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Chapter 1

The Beautifully Simple Model that Gets RESULTS

The beautifully simple model that gets RESULTS

Results can be considered a consequence of behaviors. The way we behave is dependent on the internal environment of our brain and the external environment that we are in. In order to change our behaviors we can make informed changes to internal and external environments. These interactions are complex, however we can isolate and share some grounding principles taken from scientific research. For example, we know that sleep has a big impact on the internal environment of our brain. We know that a sleep-deprived person tends to behave in a different way, normally a less desirable way, and being sleep deprived makes it less likely you get the results you’re looking for. However, many professional services organizations have a culture where going without sleep is a norm.

Results
Most organizations are looking for results. Results come in a huge variety of different shapes and sizes and can be measured or assessed in lots of different ways. Many organizations have challenges putting this beautifully simple model to work to get the results they are after. There are a few things worth being aware of. The brain likes to know what is expected of it. It likes there to be congruency between the different ways it is being communicated to. If we are getting mixed messages then we can become distrustful of our organization. This can have a negative impact on many areas of business and individuals.

So the first thing to do is to get crystal clear on the results you are looking to achieve. We’re talking about a high level of specificity around what “great” would look like. This is an organization-wide objective. If you have HR saying one thing, leadership saying another, PR saying yet another, and the promotion policy reflecting something else, then whatever a person does could be perceived as wrong. Let’s have a look at an area of the brain that gets activated when there are mixed messages coming through and a lack of clarity around what we’re supposed to be doing. (Whenever areas of the brain are mentioned in this book you may choose to dive in and soak up everything you can or you may choose to skim over some bits.)

**The Insula**

If we do something that we process as an error then it is useful to us to be aware of this so we can make strategic behavioral and neuronal adjustments.\(^1\) Error awareness is our ability to perceive our own mistakes. When we fail to achieve the intended outcome from an action we detect this. Errors can be costly at the time or in the future. In neuroscience straightforward simple error detection is studied, because it gets very complex as we add more variables. The part of the brain called the insula is involved in the process of us becoming aware of errors. It is not yet clear whether we need to be consciously aware of errors in order to make post-error adjustments.\(^2\) While the anterior insula appears to be the most important part of the brain for
error detection the posterior medial frontal cortex and the thalamus also are of relevance. We know that the insula is also important for interoception. We know that the insula is also important for interoception.3, 4

When errors are detected they can trigger autonomic responses such as a change in heart rate and skin conductance. This could potentially be detected by the insula. This would link interoception to error detection. As the brain processes interoceptive information it may deliver that information to support error awareness. It has been proposed that the insula could act like a relay station in regulating interactions between our brain networks that are involved in external attention and interoceptive cognition.5 The insula may be considered as part of an attentional network. It is involved in processing unexpected outcomes6 and increased necessity of effort.7, 8

Our attention is a precious commodity. It is linked to our productivity, the quality of our thinking, our creativity, and much more. It is mentally tiring to have to constantly evaluate whether something is the desired result or whether we should be doing something else.

Things also get complicated when we don’t really know what the intended outcome from our action should be. Imagine an employee who is given the goal from his manager of getting as much cash in this month as possible. On the wall in front of him are the company’s values, which include honesty and trustworthiness. In addition he is incentivized to reach a certain number of appointments each week. Is his goal to maximize profit from this interaction, be honest and trustworthy, or deliver the quickest service possible? By having competing objectives he is going to fail in some respect whatever he does. His brain will register this.

Challenges
The way we communicate what we’re looking for from our employees encompasses many different approaches. Unfortunately, organizations can confuse their people about the results that they are looking for from them. They are sent mixed messages. Often individuals or whole departments work independently from each other. They may have been trained in a particular way or may have picked up common practices from other organizations. Just because you’ve been told by an accredited training company or your last employer to do something a certain way doesn’t mean it is the best way forward. (Of course it may be … but there will be other factors.)

Imagine a scenario where your head of learning and development (L&D) has heard about the 70:20:10 theory. They think the idea of a reference model that values learning within the workflow and social learning is fantastic. They want to “implement it.” They stop investing in the traditional training sessions that have been commonplace in the organization. Instead they put up some posters encouraging people to “live and learn.” There are already many modules available on the online learning platform that people can take at their leisure.

Unfortunately, this particular organization’s culture values the billable hours people clock up. In addition, bonuses paid are linked to achieving objectives set at the start of the year. These don’t mention learning at all.

**Overcoming the Challenges**

Sometimes even simple models can be deceptively hard to implement. Walking into many organizations today, as we do, we would agree. Things are often not set up to make it easy for employees. The brain loves to conserve energy where it can, so we need to try to make it easy. In order to cultivate certain behaviors from people, we want to consider the environment that
they exist within. In this chapter, we introduce the fundamentals so that you will notice the underlying concepts running throughout the rest of the book. We go into more depth on the internal environment in Chapter 5, The Jarring Awakening, and on the external environment in Part IV.

**Behavior: Clarify, Design, Shape**

Everything in this book concerns influencing behavior. There is, of course, the question of whether we should be shaping people’s behaviors. The reality is that organizations are shaping behaviors, and the question remains whether they are doing it intentionally and in alignment with who the organization is.

Often the approach is haphazard, and the end result leaves a lot to be desired. It is really important that when considering behavior change you start at the beginning and CLARIFY the results you really want. You need to be crystal clear on what you are actually looking for, and the level of detail you need here is far greater than most people realize. Next, you need to identify the behaviors that will generate those results. The following step is to DESIGN, ideally based on existing research data, the internal and external environments that will help those behaviors be most likely. The final implementation stage is to SHAPE those environments to do their job. It is a simple, but thorough approach. It takes time to do it properly and is in some ways a lifelong project.

**Environment**

When I ask you what environment your colleagues are making decisions in, what normally springs to mind? Most people’s thoughts go straight to their external environment, their office
perhaps. This is a powerful environment, but one could argue that the internal environment – the brain and mind – are even more persuasive.

**External Environment**

It is in Part IV where we really explore the potential for our different environments and the effects they can have on how we work. While writing this book I was privileged to explore lots of different workplaces. Most organizations have spaces that they believe are practical. I would challenge what the purpose of the space is. If you could increase one person’s productivity by 10 percent, what impact would that have? Would it be worth losing space for three people? Before you dismiss any changes as unrealistic or not for you wait until Part IV, where we explore the impact the spaces we work in can have on us. In this section, let us just start to see what others have done.

Many organizations are thinking outside the box:

At Pixar they have a little row of huts, like beach huts crossed with really nice sheds, each of which is an office. There are balls of fairy lights hanging from the ceiling, giving it an outdoor feel. The walls are blue, and there are comfy sofas for waiting or thinking on. In another area, there are structures that could have originated as normal rooms that have a big oval hole cut out of the wall as the entrance space. Inside hang retro orange glow lanterns. On the floor is a chaise longue, above that a large mirror. In the corner, a raised workstation with computer screens. The feel is chic retro (from my perspective) and is hugely novel and stimulating.

Red Bull in London is very different. It is shiny … like an office from the future. The reception desk has thick silver metal sheets framing the simple white desk. There are unusually shaped
red, green, and black chairs in areas throughout the building. Glass barriers stop people falling from floor to floor. The stairs look a bit like vacuum cleaner ends, but you may choose to use the huge white slide to travel down a floor. One meeting room even has a round table set with six chairs with a ping-pong net through the middle.

Mindlab in Copenhagen know what they are doing. One space is an egg-shaped meeting room in which all the walls are whiteboards. Once you’re in you can write on any of the surfaces.

What If? Innovation have been named the UK’s happiest workplace in the past. The space works for them. Reception doubles up as a meeting space, which is a hub for the team. There are comments of praise written in this area on the walls and ceiling, naming employees and sharing specific examples of greatness. Often we see slightly (or very) odd things in workplaces. Here you’ll meet a cow in a Spiderman outfit.

Budget obviously becomes a factor at some point. But for just a little bit more let’s expand our thinking. At Inventionland in Pittsburgh, they have an amazing indoor tree house. There is greenery above and water below. A tire swing hangs from one side, and a balcony area gives a great view. Over the other side of the office is a pirate ship complete with shark-infested waters.

At TBWA Hakuhodo in Tokyo there are areas of grass where people can sit and work.

Google, perhaps unsurprisingly, have a range features in their different offices. You can find a large hammock – where lots of people could all sit/lie at once, lots of interesting pod-type meeting rooms in a variety of different styles; pods with cushions inside and trees outside, low-level lighting, and a fireman’s pole; beach bars, pinball machines, and pool tables; and massage
areas (that look like a little spa), exercise rooms, and of course meditation rooms with chairs you can recline and aquariums.

The Cath Kidson offices in London look just as you would expect them to. They are filled everywhere with the beautiful design prints. There is a lovely cafe that is top-to-toe in the identifiable brand. It is also a truly practical space, it has lovely looking food and drink and it really draws people in. Subsequently lots of meetings happen there, over a cup of tea. It has got that creative feel and would certainly appeal to the fans of the product who work there.

<table>
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<th>Louisa Fryer – L&amp;D Manager Cath Kidson</th>
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<td>Yes, so this is how it works. We usually get very busy at lunch time and then we also sometimes have like … so when we have our inductions the starters would be sitting together and we also do our monthly updates in here and we’ve also got a place downstairs. This building is quite good, we’ve got this space, we’ve got the mock shop, we’ve got the ground floor showroom, which is massive, and that is where all the product goes for international partners, where they could come and have a look at the product, but that is another space where we all get together.</td>
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The mock shop is exactly as it sounds. An average-sized shop where everything from shop displays to customer service training can be tested out – a fantastic idea.

The reason for sharing these examples is not to say you have to be incorporating all these ideas … far from it, in fact. Start by clarifying what behaviors you want (ensuring those selected will get you the results you desire). Then design the external environment that can help you facilitate those behaviors. Finally shape the environment. Jumping straight to “a slide is such a cool idea – let’s get one installed here” misses a big part of the process. Although, on the flip
side, if the idea of a slide is really exciting and motivating to you, then perhaps it would be a good idea.

**Internal Environment**

What shapes our internal environment? So much that it is exciting and a little scary. We have the scope here to start the discovery, and the most important thing you can take from this piece is to be intentional in your shaping.

**Do our genes matter?**

Absolutely. One study examined the success traders experienced on Wall Street. There are some technical terms mentioned in what follows, you may choose to follow along, looking up any new terms, or digest the summary. The researchers looked at the genes that affect dopamine levels and the career tenure of professional traders. A group of traders were genotyped and compared to a control group of people who did not trade stocks. It was found that distinct alleles of the dopamine receptor 4 promoter and catecholamine-O-methyltransferase were predominant in the traders. These alleles affect synaptic dopamine and are associated with moderate levels of the neurotransmitter, rather than very high or very low levels. Here is where it gets super interesting for us. The activity of the alleles correlated positively with the number of years spent trading at Wall Street. Also differences in personality and trading behavior were correlated with the allelic variants. This brings together the links between our genes, our behaviors, our traits, and our success. In summary, it appears that the longer a person spent on Wall Street the more predominant a gene that affects dopamine was likely to be. This also was linked to how the traders behaved.
You may have been brought up thinking that genes are more fixed than perhaps we believe them to be now. When sharing this piece of research with my husband and mother over Sunday lunch the response was a little skeptical. If things conflict with your previous understanding, try to remember that it may have been a while since you last studied the basics, and indeed the experts are working five days a week on these topics. If initially something doesn’t sit right it may not be because it is wrong, it may be because we need to upgrade the information in our brain against which we are evaluating. That said, the expression of different genes can be affected by our behaviors. Let’s look at an example from meditators.

A group of experienced meditators were asked to engage in mindful practice for eight hours. They were compared to a control group of untrained individuals, who engaged in quiet non-meditative activities. The meditators showed a range of genetic and molecular differences. These changes included altered levels of gene regulating machinery and reduced levels of proinflammatory genes. This means that gene expression can alter rapidly. One of the authors of the study, Davidson, said “Our genes are quite dynamic in their expression and these results suggest that the calmness of our mind can actually have a potential influence on their expression.” With this being proved to have an effect on our genetic expression, imagine what else is affecting us daily.

It’s all in the mind

Recently a study was done on trust. First the participants filled out a questionnaire about their own tendency to trust others. They also looked at pictures of neutral faces, and were asked to rate how trustworthy they thought each person was. This gave the researchers an indication of how trusting the participant was of others. MRI (magnetic resonance imaging) scans were also taken of the participants. Haas said,
“The most important finding was that the grey matter volume was greater in the ventral medial prefrontal cortex, which is the brain region that serves to evaluate social rewards, in people that tended to be more trusting of others […] Another finding that we observed was for a brain region called the amygdala. The volume of this area of the brain, which codes for emotional saliency, was greater in those that were both most trusting and least trusting of others. If something is emotionally important to us, the amygdala helps us code and remember it."^{13}

Moving from trust to generosity to further explore the internal environment, let’s have a look at the hormone and neuromodulator oxytocin (OT). Most people would think of generosity as a trait, describing friends or colleagues as generous in a favorable way. Interestingly, the behavior of being generous is easier to influence than perhaps many would have thought. In one study participants were infused with OT and then asked how they would split a sum of money with a stranger. The control group was not given any OT, but was given a placebo instead. Those with the extra OT were 80 percent more generous than the placebo group."^{14}

On the flip side, the hormone testosterone decreases generosity. In another study testosterone was given to 15 men to see what impact it had on prosocial behaviors. The “ultimatum” game was then played and it was found that those with raised testosterone were 27 percent. It was also noted that men with elevated testosterone were more likely to use their money to punish those who were ungenerous towards them. The authors of this study concluded that elevated testosterone causes men to behave antisocially."^{15}

The intention of this section is simply to introduce you to the reality that our internal environment, focusing in this book on our brain, has a powerful effect on our behavior. It makes total logical sense when people think about it. The extension from that, though, is that we’re only relatively recently able to grasp, from an evidence-based standpoint, what is going on in that
internal environment. There is often a delay getting new information out there and into the hands of people who can do something with it. This book is intended to give decision-makers an evidence base from which to do things differently: namely, to value and give resources to the shaping of the internal environment.

*Does everything have to happen in a lab?*

Of course not! Labs are great places to do experiments to collect data. However the practical applications can be seen in the workplace. Amy Cuddy has become quite famous after she shared her research into power poses in her TED talk. Her team set out to identify the mechanism through which power posing could improve performance. They looked at speed quality (intelligent, clear, and well structured) and presentation quality (enthusiastic, confident, and captivating). From previous research they knew that power reduces stress, anxiety, and negative effect, which they presumed would make individuals more confident, captivating, and enthusiastic.\(^{16}\) Creating an internal environment rich in testosterone and low in cortisol can be done using power poses.\(^ {17}\)

Realizing the close relationship between what we think and do and how our internal environment actually physically changes as a result can be empowering. We can make more informed choices.

This chapter has been introductory in nature. It is being brought to a close with something really practical, powerful, and possible. It is also very simple, it demonstrates one of the instances where the latest brain research underpins and strengthens the old experience-based advice that has been given for decades.
Sleep

When did we start thinking it was okay to work instead of sleep? How did this pathological acceptance start? Was it from our desire to achieve more? We have been measuring success based on what we accomplish. The things we measure tend to be linked to classic productivity. For a lawyer it would be things like how many billable hours they are able to charge. In order to increase our productivity, and subsequently how “successful” we are perceived as being, we seem to have stumbled upon the idea of reducing our sleep. So does this lead to real organizational success?

The research suggests not. Your experience can probably help you get a feel for this too. Cast your mind back, perhaps not too far, to the morning after a late night. How did you feel when your alarm went off? Did you wish you could hit snooze? Eyes feel a little heavier than normal? Head feel a little foggy?

In this section many different compelling arguments for getting at least enough sleep are presented. The reason for this is because many organizations are not yet paying attention to this valuable results-influencing tool. It may not be sexy or cutting edge or new, but the fact that it, in all its simplicity, is not yet being fully listened to and acted upon means it warrants further attention.

What Are the Benefits of Sleep?

We know that not getting enough sleep can lead to poorer cognitive performance and altered emotional functioning. What happens when we get more than enough sleep? Is it worth doing or a lazy unproductive use of time? A study that looked at this “sleep credit” (getting more sleep than one subjectively requires) found a correlation in those habitually sleeping more and those
with greater gray matter volumes within the left medial prefrontal cortex and right orbitofrontal gyrus. Building up a sleep “credit” also correlated with having greater emotional intelligence and better mental health.¹⁸ This is a long-term investment you’re making by habitually getting more sleep than you “need.”

Now we shall take a look at how investing in sleep can deliver a quick return. Would solving problems more quickly be valuable to you? Or an organization where people had insights into how to do things better? If so, encouraging a culture that values sleep appears to be a good move. An “insight” has long been understood to involve a mental restructuring that leads to a sudden gain of explicit knowledge, which allows qualitatively changed behavior. (Bit of a mouthful, but you’ve almost certainly experienced that flash of realization when you see something clearly that was shadowed or completely hidden before.) Researchers asked the participants of their study to perform a cognitive task that required them to learn some stimulus–response sequences. They improved gradually by increasing response speed across task blocks. There was also the opportunity to improve abruptly after gaining insight into a hidden abstract rule underlying all sequences.¹⁹

Initially everyone went through training to establish a task representation. Then participants enjoyed eight hours of either nocturnal sleep, nocturnal wakefulness (not so enjoyable) or daytime wakefulness. They were then retested, and more than twice as many participants had gained insight into the hidden rule after sleep as after being awake (regardless of whether than was during the night or day). The researchers concluded “that sleep, by restructuring new memory representations, facilitates extraction of explicit knowledge and insightful behaviour.”
One of the most well-known roles of sleep is around memory reactivation and consolidation. It is believed that declarative memories change after the initial learning episode due to the formation and interaction with other memories. This means that we can develop complex networks of interrelated memories, align memories with long-term strategies and goals, and generate insights based on novel combinations of these memory fragments.²⁰

The neurophysiology of how memories are consolidated during sleep is fascinating, but details of this are perhaps beyond what we need from a practical perspective. It is important to note, however, that sleep patterns in the limbic system are essential for the preservation of experience-induced synaptic modifications.²¹ Without synaptic plasticity we would be pretty stuck.

**What Happens If You Don't Get Enough Sleep?**

There is some research that a lack of sleep has further interesting, and undesirable, affects. Michael Christian and Aleksander Ellis looked at what happened when people were suffering from sleep deprivation. They found that along with the predictable decrease in productivity, loss of self-control, lowered ability to regulate thoughts, emotions, and behaviors, and feelings of hostility, there was another interesting finding. People were engaging in workplace deviance. Examples included falsifying receipts for reimbursement, working slower in order to earn more overtime pay, using drugs or alcohol while at work, and criticizing or verbally degrading colleagues.

When researchers probed further and provided students with an incentive to steal answers to a test, they discovered a fascinating trend. More of the sleep-deprived students stole the answers than their adequately rested peers. It is understood that sleep deprivation decreases brain
function in the prefrontal cortex. This is akin to our boss, who is responsible for executive functioning, coming into work a bit drunk. The ability to control emotions or govern behaviors is impaired. When someone has had less sleep than they need, their self-regulation is decreased. This is an undesirable state to be in.

One of the most concerning aspects about this research is that our experience of speaking with organizations mirrors what Ellis has voiced, “In fact, in certain industries, lack of sleep is worn as a badge of honour.”

**So What Else Does Sleep Do?**

When we sleep our brain is working a little like a dishwasher, cleaning out harmful toxins that have built up. By clearing them out we may be reducing our risk of Alzheimer’s. Fascinating research done with mice showed the lymphatic system opening up and allowing cerebrospinal fluid to flow rapidly through the brain during sleep. When the mice were awake this system prevented most of the flow. Measurements suggest that the spaces between our brain cells may increase when we sleep, enabling the brain to flush though the toxins. Dr. Maiken Nedergaard, a leader of the study, said, “Sleep changes the cellular structure of the brain. It appears to be a completely different state.”

Experientially this makes sense. Historically sleep is something that our ancestors have been doing for as far back as we can trace. Scientifically we don't yet have the full picture around sleep, but everything we do have leads us to the practical conclusion that it is a good thing to value and prioritize doing.

**The Modern Antidote?**

Many people use caffeine to delay the negative effects of sleep deprivation. We may feel it helps us to keep going or to focus. One recent study showed that people who had been kept
awake overnight and then given caffeine were less likely to “cut ethical corners at work” by lying to earn extra money in a situation designed to emulate a work environment. The participants of the study who had not received the caffeine after their night being kept awake were more willing to participate in these undesirable behaviors.\textsuperscript{23} Does this mean that organizations should provide caffeine in the workplace? We would prefer some of the other suggestions these researchers made including:

- Reducing the long hours people are expected to work
- Providing workplace napping facilities and sleep awareness training
- Avoiding doing tasks that require high levels of self-control when you expect to be sleep deprived.

A recent study showed that consuming caffeine even six hours before going to bed can have disruptive effects on both objective and subjective measures of sleep.\textsuperscript{24} These results give a scientific underpinning to the sleep hygiene recommendation of avoiding caffeine in the afternoon.

**How Does Caffeine Work?**

This is one of the times where understanding what is actually going on when you down a cup of coffee can be useful. With this knowledge you may still choose to consume caffeine, but you may do so more strategically, knowing the likely future symptoms. So, as you go through the day the neurochemical adenosine is released and levels build up. Your nervous system monitors these levels and passes through receptors, which makes you feel sleepy. We talk about receptors as working like a lock-and-key mechanism. Following this analogy through, caffeine is the same size and shape as adenosine so can also fit the receptor lock, also known as the A1 receptor. While the caffeine occupies the receptors, adenosine cannot, so even while
the adenosine is building up, you don’t feel tired. Alongside this process your dopamine levels are increasing which gives you that boost.

Once the caffeine wears off, the build-up of adenosine needs to be processed by the receptors – this takes time and can leave you feeling groggier than before you started on the coffee.

**Caveat Around the Beautifully Simple Model**

As is often the case, when you simplify something down you can lose some truth. The model may be useful, but may not be the whole story. In this case it is believed that more than just behaviors influence a result. However, in most organizations beginning with aligning behaviors is a great place to start.
What’s the Bottom Line?

Key take aways from the Beautifully Simple Model that gets RESULTS

- Get clear on what results your organization cannot compromise.
- Map out the behaviors needed to achieve those results and check that they don’t clash.
- Create the environment to support those behaviors.

What Can I Do Today?

Choose one result that you want to focus on. CLARIFY the behaviors that would enable you to achieve the result. Then DESIGN the internal and external environments that would best support you. Finally take your first steps to SHAPE them.

What Can I Put in Place for the Long Term?

Quarterly meetings where different departments ensure the expected behaviors are aligned and will deliver the results.

Quarterly design-thinking sessions that explore what internal and external environments would best support people to achieve the desired behaviors.

What Is the Overall Ideal Vision?

An organization that invests in both the internal and external environment of its employees.
References:


