these diminishing capacities.

Prove Performance

VandeWalle defines performance prove goal orientation as the "desire to prove one's competence and to gain favorable judgments about it". The performance approach orientation represents a desire to achieve a high level of performance. Persons with performance approach orientation seek positive reinforcement and feedback. These individuals don't want to put forth a lot of effort unless they will be positively evaluated, and tend to avoid tasks where they may make mistakes and therefore be poorly evaluated.

Avoid Performance

Finally, VandeWalle defines avoid performance as the "desire to avoid the disproving of one's competence and to avoid negative judgments about it". The performance avoid orientation represents a desire to avoid instances of low believes. Persons with performance avoid orientation focus on avoiding situations in which they will receive evaluations or risk demonstrating lack of confidence. Individuals high in fear of failure are more likely to adopt performance avoid goals.

Antecedents

Throughout the goal orientation literature, many studies have examined relationships between goal orientation and various antecedents. These antecedents have been identified as having varying levels of importance. In a meta-analysis by Payne and her colleagues, both need for achievement and the Big Five personality traits were identified as important antecedents of goal orientation, while cognitive ability was found to have almost no relationship with goal orientation. Payne and her colleagues did not distinguish between proximal and distal antecedents.

Cognitive Ability

Research has produced mixed results when examining the relationship between cognitive ability and goal orientation. For example, Eison found that learning-oriented (learning goal orientation) students had higher levels of cognitive ability than grade-oriented (performance goal orientation) students. However, Dweck and her colleagues were unable to find any relationship between the constructs. Although findings are mixed, "a substantial body of theory and research suggests motivational and ability traits are generally uncorrelated". In a meta-analysis by Payne and her colleagues, cognitive ability and goal orientation were found to be independent constructs. Accordingly, individuals with high cognitive ability are equally likely to hold learning, prove performance, and avoid performance goal orientations. These authors also found that LGO predicted job performance above and beyond cognitive ability. Based on this research, goal orientation, rather than cognitive ability, serves as useful tool for practitioners to use to predict job performance.

Need for Achievement

Need for achievement refers to the degree to which an individual "maintains high standards" and "aspires to accomplish difficult tasks". Goal orientation dimensions have been conceptualized as manifestations of Atkinson's need for achievement and need to avoid failure competence-relevant motives. In a meta-analysis by Payne et al., the authors found that need for achievement was positively correlated with LGO, negatively associated with APGO, and unrelated to PPGO. Another interesting finding by these authors was that need for achievement correlated more strongly with LGO than the trait, conscientiousness. Although LGO and need for achievement were found to be strongly related, the findings demonstrate that LGO is related to, but not synonymous with need for achievement.

Big Five Personality Characteristics

Extensive research has been done on personality and many researchers have agreed that personality is best conceptualized as a five-factor model (the Big Five). These traits include extraversion, openness to experience, emotional stability, conscientiousness, and agreeableness. In a study by Zweig and Webster, the relationship between the Big-Five personality traits and goal orientation was examined. The authors found that goal orientation and the Big-Five personality traits are related yet distinct constructs. They also found that personality factors combine to create people's various orientations toward learning and goals, which in turn predict the types of tasks they will engage in. In a meta-analysis by Payne et al., goal orientation was found to predict job performance over and above the Big-Five.

Goal Setting

Historically, goal setting theory has primarily been concerned with performance goals. Locke and Latham summarize 25 years of goal setting research by stating that as long as an individual is committed to a goal and has the ability to achieve it, specific, high (hard) goals lead to a higher level of task performance than vague or easy goals. However, the vast majority of goal setting studies have been conducted with a specific performance goal and often in laboratory settings where the task was fairly simple. It is possible that when tasks are more complex or require a long-term commitment, adopting a learning goal may lead to higher performance. Fan, Meng, Billings, Litchfield and Kaplan found that the relationship between trait learning goal orientation and goal-setting was moderated by self-efficacy such that individuals high in learning goal orientation and self-efficacy set higher goal that those high in learning goal orientation but low in self-efficacy. This finding suggests that while learning goal orientation can influence goal setting, the relationship also depends on other factors such as the individual's level of self-efficacy.

Fan also found that learning and prove goal orientations facilitated challenge striving, suggesting that either orientation can effectively facilitate motivation for goal attainment. Another factor to consider when examining the relationship between goal orientation and goal setting is the level of complexity inherent in the situation or task. In situations with more complex tasks, it appears that "do your best" goals may actually lead to higher performance than specific goals. It is possible that in complex tasks, a specific, difficult goal imposes greater cognitive demands on employees, making it difficult for them to learn the complex task due to this increased pressure. Kanfer and Ackerman found that in an air traffic controller simulation (a highly complex task), having a performance-outcome goal actually interfered with acquiring the knowledge necessary to perform the task. People performed better when they were asked to do their best. This suggests that adopting a learning orientation may be appropriate for complex tasks or in specific settings. However, it may be possible to set a specific, difficult learning goal. Latham and Brown found that when MBA students set specific, difficult learning goals such as mastering complex course material, they outperformed MBA students who set a performance goal for GPA. Locke and Latham claim that creating a specific, difficult learning goal in this type of situation facilitates meta-cognition which is particularly helpful in complex environments with limited guidance, such as in an MBA program.

Consequences and Outcomes

The goal orientation literature has examined the relationships among goal orientation and various proximal (e.g., self-efficacy, metacognition, & feedback seeking) and distal consequences (e.g., academic outcomes, organizational outcomes). In a meta-analysis by Payne and her colleagues, the goal orientation dimensions were found to be more strongly related to the self-regulatory constructs (i.e., self-efficacy, metacognition, & feedback seeking) than the performance constructs (i.e. academic and organizational performance). They also found that APGO was the only dimension negatively related to the various outcomes. Payne and her colleagues found that the learning strategies (metacognition would likely fall into this category) and self-efficacy are the most important proximal consequences of goal orientation followed by feedback seeking, academic outcomes, and organizational outcomes.

In their review of the goal orientation literature, Vandewalle, Nerstad, and Dysvik strongly advocated that the relationship of goal orientation with an outcome variable such as task performance

should be assessed in conjunction with moderator variables such as self-efficacy, commitment, and feedback on prior task performance.

Self-efficacy

Bandura defined self-efficacy as "a belief in one's ability to effectively perform and to exercise influence over events". Individuals who are high in self-efficacy set more difficult goals, exert more effort to achieve those goals, and seek to learn from the processes of pursuing those goals. In a meta-analysis by Payne et al., self-efficacy was identified as a proximal outcome of goal orientation. Similarly, VandeWalle, Cron & Slocum found that LGO was positively related to self-efficacy, effort, and goal setting level. Since "self-efficacy functions as a primary motivational mechanism by which goal orientation influences subsequent learning processes", employees with higher levels of self-efficacy will exert more effort toward and learn more from task assignments.

Metacognition

Metacognition is conceptualized as an individual's knowledge and regulation over one's own cognitions. Individuals high in metacognitive awareness are skilled at monitoring their progress towards goals, identifying their strengths and weaknesses, and adjusting their learning strategies accordingly to achieve favorable outcomes. Although there have been relatively few research studies conducted on the role of metacognition in leader development outcomes, some studies have found that metacognition plays an important role in such outcomes. For example, Ford et al. linked LGO and metacognitive activity and found that metacognitive activity was significantly related to knowledge acquisition, post-training performance, and self-efficacy. In a study by Schmidt & Ford, metacognitive activity was positively related to LGO as well as cognitive, affective, and skill based learning outcomes. Similarly, Bell and Kozlowski found that LGO was significantly related to metacognitive activity. The National Research Council points out that it is important to remember that metacognitive skills can be taught and essential that teachers explicitly teach metacognitive skills across the curriculum in a variety of subject areas.

Feedback Seeking and Interpretation

In an organizational context, the extent to which employees actively seek feedback can positively influence job performance. Goal orientation influences how individuals evaluate the costs and benefits of feedback-seeking opportunities. According to VandeWalle, when individuals have the opportunity to seek feedback, they face a cognitive dilemma between the need for self-assessment and the need for self-enhancement. Since individuals with a learning goal orientation are interested in developing competencies, they are more likely to interpret feedback positively and thus engage in more feedback-seeking behaviors to enhance performance. These individuals interpret feedback as valuable information about how to correct errors and improve future performance on a given task. Conversely, individuals with a performance goal orientation are likely to interpret feedback as "evaluative and judgmental information about the self", and as a result are less likely to seek feedback. Consequently, individuals with high levels of learning goal orientation are more inclined to seek feedback, while individuals with high levels of prove performance goal orientation or avoid performance goal orientation are less inclined to seek feedback.

Academic Outcomes

As previously stated, goal orientation refers to individuals' behavioral tendencies in achievement-oriented tasks. Therefore, it seems intuitive that goal orientation would be associated with various academic outcomes. According to Payne et al., learning goal orientation is positively associated with self-regulatory behaviors such as planning and goal setting, which in turn are associated with academic performance. Thus, individuals with high levels of LGO are more likely to perform well on academic tasks than individuals with high levels of the PGO dimensions. In addition, research has also shown that students' motivation can predict both the quality of the engagement in academic learning as well as the degree to which they seek out or avoid challenging situations. "Goal-setting is a technique that is often employed in organization as part of traditional performance appraisals and broader performance management interventions." If all students are to move "through the increasing challenges and academic rigors" of school, then their motivation to learn must be identified and nurtured.

Organizational Outcomes

Goal orientation has also been linked to organizational outcomes, specifically job performance. Payne et al. found that individuals with high levels of trait and state LGO and low levels of trait APGO had better job performance. They found that PPGO was unrelated to performance. The authors also found that LGO predicted job performance above and beyond both cognitive ability and the Big Five personality characteristics. This finding suggests that LGO is a valuable predictor of job performance and it may be in the best interest of organizations to create a climate in which learning is valued over performance. In another study by VandeWalle, Cron & Slocum, the authors found that individuals with a learning goal orientation had higher sales performance than those with performance goal orientations. This finding suggests that in order to be successful in organizational setting, individuals must have the desire to develop their skills.

Learning Environments

Research has shown that goal orientation is linked to outcomes and performance. Much of this research has been centered on outcomes in schools and job performance. When examining research on learning environments and curriculum design, one could argue that there is significant alignment with LGO and ideal learning environments. When designing learning environments, there are some essential principles that should be in place. These principles were outlined by the National Research Council in their 2000 report entitled How People Learn: Brain, Mind, Experience and School. First, classrooms and school need to be learner centered. By this, teachers need to be aware of the strengths, skills, attitudes and knowledge that students bring with them when they enter school. This should include acknowledging cultural differences and creating a place for the inclusion of their everyday lived experiences in the classroom. Second, teachers should strive to create a knowledge-centered classroom by focusing on what is taught, why it is taught and what competence or mastery looks like. The emphasis here should be placed on learning with understanding. One way students can demonstrate this understanding is by successfully transferring content and skills to novel situations and problems. This also relates back to metacognitive skills that have been demonstrated to be linked to learning goal orientation. Next, it is important to remember that formative assessments are essential in learning environments. This type of ongoing assessments allows teachers to assess where students are and design their instruction accordingly. Lastly, it is

very important to look at the environment in which learning takes place. The teacher wants to create an environment that nurtures a learning goal orientation as opposed to a performance goal orientation. This means encouraging a community of learners who are willing to take risks and make mistakes for the sake of learning. Teachers should create environments that emphasize mastery over performance. Performance is primarily focused on learning in the moment and a demarcated demonstration of understanding. Mastery implies skill development over a period of time that includes experience and practice. Authentic learning occurs when students can not only demonstrate understanding but apply it in multiple settings and to novel situations or problems.

Goal Programming

Goal programming is a branch of multiobjective optimization, which in turn is a branch of multi-criteria decision analysis (MCDA). This is an optimization programme. It can be thought of as an extension or generalisation of linear programming to handle multiple, normally conflicting objective measures. Each of these measures is given a goal or target value to be achieved. Unwanted deviations from this set of target values are then minimised in an achievement function. This can be a vector or a weighted sum dependent on the goal programming variant used. As satisfaction of the target is deemed to satisfy the decision maker(s), an underlying satisficing philosophy is assumed. Goal programming is used to perform three types of analysis:

- Determine the required resources to achieve a desired set of objectives.

- Determine the degree of attainment of the goals with the available resources.

- Providing the best satisfying solution under a varying amount of resources and priorities of the goals.

Goal programming was first used by Charnes, Cooper and Ferguson in 1955, although the actual name first appeared in a 1961 text by Charnes and Cooper. Seminal works by Lee, Ignizio, Ignizio and Cavalier, and Romero followed. Schniederjans gives in a bibliography of a large number of pre-1995 articles relating to goal programming, and Jones and Tamiz give an annotated bibliography of the period 1990-2000. A recent textbook by Jones and Tamiz . gives a comprehensive overview of the state-of-the-art in goal programming.

The first engineering application of goal programming, due to Ignizio in 1962, was the design and placement of the antennas employed on the second stage of the Saturn V. This was used to launch the Apollo space capsule that landed the first men on the moon.

Variants

The initial goal programming formulations ordered the unwanted deviations into a number of priority levels, with the minimisation of a deviation in a higher priority level being infinitely more important than any deviations in lower priority levels. This is known as *lexicographic* or pre-emptive goal programming. Ignizio gives an algorithm showing how a lexicographic goal programme can be solved as a series of linear programmes. Lexicographic goal programming is used when there exists a clear priority ordering amongst the goals to be achieved.

If the decision maker is more interested in direct comparisons of the objectives then *weighted* or non-pre-emptive goal programming should be used. In this case all the unwanted deviations are multiplied by weights, reflecting their relative importance, and added together as a single sum to form the achievement function. Deviations measured in different units cannot be summed directly due to the phenomenon of incommensurability.

Hence each unwanted deviation is multiplied by a normalisation constant to allow direct comparison. Popular choices for normalisation constants are the goal target value of the corresponding objective (hence turning all deviations into percentages) or the range of the corresponding objective (between the best and the worst possible values, hence mapping all deviations onto a zero-one range). For decision makers more interested in obtaining a balance between the competing objectives, Chebyshev goal programming is used. Introduced by Flavell in 1976, this variant seeks to minimise the maximum unwanted deviation, rather than the sum of deviations. This utilises the Chebyshev distance metric.

Strengths and Weaknesses

A major strength of goal programming is its simplicity and ease of use. This accounts for the large number of goal programming applications in many and diverse fields. Linear goal programmes can be solved using linear programming software as either a single linear programme, or in the case of the lexicographic variant, a series of connected linear programmes.

Goal programming can hence handle relatively large numbers of variables, constraints and objectives. A debated weakness is the ability of goal programming to produce solutions that are not Pareto efficient. This violates a fundamental concept of decision theory, that no rational decision maker will knowingly choose a solution that is not Pareto efficient. However, techniques are available to detect when this occurs and project the solution onto the Pareto efficient solution in an appropriate manner.

The setting of appropriate weights in the goal programming model is another area that has caused debate, with some authors suggesting the use of the analytic hierarchy process or interactive methods for this purpose.

SMART Criteria

SMART is a mnemonic/acronym, giving criteria to guide in the setting of objectives, for example in project management, employee-performance management and personal development. The letters S and M generally mean specific and measurable. Possibly the most common version has the remaining letters referring to achievable (or attainable), relevant, and time-bound. However, the term's inventor had a slightly different version and the letters have meant different things to different authors, as described below. Additional letters have been added by some authors.

The first-known use of the term occurs in the November 1981 issue of Management Review by George T. Doran. The principal advantage of SMART objectives is that they are easier to understand and to know when they have been done. SMART criteria are commonly associated with Peter Drucker's management by objectives concept.

Often the term S.M.A.R.T. Goals and S.M.A.R.T. Objectives will surface. Although the acronym SMART generally stays the same, objectives and goals can differ. Goals are the distinct purpose that is to be anticipated from the assignment or project. Objectives on the other hand are the determined steps that will direct full completion of the project goals.

The November 1981 issue of Management Review contained a paper by George T. Doran called There's a S.M.A.R.T. way to write management's goals and objectives. It discussed the importance of objectives and the difficulty of setting them.

Ideally speaking, each corporate, department, and section objective should be:

- Specific: Target a specific area for improvement.

- Measurable: Quantify or at least suggest an indicator of progress.

- Assignable: Specify who will do it.

- Realistic: State what results can realistically be achieved, given available resources.

- Time-related: Specify when the result(s) can be achieved.

Notice that these criteria don't say that all objectives must be quantified on all levels of management. In certain situations it is not realistic to attempt quantification, particularly in staff middle-management positions. Practicing managers and corporations can lose the benefit of a more abstract objective in order to gain quantification. It is the combination of the objective and its action plan that is really important. Therefore serious management should focus on these twins and not just the objective.

> George T. Doran, There's a S.M.A.R.T. way to write management's goals and objectives

Some authors have added additional letters giving additional criteria. Examples are given below:

- SMARTER

  ◦ Evaluated and reviewed.

  ◦ Evaluate consistently and recognize mastery.

  ◦ Exciting and Recorded.

- ◦ Exciting and Reach: A goal should excite and motivate an athlete, and make them "reach" by stretching their abilities and pushing them past their comfort zone.

- SMARTTA

  - ◦ Trackable and agreed.

- SMARRT

  - ◦ Realistic and relevance: 'Realistic' refers to something that can be done given the available resources. 'Relevance' ensures the goal is in line with the bigger picture and vision.

- SMART-VT

  - ◦ Specific, Measurable, Actionable, Realistic, Testable, Verifiable, and Traceable.

- SMARTY

  - ◦ Specific, Measurable, Actionable, Realistic, Time-bound, Why (Motivator).

- SMARTS

  - ◦ Specific, Measurable, Assignable, Realistic, Time-bound, Sustainable (Reproducible, Regenerative).

Other mnemonic acronyms also give criteria to guide in the setting of objectives.

- CLEAR

  - ◦ Collaborative

  - ◦ Limited

  - ◦ Emotional

  - ◦ Appreciable

  - ◦ Refinable

- PURE

  - ◦ Positively stated

  - ◦ Understood

  - ◦ Relevant

  - ◦ Ethical

- CPQQRT

  - ◦ Context

  - ◦ Purpose

  - ◦ Quantity

- ◦   Quality
- ◦   Resources
- ◦   Timing

GROW Model

The GROW Model is probably the most widely-utilised goal-setting and problem-solving model in the world. It provides a simple and methodical, yet-powerful framework of four main stages of a coaching or mentoring session. Though no-one can claim to be the sole inventor of the model, thought-leaders and writers Alan Fine and Graham Alexander, along with former racing car champion John Whitmore made large contributions to the contemporary model, which was largely developed during the 1980s and 1990s.

GROW

The acronym GROW stands for:

- •   Goal
- •   Reality
- •   Opportunity
- •   Will/Wrap-up/What next/Way forward

These four words and phrases correspond to the four main stages of a coaching or mentoring session.

Goal: *what do you want?*			
The end point: where the client/mentee wants to be	Agree topic for discussion	Agree specific outcomes	Set long-term aims

Reality: *where are you now?*			
The current reality: where the client is now	Invite self assessment of client	Offer specific feedback	Examine assumptions

Opportunity: *what could you do?*			
All of the options of as to how the client will progress	Invite suggestions from the client	Carefully offer suggestions	Ensure that some choices are made

Way Forward: *what will you do?*			
Action steps which will take the client to their goal	Prepare a plan with specific steps and timings	Identify possible future obstacles and solutions	Agree support for throughout the process

Goal

During the first stage of the process, the goal is the priority. Once a topic for discussion is agreed, specific outcomes and objectives should be discussed by the coach/mentor and the client/mentee/

pupil. These may be short term goals, or – when appropriate, and a clear path to the outcome can be agreed – they may be long term aims. Goals should be SMART: Specific, Measurable, Accurate, Realistic and Timely. The goal should also be inspirational and positive, whilst being challenging and requiring them to stretch themselves and their abilities to achieve it.

Reality

During the second stage of the process, both coach and mentee outline and discuss the current reality of the situation using a variety of different methods and techniques. The coach may invite the client to assess their own situation before offering their own advice or specific feedback on the current scenario and obstacles faced. The focus should be on the client, and the coach should be looking to identify potential in the situation, rather than problems. They should examine any assumptions made by the client with regards to their reality and outlook on future goals and discard any history or events that are irrelevant to the goals at hand.

Opportunity

Once reality and all obstacles to current goals have been discussed, and irrelevant 'pseudo-obstacles' discarded, the options as to how to overcome current issues preventing progress should be examined. At first, the full range of options should be put-forward and discussed, predominantly inviting suggestions from the client. Any suggestions posited by the coach or mentor should be offered carefully and with consideration of the client's overall position. By the end of stage 3, the coach should ensure that at least some choices have been made with regards to overcoming obstacles, and there is significantly less ambiguity surrounding immediate actions.

Will/Wrap-up/What next?/Way Forward

The final stage of the process is when the client commits to decisive actions in order to move towards their goal. A plan is drawn up, with the coach guiding the ideas discussed by the mentee – including specific guidelines and timings in order to make achievable progress. Any potential obstacles that may be encountered during the process are identified and subsequent solutions are considered, including an outline of the support required throughout. Both mentor and mentee should remain flexible throughout the entire process, and goals/actions may need to be altered to react to both positive or negative events.

GROW in Leadership and Management

GROW is just one of many coaching and mentoring models which can be incorporated into leadership and managerial practices, across a variety of industries. It can be used as a basis to establish a methodical and systematic process by which the efficiency and effectiveness of internal coaching practices can be improved, to provide a greater return on investment. In addition, if team leaders or managers are equipped with coaching tools such as GROW, they can be utilised alongside motivational and other methods to significantly improve workplace performance, at both team and individual levels. Effective coaching also provides return by equipping individual mentees with the tools and awareness to take greater responsibility over obstacles and goal-setting in their own lives.

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7

Barriers to Time Management

Some of the barriers that hinder time management include ineffective planning, fear of failure, procrastination, stress, anxiety, inability to say no, and many other mental barriers. This chapter closely examines these barriers related to the effective management of time to provide an extensive understanding of the subject.

Ineffective Planning

Planning is one of the main processes of effective maintenance departments. By determining the work details up front before the actual work takes place, planning allows for the most efficient use of maintenance resources. It also supports reduced downtime by insuring production equipment will only need to be out of service while the actual maintenance work is being performed. When proper job plans are created, they contain all of the details needed to perform the work necessary to maintain the reliability of that equipment. Planning, along with scheduling, provides the glue for bringing all of the reliability processes together and maximizing the opportunity for "uptime" and more reliable production.

If all of this is true, then why do some maintenance departments that have Planning in place fail to produce desired results? Delays, mismanagement, ineffective supervision, poor performance and unavailable materials all can contribute to ineffective planning and cause unnecessary delays. If any of these situations are present, you may not recognize them unless you know what to look for.

Delays

When delays become the norm, start looking for scenarios like:

- Crafts persons spending time trying to gain details of what is involved in the work, talking with operators, talking with production supervision, talking with maintenance supervision, talking with planners and even with other crafts persons. They may even spend time looking over prints and OEM manuals, if they can find them and they are up-to-date.

- Next the crafts persons need to determine what materials may be needed to perform the job, where they are located and what is the availability. Once they make this determination, they then have to gather the materials and get them to the job site. This alone could add an additional 10 to 20% to the duration of the job, not to mention any cost that may be incurred if the material is "out of stock" and requires expediting.

Typically all of this is happening after the production equipment has been taken out of service; downtime equals loss of production and loss of production equals loss of revenue. You may want to start auditing the job plans that are being supplied to crafts persons in the field.

Mismanagement

When mismanagement is an issue, it looks something like this:

- The maintenance supervisor assigns crafts persons to the job and they go to the job site as a group.

- The supervisor leaves the crew at the site while he goes to find someone in operations to get more information about the job: expectations, time available for repair, operator availability for support as needed, etc.

- When he gets back, often he finds he doesn't have the right number of people for the job or maybe even the right skills or it could be that he just has the skills scheduled in the wrong sequence.

- Again, crafts persons are left to determine what minor details are involved and what materials may be needed to complete the work.

- The material may be out of stock and need to be procured from off site, and expediting fees may apply.

- While all of this is happening, Operations decides to use the additional time to have maintenance perform additional work or modify their original request resulting in more delays and more downtime. All of this adds to inefficient productivity of the maintenance crafts persons and again, lost production.

Ineffective Supervision

When supervision is ineffective, you may observe symptoms like these:

- Crafts persons stand around at the job site waiting for instructions about what to do and information on how to do it.

- Most jobs get interrupted after work has begun, causing delays not only on this one but the new work as well.

- Supervisors are unsure of how many persons are actually required to perform the tasks at hand so over-manning jobs becomes the norm and the number of job completions remains low.

- Supervisors aren't able to spend time in the field with their reports due to clerical work or administrative duties keeping them "tied to the desk" and unavailable for support. This also keeps them from coordinating work with their partners, the equipment owners, so as to minimize any possible production delays.

Poor Performance

In some situations, the maintenance department seems to be actually working on a "stand-by" basis – stand by until you are needed and then respond immediately and correct any problems with absolute minimal production downtime. They work continually until the situation is corrected and then they go back to the "stand-by" mode. Some of the symptoms are:

- Crafts persons spend valuable time standing around waiting for equipment to be made ready so it can be serviced as required.

- They are unable to complete one job before being pulled off to work on another one – they hop from job to job.

- Crafts persons have to spend time figuring out what materials and/or special tools are needed to complete the job.

- The maintenance department is unable to develop a productive work rhythm to insure time spent on the job is realistic and the quality of work is what it should be. This also adds to the "poor morale" factor and multiplies other delays.

Unavailable Materials

When needed materials are not available, it may cause:

- Production delays due to having equipment down while we wait until parts or materials can be purchased and arrive.

- In lieu of waiting, we may choose to fabricate our own, resulting in sub-standard replacements, or we may decide to use something that we can make work or just resort to a temporary fix, resulting in reduced reliability and production quality loss.

All of these situations contribute to machine downtime and production loss that proper planning and scheduling are designed to reduce. The core product of planning and scheduling is reduced delays – reduced delays in equipment downtime, in waiting for materials, in preparedness of starting jobs and in completing jobs. Reduce these delays and you increase equipment and machine uptime, resulting in improved availability of equipment and increased production "out the door."

Most companies are in business to produce a product and make a profit so the stake holders can realize a decent return on their investment and support capital growth. Proper planning and

scheduling supports this – it requires professionally trained Planners and Schedulers, a good EAM system to work with, complete and correct BOMs, a work force that understands and supports the benefits that are realized from planning and scheduling, and a work flow process that everyone can interact with and easily follow. If you are observing symptoms of ineffective planning in your organization, consider creating a get-well plan that includes training for people responsible for planning and scheduling. Implementing planning and scheduling best practices could significantly improve operational and financial results.

Fear of Failure

Many of us have probably experienced this at one time or another. The fear of failing can be immobilizing – it can cause us to do nothing, and therefore resist moving forward. But when we allow fear to stop our forward progress in life, we're likely to miss some great opportunities along the way.

Causes of Fear of Failure

To find the causes of fear of failure, we first need to understand what "failure" actually means.

We all have different definitions of failure, simply because we all have different benchmarks, values, and belief systems. A failure to one person might simply be a great learning experience for someone else.

Many of us are afraid of failing, at least some of the time. But fear of failure (also called "atychiphobia") is when we allow that fear to stop us doing the things that can move us forward to achieve our goals.

Fear of failure can be linked to many causes. For instance, having critical or unsupportive parents is a cause for some people. Because they were routinely undermined or humiliated in childhood, they carry those negative feelings into adulthood.

Experiencing a traumatic event at some point in your life can also be a cause. For example, say that several years ago you gave an important presentation in front of a large group, and you did very poorly. The experience might have been so terrible that you became afraid of failing in other things. And you carry that fear even now, years later.

How you Experience Fear of Failure?

You might experience some or all of these symptoms if you have a fear of failure:

- A reluctance to try new things or get involved in challenging projects.
- Self-sabotage: For example, procrastination, excessive anxiety, or a failure to follow through with goals.
- Low self-esteem or self-confidence: Commonly using negative statements such as "I'll never be good enough to get that promotion," or "I'm not smart enough to get on that team."

- Perfectionism: A willingness to try only those things that you know you'll finish perfectly and successfully.

Failure

It's almost impossible to go through life without experiencing some kind of failure. People who do so probably live so cautiously that they go nowhere. Put simply, they're not really living at all.

But, the wonderful thing about failure is that it's entirely up to us to decide how to look at it.

We can choose to see failure as "the end of the world," or as proof of just how inadequate we are. Or, we can look at failure as the incredible learning experience that it often is. Every time we fail at something, we can choose to look for the lesson we're meant to learn. These lessons are very important; they're how we grow, and how we keep from making that same mistake again. Failures stop us only if we let them.

It's easy to find successful people who have experienced failure. For example:

- Michael Jordan is widely considered to be one of the greatest basketball players of all time. And yet, he was cut from his high school basketball team because his coach didn't think he had enough skill.

- Warren Buffet, one of the world's richest and most successful businessmen, was rejected by Harvard University.

- Richard Branson, owner of the Virgin empire, is a high-school dropout.

Most of us will stumble and fall in life. Doors will get slammed in our faces, and we might make some bad decisions. But imagine if Michael Jordan had given up on his dream to play basketball when he was cut from that team. Imagine if Richard Branson had listened to the people who told him he'd never do anything worthwhile without a high-school diploma.

Think of the opportunities you'll miss if you let your failures stop you.

Failure can also teach us things about ourselves that we would never have learned otherwise. For instance, failure can help you discover how strong a person you are. Failing at something can help you discover your truest friends, or help you find unexpected motivation to succeed.

Often, valuable insights come only after a failure. Accepting and learning from those insights is key to succeeding in life.

How not to be Afraid of Failure?

It's important to realize that in everything we do, there's always a chance that we'll fail. Facing that chance, and embracing it, is not only courageous – it also gives us a fuller, more rewarding life.

However, here are a few ways to reduce the fear of failing:

- Analyze all potential outcomes: Many people experience fear of failure because they fear the unknown. Remove that fear by considering all of the potential outcomes of your decision.

- Learn to think more positively: Positive thinking is an incredibly powerful way to build self-confidence and neutralize self-sabotage.

- Look at the worse-case scenario: In some cases, the worst case scenario may be genuinely disastrous, and it may be perfectly rational to fear failure. In other cases, however, this worst case may actually not be that bad, and recognizing this can help.

- Have a contingency plan: If you're afraid of failing at something, having a "Plan B" in place can help you feel more confident about moving forward.

How to Stop Living in Fear?

If you are afraid of failure, you might be uncomfortable setting goals . But goals help us define where we want to go in life. Without goals, we have no sure destination.

Many experts recommend visualization as a powerful tool for goal setting. Imagining how life will be after you've reached your goal is a great motivator to keep you moving forward.

However, visualization might produce the opposite results in people who have a fear of failure. Research shows that people who have a fear of failure were often left in a strong negative mood after being asked to visualize goals and goal attainment.

So, what can you do Instead?

Start by setting a few small goals . These should be goals that are slightly, but not overwhelmingly, challenging. Think of these goals as "early wins" that are designed to help boost your confidence.

For example, if you've been too afraid to talk to the new department head (who has the power to give you the promotion you want), then make that your first goal. Plan to stop by her office during the next week to introduce yourself.

Or, imagine that you've dreamed of returning to school to get your MBA, but you're convinced that you're not smart enough to be accepted into business school. Set a goal to talk with a school counselor or admissions officer to see what's required for admission.

Try to make your goals tiny steps on the route to much bigger goals. Don't focus on the end picture.

Taking one small step at a time will help build your confidence, keep you moving forward, and prevent you from getting overwhelmed with visions of your final goal.

Warning

Sometimes, being afraid of failure can be a symptom of a more serious mental health condition. Negative thinking can cause severe health problems and, in extreme cases, death. While these techniques have been shown to have a positive effect on reducing stress, they are for guidance only, and readers should take the advice of suitably qualified health professionals if they have any concerns over related illnesses or if negative thoughts are causing significant or persistent unhappiness.

Procrastination
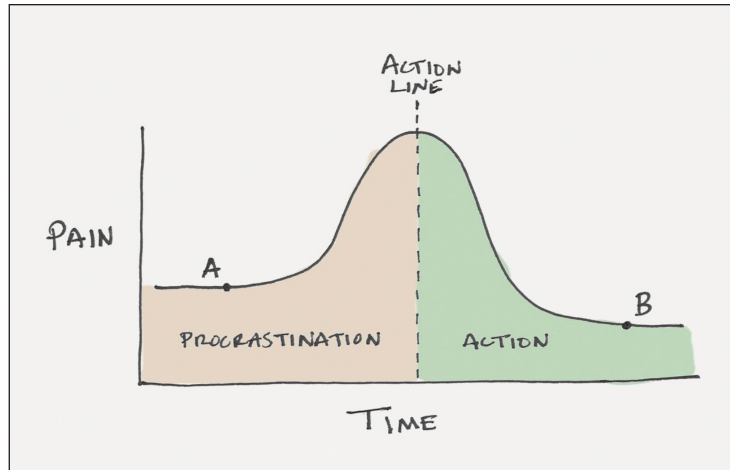
Procrastination is the avoidance of doing a task that needs to be accomplished by a certain deadline. It could be further stated as a habitual or intentional delay of starting or finishing a task despite knowing it might have negative consequences. It is a common human experience involving delay in everyday chores or even putting off salient tasks such as attending an appointment, submitting a job report or academic assignment, or broaching a stressful issue with a partner. Although typically perceived as a negative trait due to its hindering effect on one's productivity often associated with depression, low self-esteem, guilt and inadequacy; it can also be considered a wise response to certain demands that could present risky or negative outcomes or require waiting for new information to arrive.

From a cultural perspective, students from both Western and non-Western cultures are found to exhibit academic procrastination, but for different reasons. Students from Western cultures tend to procrastinate in order to avoid doing worse than they have done before or from failing to learn as much as they should have, whereas students from non-Western cultures tend to procrastinate in order to avoid looking incompetent, or to avoid demonstrating a lack of ability in front of their peers. It is also important to consider how different cultural perspectives of time management can impact procrastination. For example, in cultures that have a multi-active view of time, people tend to place a higher value on making sure a job is done accurately before finishing. In cultures with a linear view of time, people tend to designate a certain amount of time on a task and stop once the allotted time has expired.

Various types of procrastination (such as academic/non-academic or behavioural/indecisive) have their own underlying causes and effects. The most prominent explanation in present literature draws upon "Intemporal discounting, task averseness and certain personality traits such as indecisiveness and distractibility" as the common causes of procrastination.

A study of behavioral patterns of pigeons through delayed reward suggests that procrastination is not unique to humans, but can also be observed in some other animals. There are experiments finding clear evidence for "procrastination" among pigeons, which show that pigeons tend to choose a complex but delayed task rather than an easy but hurry-up one.

Prevalence

In a study of academic procrastination from the University of Vermont, published in 1984, 46% of the subjects reported that they "always" or "nearly always" procrastinate writing papers, while approximately 30% reported procrastinating studying for exams and reading weekly assignments (by 28% and 30% respectively). Nearly a quarter of the subjects reported that procrastination was a problem for them regarding the same tasks. However, as many as 65% indicated that they would like to reduce their procrastination when writing papers, and approximately 62% indicated the same for studying for exams and 55% for reading weekly assignments.

A 1992 study showed that "52% of surveyed students indicated having a moderate to high need for help concerning procrastination." It is estimated that 80–95% of college students engage in procrastination, and approximately 75% consider themselves procrastinators.

In a study performed on university students, procrastination was shown to be greater on tasks that were perceived as unpleasant or as impositions than on tasks for which the student believed they lacked the required skills for accomplishing the task.

Another point of relevance is that of procrastination in industry. A study: The Impact of Organizational and Personal Factors on Procrastination in Employees of a Modern Russian Industrial Enterprise published in the Psychology in Russia: State of the Art journal, helped to identify the many factors that affected employees' procrastination habits. Some of which include intensity of performance evaluations, importance of their duty within a company, and their perception and opinions on management and/or upper level decisions.

Behavioral Criteria of Academic Procrastination

Gregory Schraw, Theresa Wadkins, and Lori Olafson in 2007 proposed three criteria for a behavior to be classified as academic procrastination: it must be counterproductive, needless, and delaying. Steel reviewed all previous attempts to define procrastination, and concluded in a 2007 study that procrastination is "to voluntarily delay an intended course of action despite expecting to be worse off for the delay." Sabini & Silver argued that postponement and irrationality are the two key features of procrastination. Delaying a task is not deemed as procrastination, they argue, if there are rational reasons behind the delay.

An approach that integrates several core theories of motivation as well as meta-analytic research on procrastination is the temporal motivation theory. It summarizes key predictors of procrastination (expectancy, value, and impulsiveness) into a mathematical equation.

Psychological Perspective

The pleasure principle may be responsible for procrastination; one may prefer to avoid negative emotions by delaying stressful tasks. As the deadline for their target of procrastination grows closer, they are more stressed and may, thus, decide to procrastinate more to avoid this stress. Some psychologists cite such behavior as a mechanism for coping with the anxiety associated with starting or completing any task or decision. Piers Steel indicated in 2010 that anxiety is just as likely to induce people to start working early as late, and that the focus of studies on procrastination should be impulsiveness. That is, anxiety will cause people to delay only if they are impulsive.

Coping Responses

Negative coping responses of procrastination tend to be avoidant or emotional rather than task-oriented or focused on problem-solving. Emotional and avoidant coping is employed to reduce stress (and cognitive dissonance) associated with delaying intended and important personal goals. This option provides immediate pleasure and is consequently very attractive to impulsive procrastinators, at the point of discovery of the achievable goals at hand. There are several emotion-oriented strategies, similar to Freudian defense mechanisms, coping styles and self-handicapping.

Coping responses of procrastinators include the following:

- Avoidance: Avoiding the location or situation where the task takes place (e.g. a graduate student avoiding driving into the university).

- Denial and trivialization: Pretending that procrastinatory behavior is not actually procrastinating, but rather a task which is more important than the avoided one, or that the essential task that should be done is not of immediate importance.

- Distraction: Engaging or immersing in other behaviors or actions to prevent awareness of the task (e.g. intensive video game playing or web browsing). The subject is very sensitive to instant gratification and becomes absorbed in coping behaviors beyond self-restraint.

- Descending counterfactuality: Comparing consequences of one's procrastinatory behavior with others' worse situations (e.g. "Yes, I procrastinated and got a B– in the course, but I didn't fail like one other student did.")

- Valorisation: Pointing in satisfaction to what one achieved in the meantime while one should have been doing something else.

- Blaming: Delusional attributions to external factors, such as rationalizing that the procrastination is due to external forces beyond one's control (e.g. "I'm not procrastinating, but this assignment is tough.")

- Mocking: Using humor to validate one's procrastination. The person uses slapstick or slipshod methods to criticize and ridicule others' striving towards the goal.

Task- or problem-solving measures are taxing from a procrastinator's outlook. If such measures are pursued, it is less likely the procrastinator would remain a procrastinator. However, pursuing such measures requires actively changing one's behavior or situation to prevent and minimize the re-occurrence of procrastination.

In 2006, it was suggested that neuroticism has no direct links to procrastination and that any relationship is fully mediated by conscientiousness. In 1982, it had been suggested that irrationality was an inherent feature of procrastination. "Putting things off even until the last moment isn't procrastination if there is a reason to believe that they will take only that moment". Steel *et al.* explained in 2001, "actions must be postponed and this postponement must represent poor, inadequate, or inefficient planning".

Health Perspective

To a certain degree it is normal to procrastinate and it can be regarded as a useful way to prioritize

between tasks, due to a lower tendency of procrastination on truly valued tasks (for most people). On the other hand, excessive procrastination can become a problem and impede normal functioning. When this happens, procrastination has been found to result in health problems, stress, anxiety, sense of guilt and crisis as well as loss of personal productivity and social disapproval for not meeting responsibilities or commitments. Together these feelings may promote further procrastination and for some individuals procrastination becomes almost chronic. Such procrastinators may have difficulties seeking support due to procrastination itself, but also social stigma and the belief that task-aversion is caused by laziness, lack of willpower or low ambition. In some cases problematic procrastination might be a sign of some underlying psychological disorder, but not necessarily.

Research on the physiological roots of procrastination have been concerned with the role of the prefrontal cortex, the area of the brain that is responsible for executive brain functions such as impulse control, attention and planning. This is consistent with the notion that procrastination is strongly related to such functions, or a lack thereof. The prefrontal cortex also acts as a filter, decreasing distracting stimuli from other brain regions. Damage or low activation in this area can reduce one's ability to avert diversions, which results in poorer organization, a loss of attention, and increased procrastination. This is similar to the prefrontal lobe's role in ADHD, where it is commonly underactivated.

In a 2014 U.S. study surveying procrastination and impulsiveness in fraternal- and identical twin pairs, both traits were found to be "moderately heritable". The two traits were not separable at the genetic level ($r_{genetic}$ = 1.0), meaning no unique genetic influences of either trait alone was found. The authors confirmed three constructs developed from the evolutionary hypothesis that procrastination arose as a by-product of impulsivity: "(a) Procrastination is heritable, (b) the two traits share considerable genetic variation, and (c) goal-management ability is an important component of this shared variation."

Management

Psychologist William J. Knaus estimated that more than 90% of college students procrastinate. Of these students, 25% are chronic procrastinators and typically abandon higher education (college dropouts).

Perfectionism is a prime cause for procrastination because pursuing unattainable goals (perfection) usually results in failure. Unrealistic expectations destroy self-esteem and lead to self-repudiation, self-contempt, and widespread unhappiness. To overcome procrastination, it is essential to recognize and accept the power of failure without condemning, to stop focusing on faults and flaws and to set goals that are easier to achieve.

Behaviors and practices that reduce procrastination:

- Awareness of habits and thoughts that lead to procrastinating.

- Seeking help for self-defeating problems such as fear, anxiety, difficulty in concentrating, poor time management, indecisiveness, and perfectionism.

- Fair evaluation of personal goals, strengths, weaknesses, and priorities.

- Realistic goals and personal positive links between the tasks and the concrete, meaningful goals.

- Structuring and organization of daily activities.

- Modification of one's environment for that newly gained perspective: the elimination or minimization of noise or distraction; investing effort into relevant matters; and ceasing day-dreaming.

- Disciplining oneself to set priorities.

- Motivation with enjoyable activities, socializing and constructive hobbies.

- Approaching issues in small blocks of time, instead of attempting whole problems at once and risking intimidation.

- To prevent relapse, reinforce pre-set goals based on needs and allow yourself to be rewarded in a balanced way for accomplished tasks.

Making a plan to complete tasks in a rigid schedule format might not work for everyone. There is no hard-and-fast rule to follow such a process if it turns out to be counter-productive. Instead of scheduling, it may be better to execute tasks in a flexible, unstructured schedule which has time slots for only necessary activities.

Piers Steel suggests that better time management is a key to overcoming procrastination, including being aware of and using one's "power hours" (being a "morning person" or "night owl"). A good approach is to creatively utilize one's internal circadian rhythms that are best suited for the most challenging and productive work. Steel states that it is essential to have realistic goals, to tackle one problem at a time and to cherish the "small successes". Brian O'Leary supports that "finding a work-life balance may actually help us find ways to be more productive", suggesting that dedicating leisure activities as motivation can increase one's efficiency at handling tasks. Procrastination is not a lifelong trait. Those likely to worry can learn to let go, those who procrastinate can find different methods and strategies to help focus and avoid impulses.

After contemplating his own procrastination habits, philosopher John Perry authored an essay entitled "Structured Procrastination", wherein he proposes a "cheat" method as a safer approach for tackling procrastination: using a pyramid scheme to reinforce the unpleasant tasks needed to be completed in a quasi-prioritized order.

Severe and Negative Impact

For some people, procrastination can be persistent and tremendously disruptive to everyday life. For these individuals, procrastination may be symptomatic of a psychological disorder. Procrastination has been linked to a number of negative associations, such as depression, irrational behaviour, low self-esteem, anxiety and neurological disorders such as ADHD. Others have found relationships with guilt and stress. Therefore, it is important for people whose procrastination has become chronic and is perceived to be debilitating to seek out a trained therapist or psychiatrist to investigate whether an underlying mental health issue may be present.

With a distant deadline, procrastinators report significantly less stress and physical illness than do non-procrastinators. However, as the deadline approaches, this relationship is reversed.

Procrastinators report more stress, more symptoms of physical illness, and more medical visits, to the extent that, overall, procrastinators suffer more stress and health problems.

Correlates

Procrastination has been linked to the complex arrangement of cognitive, affective and behavioral relationships from task desirability to low self esteem and anxiety to depression. A study found that procrastinators were less future-oriented than their non-procrastinator counterparts. This result was hypothesized to be in association with hedonistic perspectives on the present; instead it was found procrastination was better predicted by a fatalistic and hopeless attitude towards life.

A correlation between procrastination and eveningness was observed where individuals who had later sleeping and waking patterns were more likely to procrastinate. It has been shown that Morningness increases across lifespan and procrastination decreases with age.

Perfectionism

Traditionally, procrastination has been associated with perfectionism: a tendency to negatively evaluate outcomes and one's own performance, intense fear and avoidance of evaluation of one's abilities by others, heightened social self-consciousness and anxiety, recurrent low mood, and "workaholism". However, adaptive perfectionists—egosyntonic perfectionism—were *less* likely to procrastinate than non-perfectionists, while maladaptive perfectionists, who saw their perfectionism as a problem—egodystonic perfectionism—had high levels of procrastination and anxiety. In a regression analysis study of Steel, from 2007, it is found that mild to moderate perfectionists typically procrastinate slightly less than others, with "the exception being perfectionists who were also seeking clinical counseling".

Academic

According to an Educational Science Professor, Hatice Odaci, academic procrastination is a significant problem during college years in part because many college students lack efficient time management skills in using the Internet. Also, Odaci notes that most colleges provide free and fast twenty-four-hour Internet service which some students are not usually accustomed to, and as a result of irresponsible use or lack of firewalls these students become engulfed in distractions, and thus in procrastination.

"Student syndrome" refers to the phenomenon where a student will begin to fully apply themself to a task only immediately before a deadline. This negates the usefulness of any buffers built into individual task duration estimates. Results from a 2002 study indicate that many students are aware of procrastination and accordingly set binding deadlines long before the date for which a task is due. These self-imposed binding deadlines are correlated with a better performance than without binding deadlines though performance is best for evenly spaced external binding deadlines. Finally, students have difficulties optimally setting self-imposed deadlines, with results suggesting a lack of spacing before the date at which results are due. In one experiment, participation in online exercises was found to be five times higher in the final week before a deadline than in the summed total of the first three weeks for which the exercises were available. Procrastinators end up being the ones doing most of the work in the final week before a deadline.

Other reasons cited on why students procrastinate include fear of failure and success, perfectionist expectations, as well as legitimate activities that may take precedence over school work, such as a job.

Procrastinators have been found to receive worse grades than non-procrastinators. Tice report that more than one-third of the variation in final exam scores could be attributed to procrastination. The negative association between procrastination and academic performance is recurring and consistent. Howell found that, though scores on two widely used procrastination scales were not significantly associated with the grade received for an assignment, self-report measures of procrastination on the assessment itself were negatively associated with grade.

In 2005, a study conducted by Angela Chu and Jin Nam Choi and published in the Journal of Social Psychology intended to understand task performance among procrastinators with the definition of procrastination as the absence of self-regulated performance, from the 1977 work of Ellis & Knaus. In their study they identified two types of procrastination: the traditional procrastination which they denote as passive, and active procrastination where the person finds enjoyment of a goal-oriented activity only under pressure. The study calls this active procrastination positive procrastination, as it is a functioning state in a self-handicapping environment. In addition, it was observed that active procrastinators have more realistic perceptions of time and perceive more control over their time than passive procrastinators, which is considered a major differentiator between the two types. But surprisingly, active and passive procrastinators showed similar levels of academic performance. The population of the study was college students and the majority of the sample size were women and Asian in origin. Comparisons with chronic pathological procrastination traits were avoided.

Different findings emerge when observed and self-reported procrastination are compared. Steel et al. constructed their own scales based on Silver and Sabini's "irrational" and "postponement" criteria. They also sought to measure this behavior objectively. During a course, students could complete exam practice computer exercises at their own pace, and during the supervised class time could also complete chapter quizzes. A weighted average of the times at which each chapter quiz was finished formed the measure of observed procrastination, whilst observed irrationality was quantified with the number of practice exercises that were left uncompleted. Researchers found that there was only a moderate correlation between observed and self-reported procrastination (r = 0.35). There was a very strong inverse relationship between the number of exercises completed and the measure of postponement (r = −0.78). Observed procrastination was very strongly negatively correlated with course grade (r = −0.87), as was self-reported procrastination (though less so, r = −0.36). As such, self-reported measures of procrastination, on which the majority of the literature is based, may not be the most appropriate measure to use in all cases. It was also found that procrastination itself may not have contributed significantly to poorer grades. Steel et al. noted that those students who completed all of the practice exercises "tended to perform well on the final exam no matter how much they delayed."

Procrastination is considerably more widespread in students than in the general population, with over 70 percent of students reporting procrastination for assignments at some point. A 2014 panel study from Germany among several thousand university students found that increasing academic procrastination increases the frequency of seven different forms of academic misconduct, i.e., using fraudulent excuses, plagiarism, copying from someone else in exams, using forbidden means in exams, carrying forbidden means into exams, copying parts of homework from others,

fabrication or falsification of data and the variety of academic misconduct. This study argues that academic misconduct can be seen as a means to cope with the negative consequences of academic procrastination such as performance impairment.

Stress

Psychological Stress

A man expressing stress with both hands on his head.

In psychology, stress is a feeling of strain and pressure. Stress is a type of psychological pain. Small amounts of stress may be desired, beneficial, and even healthy. Positive stress helps improve athletic performance. It also plays a factor in motivation, adaptation, and reaction to the environment. Excessive amounts of stress, however, may lead to bodily harm. Stress can increase the risk of strokes, heart attacks, ulcers, and mental illnesses such as depression.

Stress can be external and related to the environment, but may also be caused by internal perceptions that cause an individual to experience anxiety or other negative emotions surrounding a situation, such as pressure, discomfort, etc., which they then deem stressful.

Humans experience stress, or perceive things as threatening, when they do not believe that their resources for coping with obstacles (stimuli, people, situations, etc.) are enough for what the circumstances demand. When people think the demands being placed on them exceed their ability to cope, they then perceive stress.

Types of Stress

A very much overlooked side of stress is its positive adaptations. Positive psychological stress can lead to motivation and challenge instead of anxiety. The effects of experiencing eustress, which is positive stress, versus distress, defined as negative stress, are significant. While colloquially lumped together, the various types of stress should be treated as separate concepts.

Selye proposed four variations of stress. On one axis he locates good stress (eustress) and bad stress (distress). On the other is over-stress (hyperstress) and understress (hypostress). Selye advocates balancing these: the ultimate goal would be to balance hyperstress and hypostress perfectly and have as much eustress as possible. Stress is extremely useful for a productive lifestyle because it makes working enjoyable instead of a chore, as seen with distress.

Causes of Stress

Neutrality of Stressors

Stress is a non-specific response. It is neutral, and what varies is the degree of response. It is all about the context of the individual and how they perceive the situation. Selye defined stress as "the nonspecific (that is, common) result of any demand upon the body, be the effect mental or somatic." This includes the medical definition of stress as a physical demand and the colloquial definition of stress as a psychological demand. A stressor is inherently neutral meaning that the same stressor can cause either distress or eustress. It is individual differences and responses that induce either distress or eustress.

Types of Stressors

A stressor is any event, experience, or environmental stimulus that causes stress in an individual. These events or experiences are perceived as threats or challenges to the individual and can be either physical or psychological. Researchers have found that stressors can make individuals more prone to both physical and psychological problems, including heart disease and anxiety.

Stressors are more likely to affect an individual's health when they are "chronic, highly disruptive, or perceived as uncontrollable". In psychology, researchers generally classify the different types of stressors into four categories: 1) crises/catastrophes, 2) major life events, 3) daily hassles/microstressors, and 4) ambient stressors.

Crises/Catastrophes

This type of stressor is unforeseen and unpredictable and, as such, is completely out of the control of the individual. Examples of crises and catastrophes include: devastating natural disasters, such as major floods or earthquakes, wars, etc. Though rare in occurrence, this type of stressor typically causes a great deal of stress in a person's life. A study conducted by Stanford University found that after natural disasters, those affected experienced a significant increase in stress level. Combat stress is a widespread acute and chronic problem. With the rapid pace and the urgency of firing first, tragic episodes of accidentally killing friendly forces ("brother" killing "brother" or fratricide) may happen. Prevention requires stress reduction, emphasis on vehicle and other identification training, awareness of the tactical situation, and continual risk analysis by leaders at all echelons.

Major Life Events

Common examples of major life events include: marriage, going to college, death of a loved one, birth of a child, moving houses, etc. These events, either positive or negative, can create a sense of uncertainty and fear, which will ultimately lead to stress. For instance, research has found the elevation of stress during the transition from high school to university, with college freshmen being

about two times more likely to be stressed than final year students. Research has found major life events are somewhat rare to be major causes of stress, due to its rare occurrences.

The length of time since occurrence and whether or not it is a positive or negative event are factors in whether or not it causes stress and how much stress it causes. Researchers have found that events that have occurred within the past month generally are not linked to stress or illness, while chronic events that occurred more than several months ago are linked to stress and illness and personality change. Additionally, positive life events are typically not linked to stress – and if so, generally only trivial stress – while negative life events can be linked to stress and the health problems that accompany it. However, positive experiences and positive life changes can predict decreases in neuroticism.

Daily Hassles/Microstressors

This category includes daily annoyances and minor hassles. Examples include: making decisions, meeting deadlines at work or school, traffic jams, encounters with irritating personalities, etc. Often, this type of stressor includes conflicts with other people. Daily stressors, however, are different for each individual, as not everyone perceives a certain event as stressful. For example, most people find public speaking to be stressful, nevertheless, a seasoned politician most likely will not.

Daily hassles are the most frequently occurring type of stressor in most adults. The high frequency of hassles causes this stressor to have the most physiological effect on an individual. Carolyn Aldwin, Ph.D., conducted a study at the Oregon State University that examined the perceived intensity of daily hassles on an individual's mortality. Aldwin's study concluded that there is a strong correlation between individuals who rate their hassles as very intense and a high level of mortality. One's perception of his/her daily stressors can have a modulating effect on the physiological impact of daily stressors.

There are three major psychological types of conflicts that can cause stress:

- The approach-approach conflict, occurs when a person is choosing between two equally attractive options, i.e. whether to go see a movie or to go see a concert.

- The avoidance-avoidance conflict, occurs where a person has to choose between two equally unattractive options, for example, to take out a second loan with unappealing terms to pay off the mortgage or to face foreclosure on one's house.

- The approach-avoidance conflict, occurs when a person is forced to choose whether or not to partake in something that has both attractive and unattractive traits – such as whether or not to attend an expensive college (meaning taking out loans now, but also meaning a quality education and employment after graduation).

Travel-related stress results from three main categories: lost time, surprises (an unforeseen event such as lost or delayed baggage) and routine breakers (inability to maintain daily habits).

Ambient Stressors

As their name implies, these are global (as opposed to individual) low-grade stressors that are a part of the background environment. They are defined as stressors that are "chronic, negatively

valued, non-urgent, physically perceptible, and intractable to the efforts of individuals to change them". Typical examples of ambient stressors are pollution, noise, crowding, and traffic. Unlike the other three types of stressor, ambient stressors can (but do not necessarily have to) negatively impact stress without conscious awareness. They are thus low on what Stokols called "perceptual salience".

Organizational Stressors

Studies conducted in military and combat fields show that some of the most potent stressors can be due to personal organizational problems in the unit or on the home front. Stress due to bad organizational practices is often connected to "Toxic Leadership", both in companies and in governmental organizations.

Life events scales can be used to assess stressful things that people experience in their lives. One such scale is the Holmes and Rahe Stress Scale, also known as the Social Readjustment Rating Scale, or SRRS. Developed by psychiatrists Thomas Holmes and Richard Rahe in 1967, the scale lists 43 stressful events.

To calculate one's score, add up the number of "life change units" if an event occurred in the past year. A score of more than 300 means that individual is at risk for illness, a score between 150 and 299 means risk of illness is moderate, and a score under 150 means that individual only has a slight risk of illness.

Life event	Life change units
Death of a spouse	100
Divorce	73
Marital separation	65
Imprisonment	63
Death of a close family member	63
Personal injury or illness	53
Marriage	50
Dismissal from work	47
Marital reconciliation	45
Retirement	45
Change in health of family member	44
Pregnancy	40
Sexual difficulties	39
Gain a new family member	39
Business readjustment	39
Change in financial state	38
Death of a close friend	37
Change to different line of work	36
Change in frequency of arguments	35
Major mortgage	32
Foreclosure of mortgage or loan	30
Change in responsibilities at work	29
Child leaving home	29

Trouble with in-laws	29
Outstanding personal achievement	28
Spouse starts or stops work	26
Begin or end school	26
Change in living conditions	25
Revision of personal habits	24
Trouble with boss	23
Change in working hours or conditions	20
Change in residence	20
Change in schools	20
Change in recreation	19
Change in church activities	19
Change in social activities	18
Minor mortgage or loan	17
Change in sleeping habits	16
Change in number of family reunions	15
Change in eating habits	14
Vacation	13
Minor violation of law	10

A modified version was made for non-adults. The scale is below:

Life event	Life change units
Unwed pregnancy	100
Death of parent	100
Getting married	95
Divorce of parents	90
Acquiring a visible deformity	80
Fathering an unwed pregnancy	70
Jail sentence of parent for over one year	70
Marital separation of parents	69
Death of a brother or sister	68
Change in acceptance by peers	67
Pregnancy of unwed sister	64
Discovery of being an adopted child	63
Marriage of parent to stepparent	63
Death of a close friend	63
Having a visible congenital deformity	62
Serious illness requiring hospitalization	58
Failure of a grade in school	56
Not making an extracurricular activity	55
Hospitalization of a parent	55
Jail sentence of parent for over 30 days	53
Breaking up with boyfriend or girlfriend	53
Beginning to date	51
Suspension from school	50

Becoming involved with drugs or alcohol	50
Birth of a brother or sister	50
Increase in arguments between parents	47
Loss of job by parent	46
Outstanding personal achievement	46
Change in parent's financial status	45
Accepted at college of choice	43
Being a senior in high school	42
Hospitalization of a sibling	41
Increased absence of parent from home	38
Brother or sister leaving home	37
Addition of third adult to family	34
Becoming a full-fledged member of a church	31
Decrease in arguments between parents	27
Decrease in arguments with parents	26
Mother or father beginning work	26

The SRRS is used in psychiatry to weight the impact of life events.

Physiological Impacts of Stress

The body responds to stress in many ways. Readjusting chemical levels is just one of them. Here are some examples of adjustments and changes.

General Adaptive Syndrome

In terms of measuring the body's response to stress, psychologists tend to use Hans Selye's general adaptation syndrome. This model is also often referred to as the classic stress response, and it revolves around the concept of homeostasis. General adaptive syndrome occurs in three stages:

- The alarm reaction: This stage occurs when the stressor is first presented. The body begins to gather resources to deal with the stressor. The hypothalamic-pituitary-adrenal axis and sympathetic nervous system are activated, resulting in the release of hormones from the adrenal gland such as cortisol, adrenaline (epinephrine), and norepinephrine into the bloodstream to adjust bodily processes. These hormonal adjustments increase energy levels, increase muscle tension, reduce sensitivity to pain, slow down the digestive system, and cause a rise in blood pressure. In addition, the Locus coeruleus, a collection of Norepinephrine-containing neurons in the pons of the brainstem whose axons project to various regions of the brain, is involved in releasing Norepinephrine directly onto neurons. High levels of Norepinephrine acting as a neurotransmitter on its receptors expressed on neurons in brain regions, such as the prefrontal cortex is thought to be involved in the effects of stress on executive functions, such as impaired working memory.

- The stage of resistance: The body continues building up resistance throughout the stage of resistance, until either the body's resources are depleted, leading to the exhaustion phase, or the stressful stimulus is removed. As the body uses up more and more of its resources people become increasingly tired and susceptible to illness. This stage is where psychosomatic disorders first begin to appear.

- • The stage of exhaustion: The body is completely drained of the hormones and resources it was depending on to manage the stressor. The person now begins to exhibit behaviors such as anxiety, irritability, avoidance of responsibilities and relationships, self-destructive behavior, and poor judgment. If someone is experiencing these symptoms they have a much greater chance of lashing out, damaging relationships, or avoiding social interaction at all.

This physiological stress response involves high levels of sympathetic nervous system activation, often referred to as the "fight or flight" response. The response involves pupil dilation, release of endorphins, increased heart and respiration rates, cessation of digestive processes, secretion of adrenaline, arteriole dilation, and constriction of veins. This high level of arousal is often unnecessary to adequately cope with micro-stressors and daily hassles; yet, this is the response pattern seen in humans, which often leads to health issues commonly associated with high levels of stress.

Quality of Sleep

Sleep allows people to rest and re-energize for another day filled with interactions and tasks. If someone is stressed it is extremely important for them to get enough sleep so that they can think clearly. Unfortunately, chemical changes in the body caused by stress can make sleep a difficult thing. Glucocorticoids are released by the body in response to stress which can disrupt sleep.

Health Effects

A stressed girl waiting on line at a medical center.

There is likely a connection between stress and illness. Theories of the stress–illness link suggest that both acute and chronic stress can cause illness, and several studies found such a link. According to these theories, both kinds of stress can lead to changes in behavior and in physiology. Behavioral changes can be smoking and eating habits and physical activity. Physiological changes can be changes in sympathetic activation or hypothalamic pituitary adrenocorticoid activation, and immunological function. However, there is much variability in the link between stress and illness.

Stress can make the individual more susceptible to physical illnesses like the common cold. Stressful events, such as job changes, may result in insomnia, impaired sleeping, and health complaints. Research indicates the type of stressor (whether it is acute or chronic) and individual characteristics such as age and physical well-being before the onset of the stressor can combine to determine the effect of stress on an individual. An individual's personality characteristics (such as level of

neuroticism), genetics, and childhood experiences with major stressors and traumas may also dictate their response to stressors.

Chronic stress and a lack of coping resources available or used by an individual can often lead to the development of psychological issues such as depression and anxiety. This is particularly true regarding chronic stressors. These are stressors that may not be as intense as an acute stressor like a natural disaster or a major accident, but they persist over longer periods of time. These types of stressors tend to have a more negative impact on health because they are sustained and thus require the body's physiological response to occur daily. This depletes the body's energy more quickly and usually occurs over long periods of time, especially when these microstressors cannot be avoided (i.e. stress of living in a dangerous neighborhood). See allostatic load for further discussion of the biological process by which chronic stress may affect the body. For example, studies have found that caregivers, particularly those of dementia patients, have higher levels of depression and slightly worse physical health than noncaregivers.

Studies have also shown that perceived chronic stress and the hostility associated with Type A personalities are often associated with much higher risks of cardiovascular disease. This occurs because of the compromised immune system as well as the high levels of arousal in the sympathetic nervous system that occur as part of the body's physiological response to stressful events. However, it is possible for individuals to exhibit hardiness – a term referring to the ability to be both chronically stressed and healthy. Chronic stress can be associated with psychological disorders such as delusions. Pathological anxiety and chronic stress lead to structural degeneration and impaired functioning of the hippocampus.

It has long been believed that negative affective states, such as feelings of anxiety and depression, could influence the pathogenesis of physical disease, which in turn, have direct effects on biological process that could result in increased risk of disease in the end. However, studies done by the University of Wisconsin-Madison and other places have shown this to be partly untrue; although stress seems to increase the risk of reported poor health, the *perception* that stress is harmful increases the risk even further. For example, when humans are under chronic stress, permanent changes in their physiological, emotional, and behavioral responses are most likely to occur. Such changes could lead to disease. Chronic stress results from stressful events that persist over a relatively long period of time, such as caring for a spouse with dementia, or results from brief focal events that continue to be experienced as overwhelming even long after they are over, such as experiencing a sexual assault.

Experiments show that when healthy human individuals are exposed to acute laboratory stressors, they show an adaptive enhancement of some markers of natural immunity but a general suppression of functions of specific immunity. By comparison, when healthy human individuals are exposed to real-life chronic stress, this stress is associated with a biphasic immune response where partial suppression of cellular and humoral function coincides with low-grade, nonspecific inflammation.

Even though psychological stress is often connected with illness or disease, most healthy individuals can still remain disease-free after confronting chronic stressful events. Also, people who do not believe that stress will affect their health do not have an increased risk of illness, disease, or death. This suggests that there are individual differences in vulnerability to the potential pathogenic effects of stress; individual differences in vulnerability arise due to both genetic and psychological

factors. In addition, the age at which the stress is experienced can dictate its effect on health. Research suggests chronic stress at a young age can have lifelong impacts on the biological, psychological, and behavioral responses to stress later in life.

As stress has a physical effect on the body, some individuals may not distinguish this from other more serious illnesses. If the symptom is unambiguous (e.g. a breast lump), individuals are motivated to seek care regardless if they are under stress. However, if the symptom is ambiguous (e.g. headache), they will not seek care attributing the symptom to stress if the stressor's onset is recent which began in the previous 3 weeks, and will seek care if the onset is not recent.

In animals, stress contributes to the initiation, growth, and metastasis of select tumors, but studies that try to link stress and cancer incidence in humans have had mixed results. This can be due to practical difficulties in designing and implementing adequate studies. Personal belief in stress as a risk factor for cancer was common in one UK study, though awareness of risk factors overall was found to be low.

Social Impacts of Stress

Stressful Social Experiences that Affect Communication
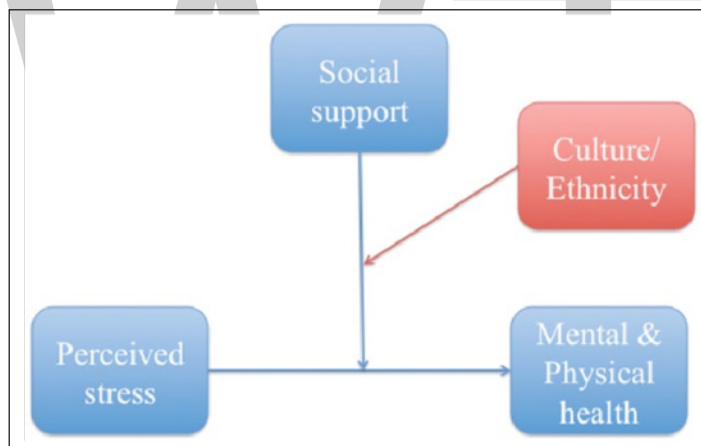
When someone is stressed, many challenges can arise; a recognized challenge being communication difficulties. Here are some examples of how stress can hinder communication.

Cultural Differences: Individualistic vs. Collectivistic

The cultures of the world generally fall into two categories; individualistic and collectivistic.

- An individualistic culture, like that of the United States, where everyone is an independent entity defined by their accomplishments and goals.

- A collectivistic culture, like that of many Asian countries, prefers to see individuals as interdependent on each other. They value modesty and family.

These cultural differences can affect how people communicate when they are stressed. For example, a member of an individualistic culture would be hesitant to ask for pain medication for fear of being perceived as weak. A member of a collectivistic culture would not hesitate. They have been

brought up in a culture where everyone helps each other and is one functional unit whereas the member of the individualistic culture is not as comfortable asking others for aid.

Language Barriers

Language barriers can cause stress by making people feel uncomfortable because differences in syntax, vocabulary, different ways of showing respect, and different use of body language can make things difficult, and along with a desire for successful social interactions, being uncomfortable with the communication around a person can discourage them from communicating at all.

Changes in the Home

Divorce, death, and remarriage are all disruptive events in a household. Although everyone involved is affected by events such as these, it can be most drastically seen in children. Due to their age, children have relatively undeveloped coping skills. For this reason a stressful event may cause some changes in their behavior. Falling in with a new crowd, developing some new and sometimes undesirable habits are just some of the changes stress may trigger in their lives.

A particularly interesting response to stress is talking to an imaginary friend. A child may feel angry with a parent or their peers who they feel brought this change on them. They need someone to talk to but it definitely would not be the person with whom they are angry. That is when the imaginary friend comes in. They "talk" to this imaginary friend but in doing so they cut off communication with the real people around them.

Social Support and Health

Researchers have long been interested in how an individual's level and types of social support impact the effect of stress on their health. Studies consistently show that social support can protect against physical and mental consequences of stress. This can occur through a variety of mechanisms. One model, known as the "direct effects" model, holds that social support has a direct, positive impact on health by increasing positive affect, promoting adaptive health behaviors, predictability and stability in life, and safeguarding against social, legal, and economic concerns that could negatively impact health. another model, the "buffering effect", says that social support exerts greatest influence on health in times of stress, either by helping individuals appraise situations in less threatening manners or coping with the actual stress. Researchers have found evidence to support both these pathways.

Social support is defined more specifically as psychological and material resources provided by a social network that are aimed at helping an individual cope with stress. Researchers generally distinguish among several types of social support: instrumental support – which refers to material aid (e.g., financial support or assistance in transportation to a physician's appointment), informational support (e.g., knowledge, education or advice in problem-solving), and emotional support (e.g., empathy, reassurance, etc.). Social support can reduce the rate of stress during pregnancy.

Management

Stress management refers to a wide spectrum of techniques and psychotherapies aimed at controlling a person's levels of stress, especially chronic stress, usually for the purpose of improving

everyday functioning. It involves controlling and reducing the tension that occurs in stressful situations by making emotional and physical changes.

Prevention and Resilience Building

Decreasing stressful behaviors is a part of prevention, some of the common strategies and techniques are: Self-monitoring, tailoring, material reinforcement, social reinforcement, social support, self-contracting, contracting with significant other, shaping, reminders, self-help groups, professional help.

Although many techniques have traditionally been developed to deal with the consequences of stress considerable research has also been conducted on the prevention of stress, a subject closely related to psychological resilience-building. A number of self-help approaches to stress-prevention and resilience-building have been developed, drawing mainly on the theory and practice of cognitive-behavioral therapy.

Biofeedback may also play a role in stress management. A randomized study by Sutarto et al. assessed the effect of resonant breathing biofeedback (recognize and control involuntary heart rate variability) among manufacturing operators; depression, anxiety and stress significantly decreased.

Exercising to Reduce Stress

Studies have shown that exercise reduces stress. Exercise effectively reduces fatigue, improves sleep, enhances overall cognitive function such as alertness and concentration, decreases overall levels of tension, and improves self-esteem. Because many of these are depleted when an individual experiences chronic stress, exercise provides an ideal coping mechanism. Despite popular belief, it is not necessary for exercise to be routine or intense in order to reduce stress. As little as five minutes of aerobic exercise can begin to stimulate anti-anxiety effects. Further, a 10-minute walk may have the same psychological benefits as a 45-minute workout, reinforcing the assertion that exercise in any amount or intensity will reduce stress.

Theoretical Explanations

A multitude of theories have been presented in attempts to explain why exercise effectively reduces stress. One theory, known as the time-out hypothesis, claims that exercise provides distraction from the stressor. The time out hypothesis claims that exercise effectively reduces stress because it gives individuals a break from their stressors. This was tested in a recent study of college women who had identified studying as their primary stressor. The women were then placed under four conditions at varying times: "rest," "studying," "exercising," and "studying while exercising." The stress levels of the participants were measured through self-assessments of stress and anxiety symptoms after each condition. The results demonstrated that the "exercise" condition had the most significant reduction in stress and anxiety symptoms. These results demonstrate the validity of the time-out hypothesis. It is also important to note that exercise provided greater stress reduction than rest.

Coping Mechanisms

The Lazarus and Folkman model suggests that external events create a form of pressure to achieve, engage in, or experience a stressful situation. Stress is not the external event itself, but rather an interpretation and response to the potential threat; this is when the coping process begins.

There are various ways individuals deal with perceived threats that may be stressful. However, people have a tendency to respond to threats with a predominant coping style, in which they dismiss feelings, or manipulate the stressful situation.

There are different classifications for coping, or defense mechanisms, however they all are variations on the same general idea. There are good/productive and negative/counterproductive ways to handle stress. Because stress is perceived, the following mechanisms do not necessarily deal with the actual situation that is causing an individual stress. However, they may be considered coping mechanisms if they allow the individual to cope better with the negative feelings/anxiety that they are experiencing due to the perceived stressful situation, as opposed to actually fixing the concrete obstacle causing the stress. The following mechanisms are adapted from the DSM-IV Adaptive Functioning Scale, APA, 1994.

Highly Adaptive/Active/Problem-focused Mechanisms

These skills are what one could call as "facing the problem head on", or at least dealing with the negative emotions experienced by stress in a constructive manner. (generally adaptive).

- Affiliation ("tend and befriend") – involves dealing with stress by turning to a social network for support, but an individual does not share with others in order to diffuse or avoid the responsibility.

- Humor – the individual steps outside of a situation in order to gain greater perspective, and also to highlight any comic aspect to be found in their stressful circumstances.

Coping through laughter.

"The Association for Applied and Therapeutic Humor defines therapeutic humor as 'any intervention that promotes health and wellness by stimulating a playful discovery, expression or appreciation of the absurdity of or incongruity of life's situations. This intervention may enhance health or be used as a complementary treatment of illness to facilitate healing or coping whether physical, emotional, cognitive, or spiritual".

Sigmund Freud, a well known neurologist, suggests the humor was an excellent defensive strategy in emotional situations. When one laughs during a tough situation they feel absent from their worries, and this allows them to think differently. When one experiences a different mind set, they feel more in control of their response, and how they will go about dealing with the event that caused stress.

Lefcourt (2001) suggests that this perspective-taking humor is the most effective due to its ability to distance oneself from the situation of great stress. Studies show that the use of laughter and humor creates a sense of relief of stress that can last up to 45 minutes post-laughter.

Also, most hospitalized children have been seen to use laughter and play to relieve their fear, pain and stress. It has been discovered that there is a great importance in the use of laughter and humor in stress coping. Humans should use humor as a means to transcend their original understanding of an external event, take a different perspective, in which their anxiety may be minimized by:

- Sublimation: Allows an "indirect resolution of conflict with neither adverse consequences nor consequences marked by loss of pleasure." Essentially, this mechanism allows channeling of troubling emotions or impulses into an outlet that is socially acceptable.

- Positive reappraisal: Redirects thoughts (cognitive energy) to good things that are either occurring or have not occurred. This can lead to personal growth, self-reflection, and awareness of the power/benefits of one's efforts. For example, studies on veterans of war or peacekeeping operations indicate that persons who construe a positive meaning from their combat or threat experiences tend to adjust better than those who do not.

Mental Inhibition/Disavowal Mechanisms

These mechanisms cause the individual to have a diminished (or in some cases non-existent) awareness about their anxiety, threatening ideas, fears, etc., that come from being conscious of the perceived threat.

- Displacement: This is when an individual redirects their emotional feelings about one situation to another, less threatening one.

- Repression: Repression occurs when an individual attempts to remove all their thoughts, feelings, and anything related to the upsetting/stressful (perceived) threat out of their awareness in order to be disconnected from the entire situation. When done long enough in a successful way, this is more than just denial.

- Reaction formation: An attempt to remove any "unacceptable thoughts" from one's consciousness by replacing them with the exact opposite.

Other inhibition coping mechanisms include undoing, dissociation, denial, projection, and rationalization. Although some people claim that inhibition coping mechanisms may eventually increase the stress level because the problem is not solved, detaching from the stressor can sometimes help people to temporarily release the stress and become more prepared to deal with problems later on.

Active Mechanisms

These methods deal with stress by an individual literally taking action, or withdrawing.

- Acting out: Often viewed as counter-normative, or problematic behavior. Instead of reflecting or problem-solving, an individual takes maladaptive action.

- Passive aggression – When an individual indirectly deals with his or her anxiety and negative thoughts/feelings stemming from their stress by acting in a hostile or resentful manner towards others. Help-Rejecting Complaining can also be included in this category.

Health Promotion

There is an alternative method to coping with stress, in which one works to minimize their anxiety and stress in a preventative manner. If one works towards coping with stress daily, the feeling of stress and the ways in which one deals with it as the external event arises becomes less of a burden.

Suggested strategies to improve stress management include:

- Regular exercise: Set up a fitness program, 3–4 times a week.

- Support systems: To listen, offer advice, and support each other.

- Time management: Develop an organizational system.

- Guided imagery and visualization: Create a relaxing state of mind.

- Progressive muscle relaxation: Loosen tense muscle groups.

- Assertiveness training: Work on effective communication.

- Journal writing: Express true emotion, self-reflection.

- Stress management in the workplace: Organize a new system, switch tasks to reduce own stress.

- HeartSpeak: A novel method for reducing stress and other stress-related conditions such as anxiousness, depression, and low self-esteem.

Time Management to Prevent Stress

The values clarification process does not generally result in such a stark decision-making process as is the case with unexpected pregnancy. More ordinarily, people will find themselves faced with the more pedestrian task of trying to balance numerous work and family responsibilities. This balance can be best accomplished through a values-driven time management process.

Time management methods involve finding ways to work more efficiently, so as to maximize one's use of time. A variety of techniques and tools for list-making, task analysis scheduling, and task prioritization are typically used for this purpose. The basic time management process involves the following steps:

- Developing a thorough understanding of all the various steps that must be performed to get a particular task completed.

- Writing these steps down in the order they must be performed.

- Identifying dependencies among steps that may cause bottlenecks to occur.

- Scheduling the steps (using memory tools, including day planners, memo boards, sticky notes, shared calenders, project management software and personal information managers to assist in their timely performance).

- Tracking execution of the steps as they occur.

- Using what is learned from experience executing the steps to improve the efficiency with which various steps may be performed.

Traditional approaches to time management suffer from an over-emphasis on efficiency, technique, and getting things done and under-emphasize aligning actions with values and on preserving work/life balance. Emphasizing task completion over maintaining a balanced life tends to create stress rather than reduce it. This style of prioritizing sets the stage for failure and negative thinking when people fail to meet deadlines, or meet them in one sphere of life only by neglecting responsibilities and dependencies in the other. People are often asked to prioritize tasks according to their urgency (e.g., according to deadlines) without also considering their importance (e.g., whether or not they match values). This misplaced emphasis tends to cause people to neglect their less demanding but perhaps more satisfying relationships in favor of "oiling squeaky wheels" with potentially damaging long term results.

The same techniques for analyzing, scheduling and tracking task performance can be usefully employed, so long as these techniques are used in the service of meeting work *and* family responsibilities, rather than just focusing on work needs.

Creating Protected Time for both Work and Family Responsibilities

A good way to make sure that work demands do not intrude into people's needs for family and personal time is to set time boundaries around work activities, and to not allow those boundaries to stretch too far. This can be quite a trick to pull off for people in some lines of work, and will be impossible for some to manage. By the same token, knowing that you are in a line of work that will regularly cause you to neglect your personal and family life is information you can use to make values-based decisions about whether or not to stay in that line of work over the long term.

Taking Breaks and Vacations

A vital way to preserve work/life balance is to make sure to build time for play and relaxation directly into your schedule. One way to do this is to schedule and stick to having periodic breaks in

between periods of work. Rather than making such breaks simply about getting a coffee or smoking a cigarette, try incorporating restorative physical activity into your routine. Try stretching, walking, a relaxation technique such as progressive muscle relaxation, or even a few yoga postures during these break times to get your energy moving again. Prophylactic, preventative use of techniques for defusing stress at such times can help keep stress from accumulating.

On a larger scale, it is important to schedule time away from work for purposes of vacation. While large-scale vacations (several weeks of travel to exotic locations) can be wonderful, many Americans simply do not have enough vacation time from work or the available resources to make them practical. There is also a question as to whether a long vacation is the best way to relax and decrease stress. Shortly after you return to work from any vacation, many people quickly become stressed out again. Keeping this in mind, it can be questionable logic to blow your entire vacation budget on something you can do only once a year. As an alternative, consider taking a number of mini-vacations spread more frequently throughout the year.

Spreading Out Predictable Sources of Stress

It is often possible to predict that particular events will be stressful, and then to use this knowledge intelligently so as to minimize their impact on the quality of your life. Scheduling stressful events to occur during times when you have fewer responsibilities and more attention to give them can lessen their negative impact. For example, repainting the house in the summertime when you have some days off will likely be less stressful than tackling the project in the evenings when you are rushing home from work. Similarly, it is useful to stagger major lifestyle changes so that they occur widely spaced apart in time (when that is practical). Even life changes that are positive sources of eustress, such as getting married or bringing home a new child, can become unpleasant and overwhelming when too many things happen at once. In the same vein, stressors that are predictable can often be scheduled during times when they are more manageable. For example, if going to the grocery on a Saturday afternoon is stressful because of the crowds and long lines, schedule your week to fit the shopping in on another day.

Sometimes stressful events can simply be avoided entirely. It is possible to research commuting traffic patterns in advance of buying or renting a home and move to a region where commutes are easier. Alternatively, it may be possible to reschedule the hours you work so that you do not need to commute during peak traffic hours. Telecommuting (e.g., working from home) may also be an option to explore if your employer allows it.

Anxiety

Anxiety is an emotion characterized by an unpleasant state of inner turmoil, often accompanied by nervous behaviour such as pacing back and forth, somatic complaints, and rumination. It is the subjectively unpleasant feelings of dread over anticipated events, such as the feeling of imminent death.

Anxiety is a feeling of uneasiness and worry, usually generalized and unfocused as an overreaction to a situation that is only subjectively seen as menacing. It is often accompanied by muscular tension, restlessness, fatigue and problems in concentration. Anxiety can be appropriate, but when experienced regularly the individual may suffer from an anxiety disorder. Anxiety is not the same as fear,

which is a response to a real or perceived immediate threat; anxiety involves the expectation of future threat. People facing anxiety may withdraw from situations which have provoked anxiety in the past.
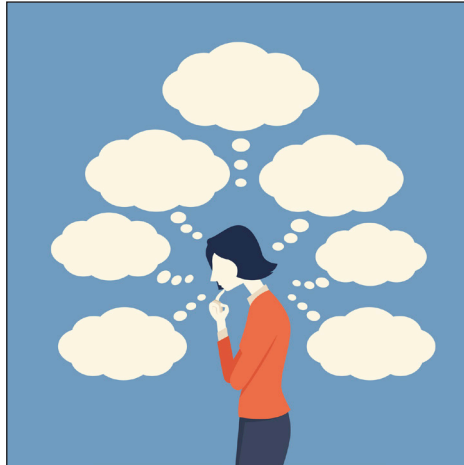
Anxiety can be either a short-term "state" or a long-term "trait". Whereas trait anxiety represents worrying about future events, anxiety disorders are a group of mental disorders characterized by feelings of anxiety and fear. Anxiety disorders are partly genetic, with twin studies suggesting 30-40% genetic influence on individual differences in anxiety. Environmental factors are also important. Twin studies show that individual-specific environments have a large influence on anxiety, whereas shared environmental influences (environments that affect twins in the same way) operate during childhood but decline through adolescence. Specific measured 'environments' that have been associated with anxiety include child abuse, family history of mental health disorders, and poverty. Anxiety is also associated with drug use, including alcohol, caffeine, and benzodiazepines (which are often prescribed to treat anxiety).
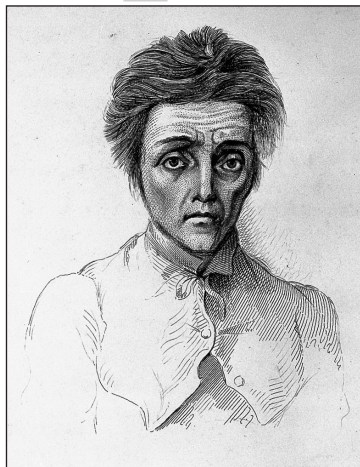
A person diagnosed with panphobia, from Alexander Morison's 1843 book The Physiognomy of Mental Diseases.

There are various types of anxiety. Existential anxiety can occur when a person faces angst, an existential crisis, or nihilistic feelings. People can also face mathematical anxiety, somatic anxiety, stage fright, or test anxiety. Social anxiety and stranger anxiety are caused when people are apprehensive around strangers or other people in general.

Anxiety disorders often occur with other mental health disorders, particularly major depressive disorder, bipolar disorder, eating disorders, or certain personality disorders. It also commonly occurs with personality traits such as neuroticism. This observed co-occurrence is partly due to genetic and environmental influences shared between these traits and anxiety.

Stress hormones released in an anxious state have an impact on bowel function and can manifest physical symptoms that may contribute to or exacerbate IBS. Anxiety is often experienced by those with obsessive–compulsive disorder and is an acute presence in panic disorder.

The first step in the management of a person with anxiety symptoms involves evaluating the possible presence of an underlying medical cause, whose recognition is essential in order to decide the correct treatment. Anxiety symptoms may mask an organic disease, or appear associated with or as a result of a medical disorder.

Symptoms

Anxiety can be experienced with long, drawn out daily symptoms that reduce quality of life, known as chronic (or generalized) anxiety, or it can be experienced in short spurts with sporadic, stressful panic attacks, known as acute anxiety. Symptoms of anxiety can range in number, intensity, and frequency, depending on the person. While almost everyone has experienced anxiety at some point in their lives, most do not develop long-term problems with anxiety.

Anxiety may cause psychiatric and physiological symptoms.

The risk of anxiety leading to depression could possibly even lead to an individual harming themselves, which is why there are many 24-hour suicide prevention hotlines.

The behavioral effects of anxiety may include withdrawal from situations which have provoked anxiety or negative feelings in the past. Other effects may include changes in sleeping patterns, changes in habits, increase or decrease in food intake, and increased motor tension (such as foot tapping).

The emotional effects of anxiety may include "feelings of apprehension or dread, trouble concentrating, feeling tense or jumpy, anticipating the worst, irritability, restlessness, watching (and waiting) for signs (and occurrences) of danger, and, feeling like your mind's gone blank" as well as "nightmares/bad dreams, obsessions about sensations, déjà vu, a trapped-in-your-mind feeling, and feeling like everything is scary."

The cognitive effects of anxiety may include thoughts about suspected dangers, such as fear of dying. "You may fear that the chest pains are a deadly heart attack or that the shooting pains in your head are the result of a tumor or an aneurysm. You feel an intense fear when you think of dying, or you may think of it more often than normal, or can't get it out of your mind."

Types

Existential

The philosopher Søren Kierkegaard, in The Concept of Anxiety, described anxiety or dread associated with the "dizziness of freedom" and suggested the possibility for positive resolution of anxiety through the self-conscious exercise of responsibility and choosing. In Art and Artist, the

psychologist Otto Rank wrote that the psychological trauma of birth was the pre-eminent human symbol of existential anxiety and encompasses the creative person's simultaneous fear of – and desire for – separation, individuation, and differentiation.

Painting entitled Anxiety, 1894, by Edvard Munch.

The theologian Paul Tillich characterized existential anxiety as "the state in which a being is aware of its possible nonbeing" and he listed three categories for the nonbeing and resulting anxiety: ontic (fate and death), moral (guilt and condemnation), and spiritual (emptiness and meaningless-ness). According to Tillich, the last of these three types of existential anxiety, i.e. spiritual anxiety, is predominant in modern times while the others were predominant in earlier periods. Tillich argues that this anxiety can be accepted as part of the human condition or it can be resisted but with negative consequences. In its pathological form, spiritual anxiety may tend to "drive the person toward the creation of certitude in systems of meaning which are supported by tradition and authority" even though such "undoubted certitude is not built on the rock of reality".

According to Viktor Frankl, the author of Man's Search for Meaning, when a person is faced with extreme mortal dangers, the most basic of all human wishes is to find a meaning of life to combat the "trauma of nonbeing" as death is near.

Depending on the source of the threat, psychoanalytic theory distinguishes the following types of anxiety:

- Realistic

- Neurotic

- Moral

Test and Performance

According to Yerkes-Dodson law, an optimal level of arousal is necessary to best complete a task such as an exam, performance, or competitive event. However, when the anxiety or level of arousal exceeds that optimum, the result is a decline in performance.

Test anxiety is the uneasiness, apprehension, or nervousness felt by students who have a fear of failing an exam. Students who have test anxiety may experience any of the following: the association of grades with personal worth; fear of embarrassment by a teacher; fear of alienation from parents or friends; time pressures; or feeling a loss of control. Sweating, dizziness, headaches, racing heartbeats, nausea, fidgeting, uncontrollable crying or laughing and drumming on a desk are all common. Because test anxiety hinges on fear of negative evaluation, debate exists as to whether test anxiety is itself a unique anxiety disorder or whether it is a specific type of social phobia. The DSM-IV classifies test anxiety as a type of social phobia.

While the term "test anxiety" refers specifically to students, many workers share the same experience with regard to their career or profession. The fear of failing at a task and being negatively evaluated for failure can have a similarly negative effect on the adult. Management of test anxiety focuses on achieving relaxation and developing mechanisms to manage anxiety.

Stranger, Social and Intergroup Anxiety
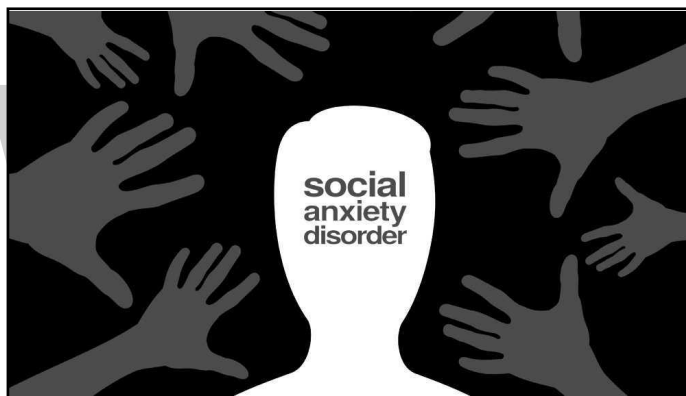
Humans generally require social acceptance and thus sometimes dread the disapproval of others. Apprehension of being judged by others may cause anxiety in social environments.

Anxiety during social interactions, particularly between strangers, is common among young people. It may persist into adulthood and become social anxiety or social phobia. "Stranger anxiety" in small children is not considered a phobia. In adults, an excessive fear of other people is not a developmentally common stage; it is called social anxiety. According to Cutting, social phobics do not fear the crowd but the fact that they may be judged negatively.

Social anxiety varies in degree and severity. For some people, it is characterized by experiencing discomfort or awkwardness during physical social contact (e.g. embracing, shaking hands, etc.), while in other cases it can lead to a fear of interacting with unfamiliar people altogether. Those suffering from this condition may restrict their lifestyles to accommodate the anxiety, minimizing social interaction whenever possible. Social anxiety also forms a core aspect of certain personality disorders, including avoidant personality disorder.

To the extent that a person is fearful of social encounters with unfamiliar others, some people may experience anxiety particularly during interactions with outgroup members, or people who share different group memberships (i.e., by race, ethnicity, class, gender, etc.). Depending on the nature of the antecedent relations, cognitions, and situational factors, intergroup contact may be stressful

and lead to feelings of anxiety. This apprehension or fear of contact with outgroup members is often called interracial or intergroup anxiety.

As is the case the more generalized forms of social anxiety, intergroup anxiety has behavioral, cognitive, and affective effects. For instance, increases in schematic processing and simplified information processing can occur when anxiety is high. Indeed, such is consistent with related work on attentional bias in implicit memory. Additionally recent research has found that implicit racial evaluations (i.e. automatic prejudiced attitudes) can be amplified during intergroup interaction. Negative experiences have been illustrated in producing not only negative expectations, but also avoidant, or antagonistic, behavior such as hostility. Furthermore, when compared to anxiety levels and cognitive effort (e.g., impression management and self-presentation) in intragroup contexts, levels and depletion of resources may be exacerbated in the intergroup situation.

Trait

Anxiety can be either a short-term 'state' or a long-term personality "trait". Trait anxiety reflects a stable tendency across the lifespan of responding with acute, state anxiety in the anticipation of threatening situations (whether they are actually deemed threatening or not). A meta-analysis showed that a high level of neuroticism is a risk factor for development of anxiety symptoms and disorders. Such anxiety may be conscious or unconscious.

Personality can also be a trait leading towards anxiety and depression. Through experience many find it difficult to collect themselves due to their own personal nature.

Choice or Decision

Anxiety induced by the need to choose between similar options is increasingly being recognized as a problem for individuals and for organizations. In 2004, Capgemini wrote: "Today we're all faced with greater choice, more competition and less time to consider our options or seek out the right advice."

In a decision context, unpredictability or uncertainty may trigger emotional responses in anxious individuals that systematically alter decision-making. There are primarily two forms of this anxiety type. The first form refers to a choice in which there are multiple potential outcomes with known or calculable probabilities. The second form refers to the uncertainty and ambiguity related to a decision context in which there are multiple possible outcomes with unknown probabilities.

Anxiety Disorders

Anxiety disorders are a group of mental disorders characterized by exaggerated feelings of anxiety and fear responses. Anxiety is a worry about future events and fear is a reaction to current events. These feelings may cause physical symptoms, such as a fast heart rate and shakiness. There are a number of anxiety disorders: including generalized anxiety disorder, specific phobia, social anxiety disorder, separation anxiety disorder, agoraphobia, panic disorder, and selective mutism. The disorder differs by what results in the symptoms. People often have more than one anxiety disorder.

Anxiety disorders are caused by a complex combination of genetic and environmental factors. To be diagnosed, symptoms typically need to be present for at least six months, be more than would

be expected for the situation, and decrease a person's ability to function in their daily lives. Other problems that may result in similar symptoms include hyperthyroidism, heart disease, caffeine, alcohol, or cannabis use, and withdrawal from certain drugs, among others.

Without treatment, anxiety disorders tend to remain. Treatment may include lifestyle changes, counselling, and medications. Counselling is typically with a type of cognitive behavioural therapy. Medications, such as antidepressants or beta blockers, may improve symptoms.

About 12% of people are affected by an anxiety disorder in a given year and between 5–30% are affected at some point in their life. They occur about twice as often in women than they do in men, and generally begin before the age of 25. The most common are specific phobia which affects nearly 12% and social anxiety disorder which affects 10% at some point in their life. They affect those between the ages of 15 and 35 the most and become less common after the age of 55. Rates appear to be higher in the United States and Europe.

Inability to Say No

One time management technique we don't use enough is simply saying no. We're quick to say yes, giving away our time, then we wonder why we have no time left for what we want.

If you find your diary is full, or full of things you don't want to do, then it's time to start saying no – nicely.

People ask for our time every single day. And if we give our time away to everyone who asks for it, we end up feeling frazzled, tired and grumpy. Often it doesn't occur to us that we have the option to simply say no.

It's much rarer for someone to thank us for our time. But when they do, it reminds us that our time is valuable, and we need to learn to value it too.

Learning when and how to say no is a way of valuing and managing our time.

When we say no to one thing, in effect we're also saying yes to something else. This might be yes to time to recharge, sleep and renew our energy. It might be yes to some thinking space. It might be yes to more time for ourselves, or yes to time for the people and things that matter to us.

Something has to Give

We can't say yes to every invitation, request, message, question or demand we get – something has to give. So what should we say no to?

Look at what or who you're saying yes to at the minute. What or who (including yourself) does that mean you are then you saying no to? Is your diary full of things that fill you with great anticipation? If not, how can you make it so? What do you need to start saying no to? Look at how you spend your time, including time online. Are you happy with what you are saying yes to by how you spend your time?

Instant Answer

Often we make poor decisions when we're distracted, overloaded and too busy. Perhaps you recognise them those things you say yes to, and then instantly regret. What happens next? We try and backtrack, spending far too long undoing the commitment or rescheduling, using up extra time before the event has even happened. Or, the appointment sits in our diary like a black cloud, and we spend time wishing we didn't have to go.

Next time you feel pressure to give an instant answer, stop. Log out of your email or leave the room. Shut your eyes for five minutes, walk round the block, or sleep on it. Think about whether you really want to say yes. Think about whether you've really got the time for it. Pausing before responding uses far less time than it takes to backtrack.

Are you always racing against time?
Saying no more could be the solution.

Delayed Response

"I'll check and get back to you" is a great way to buy yourself some thinking time and avoid making an instant commitment you might regret. This gives you time to decide whether to say yes and also to decide when is a good time for you if you are committing to dates. Most people will accept this as an entirely reasonable response. It implies you are checking with your diary or another person. It doesn't fix you to a timeframe by which you need to reply, and it buys you the thinking time you need.

Time Out

When you turn off digital distractions such as email, your smartphone and social media, you're saying no to people being able to contact you as and when they please. Instead, you're deciding to show up online at a time convenient to you. This is a simple way to say no thanks to unwanted interruptions. Yet we don't always make the most of our ability to be in control here.

On Hold

Sometimes, what we need to say rather than no is not now. If someone approaches you with an idea, venture or suggestion that you are interested in, but you just don't have the headspace to consider it because it's a particularly busy time, say so. Be specific. For example: "This is a busy fortnight, please can you contact me again after June 27th". This means it's back on their To Do list and you can forget about it. If, instead, you try to tackle it there and then, you risk becoming overloaded, not doing a very good job, or making a bad decision.

You don't Need to Know what the Space is for

If you're feeling overloaded and overwhelmed, then say no to the next commitment that is asked of you. You don't need to know what the space you are leaving is for. Maybe you are going to fill the space with what seems like nothing – things like sleeping, stopping or having a rest. But these 'nothing' times are vital. They mean we can restore our energy and then enjoy the other things we have put in our diary. Nothing times mean we can rest and think and then be productive and innovative when we turn back to our work. If necessary write 'nothing' in your diary to make sure you leave the space.

Swerve Time-wasters

Have you ever worked with someone who wasted endless amounts of your time even on simple tasks? People like this don't value your time, or their own. So saying no to working with them at the outset will save you an awful lot of time. How can you spot the signs of this early on and avoid getting pulled in to a project with them?

Classic early signs of a time-waster are arranging an initial call or meeting and then cancelling it at the very last minute. Here, they've already wasted your time – you've prepared, arranged your diary to fit around the call or meeting, and perhaps even shown up in person. Yet they think nothing of re-arranging. Other early signs are that they say they will send documents by a certain time and then don't, or that they send long rambling emails. Say no politely to the project, explaining for example, that your work commitments have changed.

Why Always Saying Yes Equals Burnout

If you work for yourself – for example, as an entrepreneur or freelancer – there can be a temptation to say yes to every project and client, due to the fear that work will dry up. But never saying no can lead to exhaustion and burnout. It can also mean that while you are busy doing the 'drudge' work you never get round to the work that makes your heart sing, the reason you do what you do in the first place. Saying no can be really, really difficult in these situations – particularly if you

don't know yet what will come along instead. So you shouldn't underestimate the powerful steps you are taking when you do say no. Every now and then, let go of the kind of work you don't want to be spending your time on by saying no. You leave space then for stepping up, getting, and doing the work that really deserves your time.

Mental Barriers to Effective Time Management

Leaders have heavy workloads and responsibilities that often cause them to work long days. It is common for leaders to attend conferences, participate in training, and read books and articles on time management but struggle to implement what they learn.

Most of them realize the value of prioritizing, setting daily goals, using project management tools, delegating, doing the most challenging tasks early, providing training to their staff to empower them to work more independently, and keeping themselves accountable, but they don't do it.

Their struggle with time management is not caused by lack of knowledge but inability to change their behavior. They may be unaware of the reasons why they continue to repeat old habits instead of implementing new practices, or they may understand their reasons but not know how to change.

Typically, they blame themselves for their lack of organization and self-discipline, or they blame other people for the interruptions they create, or both. They look at their situation from a highly pragmatic perspective and often feel discouraged or even stuck.

Time management is emotionally charged and the first step to making improvements is to deal with emotions. People don't always know consciously what drives their decisions and behaviors. In a nutshell, individuals are programmed to do what they expect to bring pleasure and avoid what they expect to create pain. This evaluation of pleasure and pain is rarely conscious and is highly subjective, as it is based on the person's past experiences, beliefs, fears, and needs. Here are some common unconscious obstacles to effective time management.

Seeking Perfection

Seeking perfection will cause managers to spend an excessive amount of time on each project. They may attach too much importance to small details that no one else will notice. They might check their work too many times, start doubting themselves, and add complexity that doesn't bring more value. The unnecessary time spent perfecting one task will be sorely missing for another task, creating unwarranted delays. Seeking perfection can also increase pressure, inflate the level of difficulty perceived, and cause procrastination.

Needing Control

Some people have a strong need to feel in control and are reluctant to delegate because they believe the best way to get something done correctly is to do it themselves. Instead of using their human resources strategically, they take responsibility for more tasks than they can handle. They will create delays and even bottlenecks when they micromanage their staff and insist on reviewing other

people's work. They may also over-complicate projects by requesting modifications that are their personal preferences but don't objectively add value to the tasks.

Task Avoidance

Managers are likely to keep themselves busy with comfortable tasks and procrastinate on an intimidating one such as writing a report. Avoidance can be caused by various reasons including (1) too much pain perceived in completing the task, (2) lack of intrinsic motivation and interest in the task, (3) lack of external pressure to complete the task, (4) rationalizing why it is acceptable to wait, (5) attaching more importance to other tasks than this one, (6) focusing on what is urgent rather than important, (7) being intimidated by the size of the task instead of tackling it in manageable chunks, (8) not feeling creative or energetic enough and choosing easier tasks instead, or (9) choosing a task that meets the individual's emotional needs (e.g. meetings or phone calls to meet the need for interaction and connection or answering e-mails for instant gratification and sense of being productive).

Fear of Failure

Lacking confidence in one's ability to successfully complete a project will create fear and procrastination. The intimidating project will be pushed to the last minute, creating more stress and pressure. This pattern is common for people who (1) worry too much about how they are perceived and tend to focus more on criticism than service to others, (2) are new at their jobs and don't feel competent enough, informed enough, or prepared enough to complete the tasks successfully, (3) have a critical supervisor who is very difficult to please, (4) exaggerate in their minds what is at stake and create unjustified anxiety, (5) work in an environment that is unsupportive and feels unsafe, or (6) have been treated poorly in the past and still carry the fear of being criticized or punished, even if their current work environment is healthy.

Desire to Please

People who have a strong need to please others tend to have difficulty saying no to requests, even when they are not certain they can deliver on their promises. As a result, they will over-commit and find themselves unable to meet deadlines. Their fear of disappointing someone or letting someone down will often become a self-fulfilling prophecy because they lack healthy boundaries. They are also likely to let people take too much of their time, call them too often, ask for too many favors, and assign them projects that should be directed elsewhere. They tend to make unnecessary sacrifices because they want to be liked, and prioritize what other people want over what they themselves need.

Need for Connection

Occasionally, managers overestimate how much time they should spend nurturing relationships on campus by engaging in long conversations with co-workers. Leaders with an open-door policy who lack self-discipline may allow people to interrupt their workflow excessively and overstay their welcome. While relationships are of the utmost importance and leaders need to know how to inspire teamwork, loyalty, and collaboration, they should not assume that quantity of conversations is an indication of quality. Many high achievers will lose motivation when they question

whether other people are working or socializing. An excessively laid back atmosphere can hurt morale and dedication. When friendships seem to be more important than work, standards are likely to get lower and so will productivity.

Seeking Comfort and Familiarity

Not everyone embraces change. In fact, most people are highly resistant to change. Many individuals prefer to keep doing what is familiar, comfortable, and predictable, even if it is not optimal. Breaking old habits require commitment and self-discipline. If someone does not set a clear intention to change and create structure for accountability and follow-through, they will revert back to doing things the way they always have. Improving time management is not difficult but it feels too unfamiliar and uncomfortable to some people.

Being Reactive rather than Proactive

Some managers describe their work as putting out fires all day. Their lack of structure and organization causes them to spend their workdays reacting to emails, calls, meetings, and crises to resolve. They believe they cannot make time to create processes or systems, or train their staff to do more or work independently. They are busy keeping their heads above water and don't know how to make time to improve their workflow and effectiveness. Their attachment to the belief that they don't have any time available prevents them from implementing time management strategies.

Taking Pride in being Overworked

When someone takes pride in personal sacrifice and being overworked, they will not improve their time management. Being able to leave the office on time each day would damage their self-image. Their self-worth and identity are tied to how hard they work therefore; finding ways to create free time may be appealing consciously but will be rejected unconsciously. They will sabotage their efforts to achieve work-life balance because they think hard work is more honorable. Their inner conflict will keep them from changing habits.

Feeling not Good Enough

Similarly, when leaders have a relentless inner voice telling them they are not good enough or are not doing enough, they will continue to work excessively to prove their worth and find self-acceptance. Their inner critic will sabotage efforts to improve their time management because the unconscious goal remains to do more and sacrifice more, not less.

Overcoming Unconscious Obstacles

The first step to overcoming these obstacles is to become aware of them. Self-reflection can be facilitated easily and effectively by a coach. Once the person understands the reasons why they have difficulty implementing better time management practices, they can find solutions and commit to changing old habits.

Managers who now understand what need(s) they were unconsciously trying to meet can find new vehicles to meet these needs, making it possible to change the unwanted behaviors. Briefly

acknowledging their fears will allow them to think of solutions to find reassurance and make the fears disappear. Identifying long-held beliefs that cause dysfunction will give them an opportunity to change perspective and liberate themselves from old patterns.

Work habits are determined by the unconscious mind until we choose to consciously observe our own decisions and behaviors and choose to make changes. Intentions alone are not effective because obstacles need to be brought to the surface to be overcome.

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