



## Planning With Your Brain in Mind

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### Introduction

We are born to plan – it is literally in our DNA. Most of us can't even remember when we heard the “Ant and Grasshopper” fable, but it was early in our lives. The ant, looking forward and planning for the winter, works hard. The grasshopper, thinking only for today, goofs off and plays. As the fable goes, it doesn't end well for the grasshopper.

At the dawn of our species, our ancestors first learned to anticipate daily cycles. This was followed eventually by anticipation of seasonal changes and animal migration cycles. The early adaptations to these cycles represented the very first versions of planning (Pinker, 2002). It is such an important part of our evolutionary heritage that it is a natural part of the way we talk. For this reason, virtually all languages have the future built into them.

Planning is looking forward, and there are hosts of planners out there to help us do so: retirement planners, vacations planners, financial planners, strategic planners, etc. Those of us in the business world are called on, usually at least annually, to come up with a plan. This can be for marketing, strategy, people, IT, or just about any facet of the business. Why is so much time and energy invested in planning? Let me bypass many of the stock business cases for planning and come at this from a different point of view.

We plan because predicting the future makes us feel safer (Trafton & Marentette, 2010). The evolution of our brain has left us with structures and processes that both drive us to look forward and provide us with processes that help and, in some cases, hinder the planning process. It isn't enough to create a plan. To be successful, the plan must make a difference in the business.

In this article, I will focus on three principle evolutionary drivers that influence plans and the planning process.

- **Memory** – First, we will look at our memory processes and how they affect planning.
- **Storytelling** – Then, we will look at storytelling and the certainty with which we believe our own stories.
- **Focus** – Finally, we will examine the issue of focus and intention.

Once we understand these three evolutionary drivers, we can wrap it into some action steps to help you better align your plan and planning process with the way our brains really work.

### Memory

Human memory is truly amazing. If you think about it, I'm sure you can recall a childhood birthday party or family outing that happened decades ago, and with great clarity. We remember people, places, words and ideas. But, there are some basic limits to our memory processes. Those limits directly influence whether your plan is successfully implemented or not.

Memory is relatively easy to measure. One common component of standard intelligence tests is a measure of “digit span” (Wechsler, 2008). In this test, the administrator reads strings of digits aloud. The examinee is asked to repeat them back exactly. For the vast majority of people, the number of digits they can accurately recall is 7. This is an extremely robust finding. Occasionally, there are people who can remember 8 or perhaps 9 digits, but this is uncommon. Similarly, some people can only remember 5 or 6 digits. As a rule, though, people can remember 7 digits.

About now, you are probably thinking to yourself, “I can remember more than 7 things.” Indeed, you can. The question is how is that accomplished? The answer is “chunking.” Telephone numbers present a great example of how this works. Most of us remember phone numbers in three chunks: the area code, the 3-digit prefix, and the 4-digit number. This is such a common chunking strategy that we even write phone numbers with dashes to separate the chunks. So, even though we can recall 7-digit strings, it requires considerable effort and attention. We are much more comfortable with 4- or 5-digit spans. Therefore, it makes the most sense to structure our plans and our plan-

ning process within this natural, comfortable limit.

What happens if we violate or exceed this limit? First, we risk confusion in those we are trying to influence. Second, people may focus on some elements and leave others out of their thinking. Third, and most common, people will create their own chunking strategy to allow them to recall it all. This is not a problem until their chunking strategy deviates from yours. So, for example, you might be building your communication around five functional teams, while someone else may be crafting messages around four product groups. At that point, priorities, messages, and actions are no longer aligned in the way you intended.

This memory span is a fundamental process in human cognition. It operates often without our awareness or intention. It is one of the basic building blocks of the way we take in, store, process and output information. When we operate with this process in mind, we gain effectiveness because we capitalize on the natural cognitive processing in our own brain and the brains of those around us. A bit later we will look at some things you can do to keep your plan and planning process aligned with this and other important cognitive processes.

## Storytelling and Certainty

Every time we go in to a meeting or sit down to work out a complex plan for our organization, we are operating from a rich foundation of understanding and belief. We have an enduring story, or narrative, about who we are, who the others are around us, and why people are doing what they are doing. Because we do this without effort or intention, it is easy to overlook how unique this process is, and how powerfully it drives our behavior without our awareness.

This amazing storytelling ability comes for our capacity for “theory of mind” (Pinker, 2002; Gazzaniga, 1998). With this capacity, we create stories not only about what other people are doing, but also about why they are doing it. We imagine what the motives of these other people are. If a colleague objects to our assertion, we very readily create an internal story about the motives for that objection. In many instances, this process helps us anticipate the behavior of others, make predictions about best steps forward and possibly allows us to head off some future objections.

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If that were all that happened, life would be easier. The major problem here is that we never truly know what someone else is thinking. Even if we trust that they are telling us the truth about their thinking, humans rarely have a full and clear understanding of their own motivations (Trafton & Marentette, 2010). It is critical to appreciate (in every context, not just planning) that our story, our narrative about the world, exists in our head and is just a creation of our mind.

Of course, if our story didn’t line up reasonably well with reality, we wouldn’t get very far. But, it only takes a small deviation from reality to make life interesting. For example, imagine that a colleague in another department has a major objection to some element in your plan for the coming year. Imagine for a moment that, based on your past observations of this person’s behavior demonstrating what you see as an excessively strong desire to get ahead, you attribute this objection to his self-serving motives. You may be right, of course. But, suppose that this person, unbeknownst to you, has received some career coaching and, as a result, has committed to a team approach going forward. We now have a separation between your story and reality. Beyond any personal tension your response might generate, you miss out on the opportunity to understand and learn from the thinking behind the objection.

In an ideal world, when we are confronted with these deviations from reality, we simply adjust our story to conform to the world as it really exists. Unfortunately, our brains didn’t evolve in an ideal world. They evolved in a harsh, primitive environment. In this environment, there was no reinforcement for doubting our beliefs. Consider Gur, one of our primitive ancestors, walking the savannah in search of food. He hears a rustle in the bushes. Should he doubt or should he believe that he is in danger? The believers survived. The doubters became dinner. Over evolutionary time, this reinforcement paradigm led to a brain that is very, very strongly inclined to believe its own sense of the world (Burton, 2008).

It is difficult to overestimate the impact of our desire to believe our own stories. This is why, for example, when we present a plan we quickly, easily, and often vigorously defend it. Of course, it doesn’t feel like defensiveness to us in that moment. We are just being “reasonable” and presenting the facts. Still, the reality is that we aren’t very good judges of defensiveness in ourselves. Others see it much more readily.

The feeling of rightness we experience is not something we choose. It is innate human behavior. It often provides us with a “gut feeling” that we are right. It also provides us with a boost of emotional energy, so we get passionate. That passionate presentation is just our sense of rightness in action (Burton, 2008).

When thinking about our businesses, and especially the people in them, it is helpful to keep this in mind; we have a story, but so does everybody else. We feel certain we are right, and so does everyone else. We are probably not completely right, and neither is anyone else.

Now we have two pieces of the puzzle, memory span and chunking, and certainty in the belief in our own stories. Let's tackle one more piece and then get to things you can do to be more effective.

## Attention and Focus

Most of us have way more things to do than we have time to do them. So, we work on several things at once, switching between tasks as priorities vacillate and stakeholders demand results. We have plans, projects and emergencies. This way of business seems natural because most of the people around us are doing it as well. It is not natural, though. Our brains evolved to focus on only one thing at a time.

Out of the two-and-a-half pounds or so of cells that make up our brain, the only part where we actually focus our attention is about the size of your thumb (Carter, 1998). This is quite small in comparison to the rest of the brain. Indeed, most of our behavior occurs outside our intentional focus, in "automatic" processes. So, what is happening when we think we are "multitasking?" The answer is "task switching" (Rubinstein, Meyer and Evans, 2001; Gilchrist & Cowan, 2011).

What feels like multitasking is really frequent, often rapid, movement from one task to another. The more tasks on our list, the more switching is going on. Those in the IT world know that switching always comes at a cost in processing or operating efficiency. The same is true with our brains.

When we are working effectively, there is a lot going on behind the scenes. That is, while we may only be aware of the specific object of our attention, there is a lot more going on. Imagine that you are working on a plan to implement a new system or program to manage employee work hours and vacation accruals. As you think through a particular issue, you are also calling upon experience you have with these specific issues. You are also, probably without being aware of it, including ideas or concerns from recent advances in technology. Similarly, you are influenced by your knowledge of the team who will implement the change. Further, there are a host of cost issues to consider. We could go on, but the point is that all of this knowledge and information is pulled together in your brain, temporarily, as you work on the problem.

Some of the pulling together is intentional. That is, you deliberately call to mind certain information. Much, however, is unintentional and happens as part of your mental flow. Good work often ensues when we persist in a particular avenue of thought. The connections deepen and we likely get better thinking from ourselves when we can stay with a task for a while.

What happens when we are interrupted, either by ourselves or someone else? The connections are lost. Even a temporary distraction carries a cost. The cost is in the time and effort to re-establish all those connections. It takes a while to reconstruct the mindset in place before

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the switch. Make no mistake, multitasking is a myth. Every switch, every interruption, carries a penalty for failing to stay focused.

With the busy lives we all lead, there is always opportunity to be more effective in managing our attentional resources. And, a scarce resource it is. The best estimates are that only 5 to 10 percent of our behavior in any given day is deliberate and intentional (Dittrich & Stahl, 2011; Neal & Wood, 2009). What is happening during the other 90 percent of our time? The answer is automatic behavior. This is behavior that is well-learned and practiced, patterned and habitual. Take as an example answering your cell phone. When the phone is brand new, you have to think explicitly about how to activate the phone to receive the call. After a short while, you just pick it up and answer it without any real attention required. Apply this same model to any behavior you can think of.

That patterned, habitual behavior includes how we move, act, speak and even think. It is usually easier to see this in others than in ourselves. We can tell when the other person has "drifted off." Of course, we feel most comfortable when we believe that we are completely aware of and in control of our behavior. It may feel more comfortable to believe this, but about 90 percent of the time, it is not true.

We will be most effective if we treasure this scarce resource. Attention and focus are the rarest of assets in any business. Whether it is long-term planning, project implementation, or small daily tasks, managing the attentional resources of ourselves and those around us is a critical leadership responsibility.

## Becoming More Effective

What can you do to improve your work effectiveness, given the brain in your head and that in the heads of your people and your customers? Here are some ideas:

**Use the "Rule of Five."** To better align your plans and planning processes with human memory processes, consider the "Rule of Five." Break your thinking and communication into no more than five units. If you have more than five issues or topics, create aggregations that get you to five. Any hierarchical structure, be it a plan, an outline, project management template, etc., should have no more than five units at any level. This article is an example of chunking a large amount of brain science information into three topics, with an introduction and a conclusion. Your messages, plans, meeting agendas and,



indeed, all of your work, will benefit from a similar approach.

**Elicit Others' Chunking Strategies.** You will also be more effective if you elicit the chunking strategies of others before completing yours. This means that the planning process becomes more interactive sooner. If you want people to accept your structure (your chunking strategy), make sure you understand their strategy first. By offering an opportunity to compare and contrast these potentially different structures, you gain increased commitment to a common view, as well as increased understanding and retention of information.

**Challenge Your Stories as Stories.** To help yourself break free of your own stories, first accept that they are just that, stories. Doing so reduces your sense of certainty. This may create a bit of discomfort for you, but it will do wonders for moving difficult issues forward. If you want others to change their stories, show the way by challenging your own. Repeat after me, "It's just my story."

**Acknowledge Others' Sense of Rightness.** It is also critical to respect that others believe just as strongly in their sense of rightness as you do, and for reasons that are, to them at least, just as reasonable. This doesn't mean that you have to accept their stories as true. But, respect their right to believe strongly without judging them. When you create an atmosphere where people understand the tentative nature of our understanding and belief, you create more opportunity to move thinking into more fertile territory (Trafton & Marentette, 2010).

**Take Some Simple Time Management Steps.** To improve your focus, take some simple steps first. Turn off the audio alarm on your e-mail. Turn off your phone, not just put it on buzz. Close your office door, at least some of the time. *The Pomodoro Technique*, by Francesco Cirillo, is an excellent handbook for improving your time management skills (Cirillo, 2010).

**Help Others do it better.** Unfortunately, we live in an anti-focus culture. You can increase the effectiveness of yourself and your team by helping them protect their attentional resources. Resist the urge to get up and interrupt others while they are working. Support their focusing efforts by reinforcing the closed-door process. Let go of your expectation that your e-mail will generate an immediate response.

**Give Yourself a Break.** Be kind to yourself. Even if you do only one of these things, you and your team will be more effective.

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