THE SUCCESS GUIDE:

HOW TO THRIVE IN THE
CORPORATE ENVIRONMENT

A FOCUSED ROADMAP FOR ACHIEVING
PEAK PERFORMANCE,
LEADERSHIP EXCELLENCE,
AND BUILDING A
TRUST-BASED CULTURE

EDWARD BJURSTROM

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To the dedicated workers in the biopharmaceutical industry whose daily efforts bring hope and healing to the world through their commitment to excellence and the consistent manufacturing of life-saving medicines.

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Part Five: Case Study of the Pharmaceutical Manufacturing Challenge

INTRODUCTION

The experiences that shaped my life also shaped the content of this book. For that reason, I believe it is useful to summarize the relevant aspects of my life—both personal and professional—and how they relate to the purpose of this book.

I grew up in a middle-class, blue-collar family, brimming with hopes, dreams, and ambitions. I had three older brothers who taught my younger brother and me respect for authority. In college, I studied hard and earned a bachelor's degree in chemical engineering—one of the most challenging of the engineering disciplines. Freshly married out of college, I spent the early part of my career earning the respect of my peers and bosses through diligent effort and hard work.

My first job after college was at the Fluor Corporation (now known as Fluor Daniel), where I worked for nine years and was exposed in the early 1980s to the new field of biotechnology. I instantly became enamored with this novel technology and decided that was where I wanted to grow my career. After applying to nearly half a dozen companies, I was hired as a project engineer at Amgen. The company grew fast, and I grew with it over the next 18 years. At first, I led an engineering department responsible for the design and construction of new facilities that the company needed as it grew. This included new offices, laboratories, and manufacturing plants, as well as the purchase and renovation of existing buildings in the

industrial complex. I ran this organization for eight years and coordinated the construction of over a million square feet of new facilities.

At the time, the company had a practice of moving leadership from one organization to another. I was moved to lead the supply chain organization for a couple of years, and then the company's new manufacturing operation in Puerto Rico. This was a big deal as it required moving my family to the island and living as an expat for two years. It was an intense learning experience for me and my family, one that involved learning to live in a very different culture and learn a new language, Spanish.

Everything was different.

The things we took for granted in California became scarce. We could hardly find fresh produce like cucumbers, peppers, and asparagus. If you managed to find lettuce, it generally had black, rotten leaves. Of course, the climate was much more humid than we were used to in California, and they had occasional hurricanes. Only about one-third of the island's population was fully proficient in English. So, it was very important to be able to communicate—at least rudimentarily—in Spanish. I was surprised that learning a new language also gave me insight into the thinking process, values, and perspectives of the people on the island.

We moved back to California after two years, and I will never forget the feeling of returning to what I thought was normal, only to realize that my perspective had permanently changed. I had a broader view of what was acceptable and reasonable and could see things from other people's perspectives more easily. I did not realize it then, but these were the residual lessons from how we had to change our thinking to not only survive in Puerto Rico but to thrive.

While still working for Amgen, I had the opportunity to go on a mission trip to Africa with my wife and 10-year-old daughter. We flew into a remote area of Mozambique to visit a World Vision child we had sponsored some years before. I was very surprised by our reception. We had the idea we would visit this child and his family. It turned out that our visit was a big deal for the entire community! They took us around to see a

school the community had built, and they talked about the clinic they had constructed. I asked to see it because I was concerned about their available healthcare. The concrete building that was their clinic was completely empty. There were no medicines, no instruments, no pieces of paper. Nothing. I recognized they were rightly proud of the building, but I asked about how they provide healthcare for people in need. They responded by saying that once a month, a government nurse comes by and holds a clinic to treat people.

My next question was, "In between visits from the government nurse, what do people do?"

They answered that there was another clinic about 30 kilometers away where they could go.

I said, "Okay, how do you get a sick person to a clinic 30 kilometers away?"

They answered, "We can carry them on our back or in a wheelbarrow."

At that point, I knew we needed to do something to help these people and others in similar situations. We also visited people in their mud huts who were dying because they did not have access to some common and inexpensive drugs. When we returned to the United States, we began working on ways to help. Ultimately, we formed a non-profit public charity to raise funds in America to support medical clinics in rural areas of Africa. We have been to Africa a dozen times since then and currently support nine clinics in seven African nations. Together, these clinics treat 70,000 to 100,000 people per year who have little access to any other healthcare. This non-profit has been in place for 19 years now, so we have provided healthcare for well over a million people in Africa. Most African governments spend whatever funds they have for healthcare in the urban cities, with little or nothing left for the rural areas. This is why we prioritize rural clinics.

In 2005, I left Amgen and established my own consulting company; we served small biotech companies and startups with promising products but little or no experience working with the FDA on the commercialization process. My final client in 2010 was Gilead Sciences, which received a

Warning Letter from the FDA for its manufacturing plant in Southern California. At that point, the recession was drying up funding for startup companies, so they couldn't afford consultants. Six months later, I joined Gilead as a regular employee.

While providing consulting services to various companies, I came to understand the gap between efficient and inefficient teams—trust. Robust teams founded on trust have team members who support each other seamlessly and concentrate on pursuing common goals. Teams that lack a foundation of trust have team members who waste a lot of energy defending themselves with a siloed mentality. Often, the team leader is the one who makes the difference.

This book includes examples and illustrations from my experiences and observations. During my career, I formed key leadership principles, which I describe as "success guides" or ways of thinking and acting that are helpful in building relationships that lead to business success. Having traveled to over 70 countries, I have learned that there are many factors that influence how people think and, therefore, how they behave. Different cultures have strengths and weaknesses based on their history, system of beliefs, and traditions. The keys to successfully working with people of all types include recognizing their unique thinking processes, valuing their perspectives, and trying to understand their point of view. I have used these insights to leverage my leadership capabilities throughout my career.

In the workplace, individual success is based on making a valued contribution to the business and effectively collaborating with colleagues. For teams to be highly successful, they need to not only function effectively but also capture the synergy that is possible within a group of experienced and talented people who complement one another. Leaders are successful only to the extent they can inspire and motivate their people to contribute their very best and to work with their hearts and not just their hands.

You may already be familiar with some of the concepts and principles I describe in this book, but some may be new ideas for you. They also tend to build on one another synergistically. For example, reducing

distractions in your life will improve your focus and productivity, giving you the opportunity to schedule time for regular exercise. This, in turn, will improve your overall health, both physically and mentally, leading to increased productivity. It can become a virtuous cycle.

I have learned the principles expressed in this book through my own study, by trial and error, through failures and successes, and by seeing the examples of others. Many of these principles may seem like common sense, but as the old saying goes, "Common sense is the least common of the senses."

I have tried to explain not only what these principles are but also what makes them important and how to apply them in your life. I learned some of these principles empirically, but didn't always have the framework for explaining them in writing. You will find many references that I have researched to fill out that framework in order to describe these ideas in a straightforward manner. Over my career, I have coached, mentored, and trained many people in these principles. The inspiration for this book is to continue to make a difference in people's lives by sharing what I have learned with you.

I have organized this book starting with Part One, "How Humans Think and Work," which covers several foundational topics that provide valuable insights and background for the following chapters. Part Two describes the principles of success that I believe will help individuals. Part Three delves into the success factors for teams, while Part Four focuses on how leaders can be more effective and successful. Finally, Part Five explores how to apply the principles in this book in an industry where the normal business challenges are accentuated by a significant regulatory burden.

There are several things that need to be explained about this structure. It is obvious that teams are made up of individuals, and leaders are also individuals. There are numerous topics critical to all individuals, teams, and leaders. However, to avoid redundancies, I have chosen to emphasize the application of topics in only one category. For example, "Building Self-Awareness" is a cornerstone of healthy emotional intelligence, which

is important for every individual. However, it is also one of the most important characteristics of an effective leader, so I included this topic in Part Four for leaders.

Another example is the topic, "What Makes a Good Meeting." Meetings are critical for teams that, by definition, spend a lot of time together to further their assigned work. However, every leader is responsible for setting the tone of a meeting and is usually expected to facilitate team meetings. The core of this topic is how to make meetings more effective, efficient, and even enjoyable. This is a key responsibility of leadership. Therefore, this topic is also included in Part Four for leaders. Additionally, all the material for leaders can be applied to everyone, whether in a formal or informal leadership role. It will be useful to team leaders as well as corporate leaders. To gain the insights and perspectives that lead to greater success as an individual, team member, team leader, or organizational leader, it is important to read the entire book. I believe this book will help people working in highly regulated industries to consistently be effective and successful because their work is so important.

Throughout the book, I have used real-life examples to illustrate the various principles you will soon discover. Many examples are from my experiences in the biopharmaceutical industry. I have been privileged to work for over four decades in this industry, which does so much to save lives and contribute to the well-being and quality of life for people worldwide. Despite the many controversies, missteps, and failings of the biopharmaceutical industry, it has made astonishing progress in the last 40 years and provided significant medicines that have brought health, healing, and hope to millions of people.

PART ONE

HOW HUMANS THINK AND WORK

The human brain is often referred to as the most complex organ in the body, comprising over 86 billion neurons and trillions of synapses. [1] This three-pound organ governs our thoughts, feelings, and interactions with the world. Its vast complexity makes it difficult to fully understand, and it continues to be surrounded by a number of mysteries.

A chief example is the nature of consciousness and how the physical, electrical, and chemical processes that occur within the brain result in conscious thought. Despite recent advances in neuroscience, consciousness remains an enigma. [2] Emotional processing and the integration of rational thinking with the subconscious or emotional mind are recognized as crucial for improved decision-making, but this is not fully understood. It is believed that dreaming plays an important role in memory consolidation and mental health; however, the exact reasons we dream and how it affects cognitive functioning remain largely speculative.

Finally, the subject of brain plasticity or neuroplasticity is important. This refers to the brain's ability to reorganize itself by forming new neural connections throughout life as we learn and accumulate experiences. This ability has been described as the brain acting like a container that expands the more that you put into it! [3]

I have spent decades trying to help people be effective and successful. My experiences have helped me come to the conclusion that how people think will ultimately determine how successful they will be at work and in life. Therefore, Part One of this book will focus on how our thinking influences our behavior and ultimately our ability to succeed. Because the human brain is so complex and has so many aspects that we do not fully understand, we cannot take how we think for granted. There are a variety of ways we can manage our thinking processes for more positive outcomes. This is the focus of Part One.

CHAPTER 1

HOW WE THINK

"As a Man Thinks, So Is He"

Proverbs 23:7

I was standing in an empty, untilled cornfield next to the Zambezi River in Zambia when the leaders from the local community told me they were worried about starvation in the coming year because the spring rains had been poor. From my engineering perspective, I asked politely, "What about taking water from that river to irrigate these fields?"

Their reply shocked me as they revealed that the "river gods" would not allow it, and besides, there were crocodiles in the river. I tried hard not to disrespect their beliefs, but I could see that their traditions, fears, and beliefs were going to affect their survival, not the lack of rain.

For many years, I have been fascinated by the question, "Why do people behave the way they do?" This question comes to mind most often when people's behavior is self-destructive or counter to advancing their own careers or lives. Over the course of my career, I have hired many intelligent, skilled, and experienced people, only to find out after a year or two that they cannot manage their own emotions and, worse, they cannot appreciate other people's emotions or concerns.

Looking back, I see that I mistakenly hired people based solely on their technical skills and experience without seriously exploring their emotional maturity, or emotional intelligence—as it is more often called. At one point, I had to let one senior leader go because he spent so much time arguing with his peers instead of negotiating solutions to the problems they faced. His poor emotional intelligence resulted in stalled projects and increased costs. Much of the popular leadership material tries to capture the essence of emotional maturity in action without defining the core principles and connecting these with the way the human brain works.

Our conscious mind consumes a lot of energy when engaged in focused thinking. The subconscious mind uses learned programming to execute 85 to 95 percent of what we do on a day-to-day basis. The subconscious uses much less brain energy than the conscious mind, so it frees up energy for the conscious mind to focus on what's important. For example, when we were learning to ride a bike, there was a lot of intense conscious mind engagement. However, once learned, riding a bike becomes almost automatic, and the conscious mind is free to focus on riding safely in traffic.

The conscious mind is engaged when we make rational decisions, learn something new, or solve a problem. This is referred to as our cognitive function or our rational mind at work, as it demonstrates our reasoning and focused thinking capability. However, we do not have to engage our rational minds to walk, breathe, chew our food, or blink our eyes. The subconscious does that automatically. Likewise, once we learn the keys on a piano or a computer keyboard, we do not have to think about which key to hit as we play or type.

There are many attempts in literature to describe the unconscious mind, the subconscious mind, or the emotional mind. These are different names for what goes on below the awareness of the conscious mind, and they are essentially the same, but discussed with different distinctions for emphasis. Generally, we are completely unaware of what is going on with our subconscious mind. However, what is commonly understood is that the subconscious is the storehouse of all that we have learned and experienced in life. It is like a vast database of experiences, stored

memories, and automatic skills. It also processes information much faster than the conscious mind. [1] As a result of having access to such vast data, the subconscious plays a key role in decision-making, pattern recognition, intuition, and creativity. It also governs multiple processes simultaneously and is a master at multitasking.

By comparison, the conscious mind can only hold a limited number of items in working memory. Depending on how complex an item is, the conscious mind can only hold five to nine items (or chunks of information) at any one time [2]. Also, the conscious mind cannot truly focus on more than one thing at a time. It cannot multitask. Instead, it performs task-switching, which increases the cognitive load, consumes more mental energy, and reduces efficiency. More often than not, attempts at multitasking also increase rates of errors and mistakes.

The subconscious mind also accepts everything that the conscious mind tells it as true. [3] As such, it becomes the source of unconscious bias, as well as attraction and motivation. It is active all the time and never sleeps, as it governs all metabolic activity, including heart rate, breathing, and digestion. It is the source of our dreams and the seat of our emotions. In his book, *Thinking, Fast and Slow*, Daniel Kahneman describes the different roles of the subconscious mind and the conscious mind, referring to them as System 1 (subconscious) and System 2 (conscious). [4] He comments that the automatic operation of System 1 relies on associative memory and continually works to build a "coherent interpretation of what is going on in our world at any instant." It is hypervigilant for anything that may be threatening.

In his classic work, *"Emotional Intelligence,"* [5] Daniel Goleman focuses on the subconscious as the repository of all emotional experiences, referring to the subconscious as the emotional mind and the conscious mind as the thinking mind. I have found this distinction useful when addressing problematic workplace behavior, as there is usually an important emotional element involved. As a result, throughout this book, I will refer to the subconscious as the emotional mind in contrast to the conscious or thinking mind.

As the logic of the subconscious or emotional mind is associative in nature, it communicates via feelings and images that relate to stored experiences and memories. As a result, it is often inexact and can interpret a circumstance that is similar to a stored experience as if it were exact, and then drive a reaction that may not be appropriate.

In the following chapters, we will explore unconscious beliefs and how they drive our behaviors, such as why we do what we do. We will also review how to engage the rational mind versus the emotional mind, and the role that fear plays in our everyday experience and behavior.

How Our Thinking Affects Our Work

After many years of observation and study on why people behave as they do, my conclusion is that it all comes down to how we think or, many times, how we act without thinking. There are many potential situations where our emotional mind can take control and shortcut our ability to respond thoughtfully in the moment.

While consulting, I worked with many senior executives at startups who were facing significant challenges. At one client company, I attended a leadership meeting where the President of the company and the CEO disagreed on how to solve a critical problem. I cannot remember the nature of the problem, but I will never forget the red-faced shouting match that these two had in front of the other senior leaders of the company. This was a classic case where they were both "hijacked by their biology" [6], and nothing good came of it. These types of non-thinking reactions are well-documented in much of the Emotional Intelligence literature and represent the natural fear response to anything that threatens our identity, ego, or status.

It is typical to interact with a broad range of people when working in a corporate environment. As a result, you will encounter all types of personalities and a broad spectrum of people who think differently from you.

In the early 20th century, personality tests were developed to identify soldiers in World War I who might be susceptible to shell shock (known today as PTSD). The development of business-oriented personality tests

began rapidly after World War II and has proliferated dramatically since then. Today, most of the business world has embraced these tests in an attempt to improve teamwork, reduce conflict in the workplace, and provide insights for leaders. There are many critics and proponents of these tests, but I believe they provide value by highlighting the differences in how people think and, therefore, behave.

Relatively early in my career, I was introduced to the Myers-Briggs personality test in an off-site meeting. I do not remember all of the four-letter combinations that make up that system, but I recall what happened after my colleagues and I received our analysis. We were grouped based on the letter combination that resulted from our individual assessments. As a strong Type A personality, I joined the ENTJ group. Then, each group was asked to list what they wanted from the other groups. My type A group asked the people who were in the ESFJ group (the sensitive people) to "just stay out of our way." I was more than surprised that they were genuinely hurt by our request. We thought we were being polite by recognizing we didn't want to "run them over" in the effort to get things done! They, however, felt disrespected and devalued.

That was the first time it registered with me that not everyone thinks like I do! Understanding different personality types and how their thinking processes are structured became very intriguing. Of course, people have their strengths and weaknesses, and every personality type has pros and cons. The important thing is to understand your own thinking style and those you work with.

Currently, there is a lot of talk about the importance of diversity, but not enough emphasis on diversity of thought. Assembling a team with diverse perspectives can result in conflict if not managed properly. However, when trust and respect are established, such a team can tackle a problem from different angles and build on one another's input. As a result, the solution can be far superior and more creative than that produced by a team with a similar mindset.

When I was hired at Amgen, I was asked to start a new department called Engineering and Construction, as the company had new facilities it needed

to build, including offices, labs, and manufacturing plants. After making my first few new hires to staff this department, I realized they were all Chemical Engineers, like me! I made a commitment to recruit engineers from different disciplines before I hired another Chemical Engineer. I needed to have electrical, mechanical, and civil engineers in addition to the few chemical engineers I had already hired. Even though they would all be project engineers, their different backgrounds would complement one another, especially in dealing with the diverse problems and everyday challenges all projects inevitably experience. From that early time in my career, I realized the significant value that can be realized by having people with different backgrounds and experiences working in harmony.

In terms of personality traits, some people are introverts, while others are extroverts. Some people are more sensitive than others. Some are risk-averse, and others, not so much. Some are enthusiastic, and others are more skeptical. Some of these characteristics may be genetic, but the experiences in life drive a large portion of why people think and behave as they do. I found the Results Pyramid, popularized by Roger Connors and Tom Smith in their 1999 book *Change the Culture, Change the Game,* [7] very insightful. Their discussion of how beliefs are forged out of experience is a key learning for leaders.

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                    Results

                    Actions

                    Beliefs

              Interpretation
               of Experiences

                 Experiences
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People's actions and behaviors are shaped by their beliefs. That's why it is important to understand what your people believe, as this determines their actions. Those beliefs stem from how they interpret their experiences.

One example is employees working in manufacturing who are recognized and rewarded for meeting production targets. This experience forms the belief that making a product is their most important task. This could morph into the belief that meeting their production target, no matter what, is correct, irrespective of required procedures or potential impacts on quality. This happened in one plant where the leader of a team responsible for a key manufacturing process deliberately violated established procedures and misrepresented production data to hide what he and his team were doing. When this was discovered, the leader and the majority of his team (those who were complicit) were all fired.

Manufacturing pharmaceutical drugs must be done consistently by following established, validated, and approved Standard Operating Procedures (SOPs). Failure to do so can lead to severe consequences for the operation when discovered, including product recalls and regulatory actions by the FDA. Failure to follow these procedures is often unintended

and usually due to misunderstandings or mistakes. These situations almost always have straightforward solutions. However, on several occasions in my career, it was determined that a failure to follow SOPs was done intentionally or in an effort to hide mistakes. Apparently, the individuals involved believed they could do the job better by not following the SOP. In such cases, letting the person go for cause may be a necessity, depending on whether the violation was flagrant and intentional.

The key lesson is that a pharmaceutical operation must be able to completely trust the employees who work there to be honest. If a mistake is made, the individual must report it to their supervisor. Then, it can be dealt with according to established quality procedures. If a mistake is made and the person attempts to hide it, they jeopardize their job. Having a coworker fired for trying to conceal an honest mistake is a powerful experience for everyone in the organization. It is not done lightly and only after a significant investigation.

Ask yourself, "Why would anyone try to hide a mistake if it could cost them their job?"

I believe it is an emotional response to not wanting to look incompetent to their peers or supervisors. In this situation, the person is not thinking rationally but is letting their actions be driven by their emotional mind. Assuming it is not intentional, an honest mistake is usually correctable and forgivable. Mistakes always have an associated cost, either in lost time or lost material. This is true in any industry, but is especially problematic for the pharmaceutical industry, as the cost of lost material can be significant. Though no one should ever be fired for a mistake, hiding a mistake is a breach of integrity that cannot be tolerated when one is in the business of making lifesaving drugs.

Several years ago, I was introduced to an intriguing concept called "metacognition." This is a fancy word for the idea that you can consciously think about your own thinking processes. It involves self-awareness and self-regulation, enabling you to evaluate not only what you are thinking but also how you are feeling and why. This is a reflective practice that engages

the rational mind to analyze your thoughts and emotions in the context of what is currently happening.

In practice, metacognition allows you to ask yourself critical questions such as:

- "Is what I am thinking and feeling aligned with the reality of this situation?"
- "Do the emotions I am feeling make sense given what is currently happening, or am I being influenced by some past experience?"

Suppose you find yourself feeling upset or even angry during a team meeting when a teammate asks a question about the data you just presented. You may be tempted to respond defensively or angrily. However, taking a breath and thinking about why you are feeling this way in the moment is metacognition at work and gives you the space to realize the question was asked to understand the data, not to challenge it. Additionally, you may realize you were stressed by the argument you had that morning with your teenage daughter. This kind of reflection leads to greater emotional regulation and gives you the ability to respond to such a question with an appropriate explanation, not an emotional reaction.

Research shows that metacognitive skills are linked to enhanced learning outcomes. Leaders who employ metacognitive strategies can foster a culture of reflection and growth in the workplace, encouraging their teams to critically evaluate their thought processes and emotional responses. This can lead to more constructive communication, better conflict resolution, and a stronger team dynamic.

Ultimately, metacognition is closely aligned with emotional intelligence (EQ), which will be explored in more detail in the next chapter. What you need to know now is that both concepts emphasize self-awareness and the ability to understand one's own emotions and thoughts. By developing metacognitive skills, individuals can enhance their emotional intelligence, leading to more thoughtful and deliberate actions rather than reactive, emotion-driven responses.

Success Factor Summary

Understanding how we think and how our subconscious influences our behavior is vital for personal and professional growth. The interplay between our emotional mind and conscious reasoning shapes our actions, often in ways we are only partially aware of. Embracing diversity of thought and fostering an environment where different perspectives are valued will enhance team dynamics and lead to better results. Remember that our thoughts shape our reality. By transforming our thinking, we can transform our actions, leading to a more fulfilling and productive life both personally and professionally.

Reflect on the insights shared in this chapter, and take a moment to assess your thinking patterns and the beliefs driving your actions. Consider how you can apply emotional intelligence in your professional interactions. Challenge yourself to engage in reflective practices, asking critical questions about your thoughts and feelings in various situations.

Key Takeaways for Chapter 1: How We Think

1. **The Impact of Beliefs on Behavior**: People's actions are largely driven by their beliefs, which are formed through their experiences and how they interpret them. Understanding what your people believe is crucial to influencing their behavior and achieving desired outcomes.

2. **Emotional Intelligence is Essential**: This chapter highlights the value of emotional intelligence (EQ) in leadership and workplace interactions. Many leaders focus solely on skills and experience, and overlook the importance of emotional maturity. Leaders must recognize that emotional responses can often override rational decision-making, often nullifying the value of both skill and experience.

3. **The Subconscious vs. Conscious Mind**: The subconscious mind is emotionally based and handles the majority of our daily actions automatically. It also significantly influences our decisions through emotions and past experiences, both good and bad. In contrast, the conscious mind is engaged in focused thinking and rational decision-

making, but is limited in capacity and cannot multitask effectively. The best decisions are made when the rational mind works seamlessly with the subconscious mind to make thoughtful decisions that are informed by previous experiences.

4. **Diversity of Thought**: The value of diversity in a team goes beyond demographic factors and should include diversity of thought and experience. This variety enriches problem-solving, innovation, and creativity. When people from different backgrounds and disciplines combine their efforts, truly creative and even surprising solutions can be born.

CHAPTER 2

EMOTIONAL INTELLIGENCE OVERVIEW

"Emotional intelligence, more than any other factor, more than I.Q. or expertise, accounts for 85 percent to 90 percent of success at work. I.Q. is a threshold competence. You need it, but it doesn't make you a star. Emotional intelligence can."

Warren G. Bennis

Much has been written on emotional intelligence since the publication of Daniel Goleman's book, *Emotional Intelligence,* in 1995. [1] Goleman argued that emotional intelligence, often referred to as EQ, is more critical to success in business and life than raw intelligence or IQ. Numerous studies of business leaders have validated this claim, showing that emotional intelligence is the strongest predictor of performance, with 90 percent of top performers tested having high EQ scores. [2]

People with high EQ are self-aware and in tune with their emotions. More importantly, they can effectively manage not only their emotions, but also their response to the emotions of others in real-time. They can name their emotions when they come up, and can keep them under control.

Rather than reacting automatically to whatever triggers an emotion, they engage their rational mind and decide how to respond. When confronted with negative emotions in others, they can show empathy and

understanding while they work to diffuse a potentially tense situation. As a result, they are very effective leaders, coaches, and mentors who can resolve conflicts, keep people focused on their work, and create significant value.

The following examples demonstrate the four core characteristics of high emotional intelligence at work in real time:

Self-Awareness: A manager recognizes that her frustration during team meetings often stems from personal stress. This awareness helps her to adjust her tone and approach to avoid creating a negative environment.

Self-Management: After receiving constructive criticism from a colleague, an employee takes a moment to breathe deeply and reflect before responding, ultimately expressing gratitude for the feedback instead of reacting defensively.

Social Awareness: During a team project, a team member notices that one of his colleagues seems withdrawn and less engaged than usual, prompting him to check in privately to see if everything is okay. This insight into the emotions and needs of others allows him to provide support and strengthen team cohesion.

Relationship Management: A leader uses his understanding of team dynamics to mediate a conflict between two team members, facilitating a discussion that helps them express their perspectives and find common ground.

The following chart is a summary of Goleman's description of the four core characteristics of EQ and their related competencies. [1]

Emotional Intelligence - 4 Domains with 12 Competencies			
Self Awareness	**Self Management**	**Social Awareness**	**Relationship Management**
Emotional Awareness	Maintain Emotional Balance	Empathy	Influence and/or Inspire
Ability to Name My Emotions	Adaptability	Organizational Awareness	Conflict Management
	Motivation		Coaching
	Positivity		Teamwork

Understanding the Fear Factor

In my free time, I enjoy pruning and tending to olive trees. I own an olive orchard on the central coast of California with 27 trees. Water is a big deal in California. Since the region is often dry, the trees rely on irrigation to survive and produce. Late one afternoon, I was on my knees at the end of a row of trees, repairing the drip system, when I looked down and saw a small rattlesnake coiled at the base of the end tree, sunning itself about six inches from my right knee. The angular head, diamond markings, and small rattle on its tail were unmistakable and immediately recognizable. Recognition flashed through my mind, and the next conscious thought I had was flying backward through the air and landing on my feet about ten feet away! First, there was no thought associated with this response. Physically, if I had to think about it, I am not sure I would know how to go from kneeling to instantly jumping backward ten feet. In this instance, with the recognized imminent threat to life, my subconscious or emotional mind took over my body with a nearly instantaneous response. I did not think until I landed on my feet at a safe distance.

Humans are affected by fear to a greater extent than most people recognize or are willing to admit, mainly because our brains are "wired" for survival.

Whether we know it or not, we are constantly scanning for potential threats to our existence, so all fear has its roots ultimately in our need to survive.

Our "emotional mind" is quicker to respond to threatening situations and acts as the body's radar for danger. Consequently, it reacts much faster than the rational mind, often springing into action without pausing to consider the implications of its response. As shown by my experience in the olive orchard, it can instigate physiological responses based on how it interprets what is happening in the environment to prepare the body for either flight or fight. [3] This rapid reaction can be beneficial in life-threatening situations but can also lead to inappropriate responses in less critical circumstances.

This process is inexact and can unnecessarily initiate a crisis response. Fortunately, in the modern workplace, life-threatening situations are rare. However, a sharp disagreement with a colleague in the office can have the same physiological effect as being threatened or attacked. This is essentially the same stress response that prepares the body for fight-or-flight through well-orchestrated physiological changes with an increase in heart rate, rapid breathing, and an instantaneous cascade of hormones, including adrenaline. [4]

Consider a scenario where an employee makes a mistake that delays a project. The person's manager may respond with anger or frustration, which can feel like a physical attack to the employee receiving the feedback. This creates an automatic reaction that can be overwhelming, scaring the employee and pushing them toward defensiveness. If the employee is not emotionally mature, they might react impulsively, escalating the situation further.

However, if the employee possesses high emotional intelligence, they can recognize their feelings of being threatened but consciously choose to manage their emotions. Instead of retaliating or withdrawing, they can respond thoughtfully, addressing the issue constructively and working to resolve the conflict.

Workplace disagreements can also evoke emotional memories of past negative experiences and drive a reaction that is very disproportionate and

inappropriate to the current real situation. This is where self-awareness and the ability to manage our emotional response become critical. In a later chapter on building self-awareness, I discuss how you can recognize your emotions when they come up and then steer that energy (rational brain taking control) to a positive outcome.

We generally react much quicker based on our emotions and more slowly based on our cognitive or thoughtful interpretation of what is happening. On more than one occasion, I have been deeply frustrated with the performance of one of my direct reports and wanted to fire them on the spot! However, after a few deep breaths, my rational mind would kick in, and I would realize I needed to give coaching another try. When strong emotions develop, it is important to give the rational mind time to catch up with what is actually happening. However, the rational and emotional minds usually work in sync, especially in decision-making situations. The rational mind analyzes options, while the emotional mind references similar previous decisions for lessons learned. Both are needed to make wise and right decisions.

Being able to interpret and understand other people's emotions is also an essential aspect of emotional intelligence. Facial expressions and body language give specific clues about our emotional state. People with high EQ can easily pick up on these signals and respond appropriately. If the hallmark of personal emotional intelligence is self-management, empathy is the corresponding element for effective social interaction. Empathy is the ability to understand and appreciate the needs of others, as may be indicated by their emotions. Demonstrating empathy in the workplace is a significant factor in establishing a trust-based environment where people feel valued and understood. [5]

For example, if a team member is struggling with a personal issue that is affecting their work performance, an empathetic colleague might approach them with sensitivity rather than criticism. Instead of reprimanding them for lower productivity, their colleague might say, "I've noticed you seem a bit overwhelmed lately. Is there anything I can do to help?"

This kind of support can foster a sense of belonging and trust, encouraging the affected individual to openly communicate their concerns.

Empathy also facilitates effective communication, which is essential in resolving conflicts and enhancing teamwork. When leaders exhibit empathy, they create trust and the opportunity for dialogue, thus enabling team members to express their concerns without fear of judgment. This openness can lead to more constructive feedback and collaborative problem-solving. For instance, a leader who actively listens and validates team members' feelings during meetings can help them feel more comfortable sharing their ideas. This can lead to innovative solutions that might have remained buried in a more rigid or critical environment.

Emotional intelligence can be developed and strengthened over time. Individuals can enhance their EQ through intentional practice and self-reflection. As mentioned, you will discover how to develop and deepen self-awareness in a later chapter, and this will help you improve how you manage your emotions and respond appropriately to the emotions of others.

Success Factor Summary

Emotional intelligence (EQ) is crucial for workplace success and often has a greater long-term impact than native intelligence or IQ. Your talent and experience are likely the basis of why you were hired. However, your level of emotional intelligence will be the determining factor of your future success.

Start taking actionable steps to enhance your emotional intelligence. Begin by reflecting on your emotional triggers and practicing self-awareness techniques, such as journaling, to identify your response patterns to different situations. Engage in active listening during conversations and focus on understanding other people's perspectives and feelings.

Key Takeaways for Chapter 2: Emotional Intelligence Overview

1. **Emotional Intelligence as a Key Predictor of Success**: Emotional intelligence (EQ) is a stronger predictor of success in business and life than traditional intelligence (IQ).

2. **Core Characteristics of EQ**: The essential elements of emotional intelligence include self-awareness, self-management, social awareness, and relationship management.

3. **The Impact of Fear on Responses**: Human beings are wired for survival, with fear responses often triggered by perceived threats. This instinctive reaction can lead to quick, emotional responses in non-life-threatening situations, such as workplace disagreements, making self-awareness vital for managing those reactions constructively.

4. **Empathy as a Cornerstone of Effective Communication**: Empathy is a critical component of emotional intelligence that enhances communication and teamwork. By understanding and appreciating the emotions of others, individuals can create a trust-based environment, fostering open dialogue and collaborative problem-solving.

CHAPTER 3

MAXIMIZING PERFORMANCE IN AN UNCERTAIN ENVIRONMENT

"Productivity is being able to do things that you were never able to do before."

Franz Kafka

We live in an increasingly complex world where the pace of change is being driven ever faster by technology that makes communication, information availability, and sharing nearly instantaneous. The daily flood of information can be overwhelming. Paradoxically, more information can create greater uncertainty when the quality of that information is inconsistent. New ideas, new approaches, and new problems emerge at a rate that has never been seen before. This can be disorienting, causing anxiety (fear) and decision paralysis.

The charts below were developed as part of a thought experiment on how to create an environment where people can work at their best, essentially maximizing their potential performance despite dealing with inherent uncertainty.

I started with Chart 1, which demonstrates the relationship between perceived uncertainty and fear. Notice this is not a linear relationship. In situations of extreme uncertainty, where life may be at risk, people can feel

terrorized. Conversely, in situations where there is little or no uncertainty, we tend to become bored because everything is known, and that is not very interesting.

Chart 1: Relationship Between Uncertainty and Fear
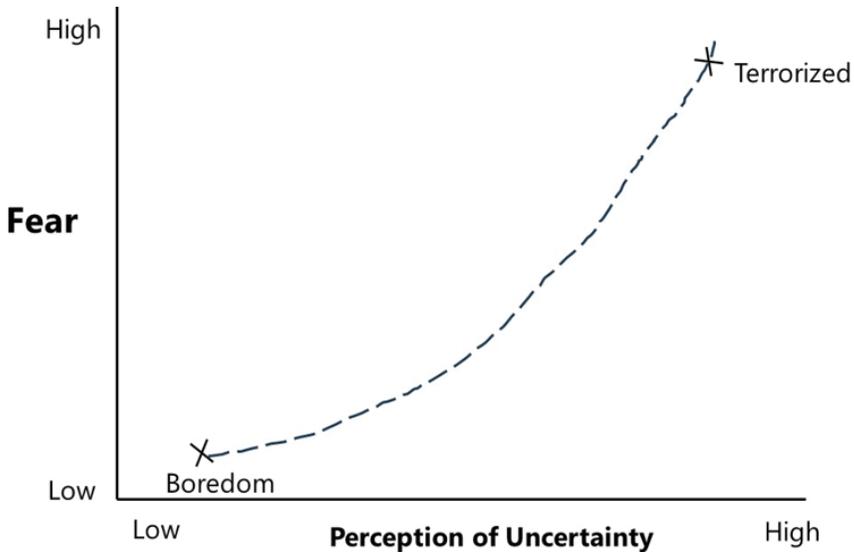
Moving on to Chart 2, I added productivity to the Y-axis. I assumed that people who are either bored or terrorized are not very productive, so their productivity (solid line) follows a bell curve. This bell curve implies that somewhere between being bored and being terrorized, there is a point where productivity can be maximized. The area under the middle of the bell curve (defined by two vertical lines) is where productivity is maximized. I call this the Zone of Creative Tension.

Chart 2: What Enables Maximum Performance?

The Zone of Creative Tension versus the Zone of Comfort

Most often, people need to be pushed into the Zone of Creative Tension, usually out of personal necessity or in the work environment, at the instance of the boss. People generally like to stay in the Zone of Comfort, where there are no scary demands and the answers to present issues and problems are readily apparent or already known. The problem with the Zone of Comfort is that there is nothing new or particularly challenging going on. The level of uncertainty is relatively low, so there is no driver or motivation to try anything new or take any risks. People who are risk-averse like staying in this zone. However, as a result, nothing new gets created, as there is no need for innovation or creativity. This existence is a notch above boredom.

The Zone of Creative Tension is where we must learn new things for the first time. This is where we face a problem we do not know how to solve. This can be due to personal necessity, such as seeking the first job in the workplace after graduating from college. For most people, writing resumes, cover letters, and going to job interviews is not something done

for the fun of it. We do it out of personal necessity and face a fair amount of uncertainty with this task. It is uncertain where we will be invited to interview, what job we may end up with, or how long the process will take. There is also great uncertainty about how this entire process will affect the rest of one's life.

With advances in technology happening all around us, especially in the pharmaceutical industry, we are constantly dealing with new opportunities that are often wrapped with increased uncertainty. Think back several decades in history when the internet was new and consider the following scenario:

In the late 1990s, the Internet matured into a critical business tool. At the time, I was responsible for a large group whose duties included manufacturing and supply chain. Online procurement was revolutionizing the purchasing function and provided a huge opportunity for cost savings through online bidding for supply contracts. I determined we could potentially save five percent on our entire purchasing budget by using this new technology effectively. Since we were buying about $1 billion worth of goods every year, that translated into a potential savings of $50 million. When I informed my purchasing director of his new goal for the year, his eyes grew big like saucers, and he exclaimed, "I don't know how to do that!" My response was, "Good! Go figure it out." He was pushed into the Zone of Creative Tension and eventually learned how to do what he didn't already know.

The Zone of Creative Tension is characterized by heightened uncertainty, unknown risks, and potential anxiety. It is in this tension that creativity thrives. Individuals facing novel problems must use fresh perspectives, as pre-existing solutions do not apply. As a result, people can get things done that others thought were impossible!

Those who are self-aware and understand either the opportunity or the necessity of the moment can forge ahead and face the issues at hand. This requires the ability to manage one's emotional response to uncertainty and let the energy associated with that tension be a catalyst to drive innovation and creativity.

We are living in a very exciting time where technology continues to advance at a seemingly ever-increasing rate. Virtually every industry was impacted by the development of the internet in the 1990s through the 2000s. I believe the ongoing development of artificial intelligence, along with advances in robotics and machine learning, will be a huge catalyst for business changes in the decade to come. This will create many opportunities for novel business capabilities as well as a lot of tension and challenges that come with such massive changes. Those who are able to step into the Zone of Creative Tension in the face of such change will have the opportunity to reshape and innovate their businesses to create significant competitive advantages. Those who are unable to embrace the challenges associated with the uncertainties involved may get left behind.

The Effect of Fear on Productivity

The most common fear that often hinders productivity is the fear of failure. This is the fear of moving out of the Zone of Comfort, where we are confident in our abilities, into a place where we are not sure we have what it takes. Chart 2 demonstrates the link between fear, stress (perception of uncertainty), and productivity. We often get stressed over things that we cannot control, as well as over things we can change or control. Mostly, we stress over things that are unknown, which creates various levels of uncertainty. We cannot control the economic climate or the rise and fall of the stock market, but we may feel stressed about how these things could affect us.

Even when dealing with things we can control, we may have different levels of confidence regarding all the potential variables. For example, public speaking raises significant fears for many people. Even if they feel prepared and confident about the subject matter, they worry they may get lost in their notes and look foolish in front of a crowd. One person I was coaching to overcome her fear of public speaking commented, "I could trip and fall going up the stairs to the podium, hit my head, and die." This may seem like a silly concern, but people who are very fearful of giving a speech are not always rational regarding their fears. This is because fear is a powerful

emotion and often defies logic. I coached her extensively on how to prepare for delivering her speech, the key being practice, practice, practice. Also, her message was important, and the audience needed to hear it. In the end, she was still anxious at the start but smoothed out and delivered a powerful message.

What Do You Mean by Productivity?

Productivity generally means getting things done or accomplishing something. However, in the regular practice of the workplace, this meaning is often lost in the sea of budget planning, resource allocations, and delegation. As a result, anyone working a lot of hours is regarded as a dedicated employee who "works hard." However, work often expands to fill the allocated time. There are many time accounting systems that track the hours people work, but there are very few systems that measure true productivity.

True productivity can be assessed by the amount of input versus the amount of output. If one employee takes twice as long to accomplish a task versus another employee, it may seem obvious who is more productive. However, most of the time, the workplace is not so simple or so obvious. It is impossible to tell who was more productive unless you have the metadata associated with each individual. For example, if you knew the first employee was recently hired and is learning a new task, your evaluation might change. What is more important is to understand the differences in their work practices. The following list gives some insight into the things that either contribute to productivity or detract from it.

- Skill level, experience, or knowledge.
- Susceptibility to distractions and interruptions.
- Ability to stay focused on one task at a time.
- Ability to prioritize and be organized.
- Task clarity, goal clarity
- Time management skills
- Personal energy, health

- Emotional stability and intelligence
- Strength of one's technical network
- Having a Growth Mindset versus a Fixed Mindset
- Strategic thinking ability, problem-solving skills

This list of factors that can influence productivity illustrates the challenges involved in trying to compare the productivity of one person versus another. However, this list also defines some concrete ways that anyone can enhance their productivity and be more effective in their work and their life. One of the big detractors of overall productivity is distractions and interruptions that occur almost continuously in our modern environment. Fortunately, we do not have to be victimized by the onslaught of social media notifications, pop-ups, and advertising that intrude on our ability to do focused work. I discuss practical ways to minimize these impacts on our ability to focus, think, and work in the chapter on Managing Distractions.

Time is linear and is a fixed quantity for everyone. There are only 24 hours in the day, yet you can leverage each hour in many ways. For example, you can invest in yourself by learning a new skill that can improve productivity over the long term. This is an investment because it takes time and effort, and may not feel productive in the short term; however, it will provide leveraged value over the long term. An organization can invest resources to streamline processes for better efficiency, as this will enable long-term improvement. This is especially valuable for recurring tasks.

Streamlining for Productivity

Improving a Process for Productivity:

A program was implemented in one manufacturing plant to solicit ideas from the operators on the floor that would help the plant identify and improve inefficient work processes or confusing procedures. The input from these operators was necessary because they are the ones who know firsthand where improvements can be made. One of the better ideas identified that the assembly of a filter setup was inefficient, as it took several hours for two operators to complete. This had to be done for every

production lot, and considering the production plan had approximately 100 lots scheduled each year, this was a significant opportunity to improve the plant's productivity. The solution was to adjust the procedure by utilizing a cart system to clamp parts of the assembly in place while one operator completed the assembly. Using this new approach, the entire operation was done in half the time with only one person instead of two. There was additional value in using this cart and clamping system, as it reduced the inherent variability of the previous manual procedure.

Refining a process to be systematic, documented, and repeatable is at the heart of consistency for any manufacturing operation. It is critical for a systematic approach or a Standard Operating Procedure (SOP) to be efficient and clear. Poorly written SOPs are a significant problem, as people will become creative in working around an inefficient SOP or ignore unclear instructions. This creates a potential product quality risk for any manufacturing operation and a compliance risk for any pharmaceutical manufacturing plant.

The following is a short list of areas to invest in to create opportunities for leveraging your productivity:

- Prioritization: Learn to prioritize and focus on what creates maximum value.
- Scheduling: Planning strategic blocks of time to focus on your most important work.
- Networking: Be deliberate in building relationships with a technical support network.

Prioritization:

Anyone working in a corporate environment will have daily tasks, short-term goals, and long-term goals. Often, the time pressure of daily tasks can crowd out the time needed to plan for long-term or strategic goals. This became a huge challenge while working with startup companies during my consulting days. One company I worked with simply didn't have sufficient resources to do everything they really needed to do. As a result, I led them

through an exercise to identify the tasks that, if left undone, would lead to the destruction of the company. We were able to sort activities into the following categories:

- Critical: Tasks that, if not done, would kill the company.
- Important: Tasks that were very important, but if left undone would be survivable and could be dealt with in the future.
- Nice to Have: Tasks that would be very beneficial to get done.

Even if you have clarity on your most important goals, every day will bring something new, something urgent, an unexpected crisis, or an opportunity. There are several methods for juggling these issues effectively while maintaining productivity, one of which is the Eisenhower Matrix. The Eisenhower Matrix [1] is a useful tool for defining what is urgent versus what is important. This is a key distinction that most people do not use or even recognize when deciding how to spend their time, energy, and resources.

Eisenhower Matrix

	Urgent	Not Urgent
Important	**1 Do it Now** Things that create value and have a near-term time constraint • Respond to Request from Boss • Submit Draft Report • Get Flat Tire Fixed	**2 Decide When To Do It** Things that create value and need to be scheduled or planned over time • Long-Term goals • Major Projects • Personal Development
Not Important	**3 Delegate** Things that do not create much value and have time constraints • Order Lunch • Prepare Meeting Minutes • Schedule Conference Room	**4 Delete** Things that create no value and Waste Time • Social Media • Video Games • Watching TV

Important Activities: These are most often associated with our goals in both professional and personal areas. Working on these activities will provide the most value for the time spent.

Urgent Activities: These are the ones that demand immediate attention for some reason. Often, these are driven by the needs and demands of other people trying to achieve their goals.

Thinking carefully about what activities create the most value will go a long way in helping you prioritize how you spend your time. Too often, our time is hijacked by what is urgently demanding our attention. We can get caught up in what is called the "Tyranny of the Urgent," spending most of our time in boxes 1 and 3 and losing track of what is more important [2]. Urgent tasks attract our attention because they are usually clear on what needs to be done and by when. The important activities in box 2 are usually more complex, take more thought to clearly define, and have longer timeframes. As a result, it is easier to procrastinate on them and instead gravitate to dealing with the urgent.

The objective is to balance activities to quickly deal with what is urgent and make time for more strategic activities. This matrix is an idealized framework and relates to value creation. For example, watching TV during your downtime is not likely something you will eliminate, but it should be kept in balance and not hinder progress on your long-term goals.

Some not-so-obvious benefits of using this matrix are as follows:

- Writing things down and categorizing your activities reduces cognitive load and gives you more capacity to think and plan strategically.
- Balancing the timing of the urgent with the value of the important will help in deciding what is worth doing first.
- Using this tool for both business and personal tasks will help to improve your work-life balance.
- Make a concerted effort to eliminate as many distractions as possible by identifying the time-wasting activities in quadrant 4.
- Once you have sorted your activities into each quadrant, you have a clear roadmap for scheduling your week.

Scheduling:

There are two extremes that do not support productivity. The first is not having a plan for each day of the week, and the other is allowing others to fill your schedule with their priorities. In the first case, the most important work gets put on the back burner while you deal with the daily crisis or whatever urgent item comes up. In the second case, project meetings, staff meetings, training, and 1:1s with your direct reports will fill your days, leaving no time for you to work on your priorities. It is not that any of these meetings and connections with others are unimportant, but they should flow around the time that you have blocked out on your calendar to work on the items in box 2 of the matrix. Those things that will provide the most value, in the long run, must have dedicated time in your schedule to be worked on. Tasks that are complicated and represent long-term efforts must be broken down into addressable elements with as much detail as possible.

For example, writing a book takes a lot of thought and planning, as well as scheduling discipline, if it is to be completed at all. There are a lot of issues with topic selection and organization, but the point is how to schedule the time to get it done. I started by just blocking a couple of hours three times a week to work on this book. Urgency often raised its ugly head, resulting in a 60 percent success rate in keeping with my schedule. However, it became clear that I was unfocused and too general; alas, I was not making good progress. In the end, what worked well was to block two to four hours every morning with a specific topic to work on and a target to complete at least 500 to 1000 words in that time. This required planning the entire week and deliberately making room in my schedule for the unknown but inevitable emergencies.

Blocking time in your schedule to work on your most important tasks is best done one week at a time. Deciding how to allocate your time over the week between various tasks, meetings, and projects will give you a better perspective on your overall time usage. Also, being realistic about allocating time to deal with urgent matters will help to ensure your scheduled time for important work does not get hijacked. Everyone needs to look at their

email at some point in the day, but keep that to one or at most two points in the day and limit the total time to something reasonable. Deliberately avoid unnecessary distractions. When you are doing deep work during the time blocks for important tasks, do whatever you need to do to avoid interruptions. Hang a sign or advertise that you are not to be disturbed. Turn off your phone. Cancel notifications on your computer. Protect that time.

Networking:

Networking is about building relationships with people from diverse backgrounds, experiences, and talents. Being deliberate about getting to know people and their expertise is just the beginning. Staying in contact with them and exploring shared interests over time is what builds a strong network. Be curious about what they are doing and make it clear you are happy to be available if they need your input. Think through the people you currently work with, as well as those from a previous company that you know well. Develop a list of go-to experts that you can call on for advice and input if you are stuck on a project or if you just want to bounce ideas around. Here is a short list to keep in mind as you build your network:

- A real network is about relationships. It is not just a contact list.
- The focus must be on mutual benefit through shared knowledge and expertise.
- Follow up and stay in touch with people in your network on a regular basis.
- Be proactive in offering your knowledge and support.
- Be authentic and genuine.

Success Factor Summary

In a world characterized by rapid technological advancements and constant change, maximizing performance amidst uncertainty is both a challenge and an opportunity. The concept of the "Zone of Creative Tension" underscores the importance of stepping out of our comfort zones to stimulate innovation

and drive productivity. While uncertainty can provoke fear and anxiety, it can also serve as a powerful catalyst for growth and creativity when leveraged effectively. By embracing the discomfort associated with new challenges and prioritizing tasks that create real value, individuals and organizations can thrive, even in the face of unpredictability.

Embrace the Zone of Creative Tension by actively seeking opportunities that challenge you and push you beyond your comfort zone. Develop a mindset that views uncertainty as a chance for growth and innovation. Begin by identifying one area in your personal or professional life where you can step into this zone, set a clear goal, and take actionable steps to pursue it. Stay engaged with your network for support and feedback. Focus on prioritizing tasks that align with your long-term objectives.

Key Takeaways From Chapter 3: Maximizing Performance in an Uncertain Environment

1. **The Impact of Uncertainty on Productivity**: High uncertainty can lead to fear and decision paralysis, while low uncertainty can result in boredom. Both extremes hinder productivity. The optimal state, termed the "Zone of Creative Tension," is where uncertainty is balanced with enough challenge to drive innovation and creativity, maximizing performance.

2. **Zone of Creative Tension vs. Zone of Comfort**: The Zone of Creative Tension is crucial for personal and professional growth. It pushes individuals to learn and innovate as they face new challenges and uncertainties. Conversely, the Zone of Comfort, where everything is familiar and predictable, tends to stifle creativity and progress due to a lack of new challenges.

3. **The Role of Fear in Productivity**: Fear, particularly the fear of failure, can significantly hinder productivity. It's essential to manage emotional responses to uncertainty and use the energy from tension as a catalyst for innovation. This involves moving beyond comfort zones and embracing new challenges.

4. **True Productivity vs. Time Spent**: True productivity should be measured by output rather than input. It is important to recognize the factors that influence productivity, including skill level, focus, and emotional intelligence. This also highlights the need to minimize distractions and prioritize tasks that create the most value.

5. **Strategies for Enhancing Productivity**: Strategies that can boost productivity include prioritizing tasks using tools like the Eisenhower Matrix, scheduling focused work time, and building a robust network of knowledgeable peers. These strategies help individuals manage their time effectively, focus on important tasks, and leverage external expertise when needed.

CHAPTER 4

THE IMPORTANCE OF SELF-CARE

"Self-care is not a luxury, it's a necessity; you cannot pour from an empty cup."

Unknown

One of my direct reports, a leader of a large department, came into my office and surprised me with her letter of resignation. I was stunned for a moment before I asked her to sit down and tell me what was going on. As she burst into tears, she said, "I am not sure what's wrong. I am exhausted, but I can't sleep. I feel overwhelmed, anxious, and depressed, and I need to make a change." She had "hit the wall" and was suffering from burnout.

The idea of taking care of yourself seems like it should be a natural part of life. Unfortunately, it is easy to slip into unhealthy behavior patterns due to the demands of a job, stress from your personal life, and the expectations of others. In retrospect, I spent way too many years of my career not getting enough sleep or exercise. I had the mistaken idea that sleep was somewhat of a waste of time because I had so much to do. Instead, the lack of sufficient sleep over time contributed to some health issues that I am still dealing with.

The term "self-care" means different things to different people, and can include a wide range of topics. A psychologist will focus on how to maintain good mental health, while an athlete will focus on what you need to do to

stay physically fit. These divergent concerns are all important. However, the challenge is to find the balance that best serves your overall well-being as an individual.

Many people have misconceptions about their capability, capacity, and productivity. For example, they believe that getting ahead at work takes long hours, including nights and weekends, leaving no time for exercise, sufficient sleep, and family. While people's priorities differ, we must pay attention to some basic things to operate at our best and avoid burnout.

- Get at least seven to eight hours of sleep every night.
- Get some exercise.
- Stay hydrated.
- Explore methods for managing stress.
- Be intentional about learning something new.
- Make time for the people in your life.
- Making habits work for you.

This is not an exhaustive list, as many books and articles have been written on self-care. However, taking time to address these seven areas of self-care will go a long way toward providing mental and physical well-being so you can function at your best.

Time—our most precious resource—often seems to be in short supply. The "reason" we don't get enough sleep or exercise is that we feel pressured to focus all our time on what we need to do. As I discussed in reference to the Eisenhower Matrix, the important things tend to bow to the urgent. Everyone will agree logically that taking care of yourself is important; yet, that gets lost in the daily grind, and there never seems to be enough time.

Why You Should Get Sufficient Sleep

Getting enough sleep is one of the most important and often neglected aspects of ensuring you can operate at maximum capability. The typical recommendation is seven to eight hours of sleep every night. [1] People who are serious about productivity and are focused on getting things done

sometimes think of sleep as an unfortunate necessity or even a waste of time. However, insufficient sleep can affect your physical health as well as your cognitive abilities.

Physical Benefits: First, a good night's sleep obviously recharges your energy and repairs damaged tissues. During the day, the body uses cortisol to break down tissues for energy. When sleeping, cortisol levels drop, and growth hormones are released to rebuild those tissues. [2] Sufficient sleep is also vital to maintaining a healthy immune system, metabolic balance, and a healthy heart.

Cognitive Benefits: During sleep, short-term memories are consolidated and stored in long-term memory. This helps us remember, learn, and build on what we know. As short-term memory is cleared out, space is made for new short-term memories. Also, during deep sleep, toxic proteins that build up in the brain during the day are washed out. It is believed that these waste products play a role in the development of dementia.

Sleep deficiency can create problems with focusing and making decisions, solving problems, remembering things, managing emotions and behavior, and coping with change. You may take longer to finish tasks, have a slower reaction time, and make more mistakes.[3]

Some people seem to get by with less sleep than others, but at a cost. [4] Functioning on only four or five hours of sleep can make it seem like we are being efficient with our time, but as mentioned in the chapter on productivity, how we measure effectiveness and true productivity should not be based on hours spent, but on what useful output is produced.

Finally, lacking a good night's sleep can impair your ability to function in life-threatening situations. Studies have shown that when people who lack sleep are tested on a driving simulator, they perform as badly as or worse than those who are legally drunk. [5]

Get Some Exercise

The general recommendation for staying healthy is 150 minutes a week of moderate exercise, like walking, and at least 75 minutes a week of higher-

intensity exercise, like jogging. This may sound like a lot of time, but consider taking a 30-minute walk at lunchtime, five days a week. You can also break it up into two 15-minute walks per day—it may serve as a break from sitting at a computer. Additionally, getting some fresh air and sunshine outside is an added bonus. If possible, enjoy taking a walk in nature for stress relief and to improve your perspective as well as creativity.

Everyone knows that exercise can have major health benefits. The key is to develop the habit of getting some exercise every day. Making a new behavior a habit depends on making it easy to do. Walking is simple, and you can do it almost anywhere. Regular exercise can help you stay trim, improve cholesterol levels, strengthen bones, keep blood pressure in check, lift your mood, and lower your risk for diabetes and heart disease. [6]

Stay Hydrated

Your body is like a finely-tuned engine. Just as an engine requires oil to lubricate its parts, reduce friction, and operate smoothly, your body requires water to keep its systems running efficiently. Without enough oil, an engine can overheat, seize up, or even break down. In the same way, a lack of hydration can lead to fatigue, decreased cognitive function, and impaired physical performance.

Surprisingly, your brain is over 80 percent water. Proper hydration is essential for staying healthy and thinking clearly. If your body is losing water faster than you are taking it in, you are becoming dehydrated. We constantly lose water through normal body functions such as breathing and sweating. Dehydration can lead to tiredness, dizziness, lightheadedness, muscle cramps, headache, confusion, and even fainting. [7]

To stay at your best, stay hydrated.

Manage Stress

Stress is inevitable—especially for people working in a highly regulated industry where mistakes can be very costly. You cannot eliminate stress

completely, and you would not want to, as short-term stress or "normal stress" can be positive. [8] When we encounter normal stress, the body releases various hormones and neurochemicals that prepare us for action. This is essentially the fight-or-flight response, which makes us more energetic, alert, and focused. You must recognize when stressed that you may be preparing for action. That nervous energy you feel before giving a presentation, an important speech, or starting a significant meeting can make you anxious or be reframed as excitement. When you make use of this energy and focus, you demonstrate confidence in your opening statements and take your next steps in a positive direction.

Of course, chronic stress can be debilitating—especially when you start to feel overwhelmed. This can quickly lead to burnout, which is characterized by cynicism and irritability. Normally, I am a reasonably calm person, but there was a time I was challenged by a colleague and immediately became upset, angry, and belligerent. This was completely out of proportion to what was happening at that moment. Later, after I had calmed down, I realized that I was under extreme stress from a completely unrelated issue in my personal life. I went back and apologized to my colleague. Burnout is often driven by a sense that you are not in control (loss of autonomy), which causes upsets but can also breed apathy and hopelessness. [9]

Watch out for the early signs of impending burnout, such as a sense of dread associated with going to work, feeling unable to control your schedule, or growing apathy. It may be time to talk with your boss about regaining some control over your schedule or increasing your autonomy at work. Avoid catastrophizing the situation and try to see the broader perspective. Taking regular breaks, even short ones, can be very helpful. Something as simple as consciously doing breathing exercises can significantly reduce stress. [10] As mentioned above, getting sufficient sleep and exercise, as well as spending time with people you enjoy, can boost your overall mood. However, if the work environment is truly toxic and you have no ability to negotiate needed changes to your responsibilities, it may be time to seek a different job, either within the company or elsewhere.

Learn Something New

Exploring new ideas, hobbies, or skills can be very beneficial both physically and mentally. This can give you a much-needed break from your normal day-to-day activities and take your mind off your stress factors. This can be as simple as taking an online course on a subject you are interested in. Throughout my career, I have been keenly interested in how our mind works and what contributes to better performance. At one point, I took an online course related to increasing productivity, which is where I first learned about the state of mind called "flow." This course put words and structure to something I had been experiencing, but didn't know how to articulate. I summarize the key points about his state of mind in Chapter 9 on using flow in the workplace.

Learning a new skill, either related to your work or not, may be challenging at first, but if you stick with it, you will gain new confidence and a sense of achievement. Joining a group activity like a chess club, cooking class, or engaging in a new sport with others can give you a boost socially as well. [11]

Beyond the benefits of stress relief, continual learning is crucial for maintaining a healthy brain. Dopamine is released when you learn something new, and this makes learning exciting and enjoyable. Also, the brain changes physically and grows stronger when learning new and challenging things. This is referred to as brain plasticity, where new connections between neurons are made and existing ones are strengthened. Learning and memory are closely linked, and as we learn new things, our memory function and recall are improved. [12]

Spend Time with the People You Love

Spending time with people we care about improves our health in so many ways. As social creatures, we draw important psychological strength from being with others we trust and who care for us. We can unburden our frustrations and challenges, and maybe get good advice in return. The emotional support we receive from our loved ones brings balance and an improved perspective on our experiences. [13]

Making Habits Work For You

Habits are a manifestation of how the subconscious mind works. Remember that the subconscious is all about efficiently handling the vast majority of your daily activities. It is likely that you have a standard morning routine that you move through without much conscious thought. While you shower, shave, comb your hair, brush your teeth, and dress, you are probably thinking about what the day holds for you, not what you are actually doing.

Habits are very powerful and form over time based on repetitive behavior that becomes programmed into the subconscious mind. If you are working on forming a new, good habit, stick with it for at least several weeks, and it will be established. Most habits are formed without conscious thought and become self-reinforcing. Many are helpful and add to the efficiency of our lives. However, bad habits can hold us back, reduce our productivity, or negatively impact our health. Anyone who has made a New Year's resolution to either start a new positive behavior or stop a negative one knows that it takes more than just a decision and some willpower to make that change stick.

Charles Duhigg, in his book *The Power of Habit*, elucidated the science behind how habits are formed and what is happening in the brain that makes them so powerful. [14] Habits are part of a cycle that begins with a cue or trigger that initiates the behavior (habit), which is then followed by a reward. This dynamic applies to both good and bad habits. Many people fail to break an existing negative habit because they focus only on the behavior they want to change. To effectively build new habits or change old ones, it is necessary to understand and focus on the trigger involved as well as the reward that results. Triggers usually fall into different categories, such as time of day, location, a preceding event, a feeling or emotion, and the influence of other people. [15]

For example, we typically eat meals at roughly the same time of day every day. Eating is mostly habitual. Location can be where you are or where something else is. If a plate of cookies is sitting on the counter, you may

pick one up and eat it without much thought, just because it is there in front of you. Also, habits are easy to do, which is helpful to understand and keep in mind when trying to establish good habits and break negative ones. If you want to break a negative habit, make it inconvenient or harder to do. I call this adding friction, which slows down or prevents the behavior. To establish a new positive behavior, make it easy or seamless to do. So, hide the cookies in a cookie jar. Don't allow junk food in the house. If you want to exercise as your first activity in the morning, go to bed earlier so you are fully rested and wear your gym shorts to bed. If your productivity is being hindered by social media, turn off all notifications on your phone and computer.

The rewards that solidify various habits can be physical, mental, or emotional. The sense of well-being and stress relief after a good workout will be the driver to repeat this healthy behavior. Checking your Facebook account many times a day to see how many likes you have gives a dopamine hit. There are many negative habits that have instant rewards, such as overeating, overdrinking, and staying up late to play video games instead of getting sufficient sleep. Ultimately, these do not support a healthy, productive, and successful life. Occasionally indulging in these negative behaviors is one thing; it is quite another if they become habitual.

Becoming more self-disciplined is important, but not sufficient. The key is to make a decision to change and clearly define why you want to make this change. Then, write down a plan of action where you identify the trigger for the behavior you want to change, as well as the reward. Build friction into your environment to short-circuit the behavior you want to stop doing. Identify a new behavior you would like to establish that may have a similar or even more powerful reward, and make it as easy as possible to do. You do not have to be at the mercy of unconscious habits. You can be in control.

Being deliberate about how we take care of ourselves can make a lasting difference in our ability to function at peak performance. Beyond what I have discussed in this chapter are many other ways you can practice self-care. Some of these approaches—such as exercising the mind and the

body—intertwine, as both can relieve stress. Making time to reflect and think deeply or keeping a journal can help to keep a balanced perspective. It is an individual choice, but the necessity is to do something, no matter how small, to care for yourself.

Success Factor Summary

Self-care is an essential component of a healthy and productive life. By understanding and integrating practices that enhance mental, physical, and emotional health, individuals can perform at their peak and lead a more fulfilling life.

Start by identifying one area of your life where self-care is lacking or could be improved. Set a specific, achievable goal related to this area, such as committing to 30 minutes of exercise daily or getting at least seven hours of sleep each night. Create a plan to incorporate it into your routine and use habit-building strategies to make this change sustainable.

Key Takeaways from Chapter 4: The Importance of Self-Care

1. **Holistic Self-Care**: Self-care encompasses various aspects, including mental health, physical fitness, and emotional well-being. It is important to find a balance that serves your overall needs. Despite differing priorities, everyone needs to focus on basic self-care practices like sufficient sleep, exercise, and stress management to avoid burnout and maintain consistent performance.
2. **Prioritizing Sleep**: Sufficient sleep is critical for both physical and cognitive health. It aids in tissue repair, immune function, memory consolidation, and clearing toxins from the brain. Lack of sleep can impair decision-making, problem-solving, and reaction times.
3. **Exercise and Hydration**: Regular exercise—even in the form of simple activities like walking—contributes significantly to physical health and stress relief. Staying hydrated is equally essential, as water supports the operation of all major organs.

4. **Managing Stress**: While short-term stress can enhance focus and energy, chronic stress can lead to burnout. Recognizing early signs of burnout and adopting stress management techniques, such as deep breathing, exercise, and seeking social support, can help maintain balance and prevent long-term negative effects.

5. **Building Positive Habits**: Habits are powerful and can be formed or changed by understanding triggers and rewards. Making desirable habits easy to adopt and undesirable ones difficult to maintain can lead to significant improvements in self-care and productivity.

PART TWO

THE SUCCESS GUIDE FOR THE INDIVIDUAL

Introduction

Every individual desires to be successful. We go to work in the morning to do a good job, to be productive, and to provide value for the company we work for. However, the reality is that we all have good days and bad days. Unfortunately, we don't often think about what makes the difference. If a day at work didn't go well or was not very productive, what was the reason? Was it a day full of distractions, interruptions, conflicts with colleagues, or just spent in mindless administrative activities?

In Part Two, I will cover a number of principles that can assist anyone in being more productive and more successful, as well as forging a greater connection between what you love to do and what you need to do to make a living. As mentioned in Part One, we are what we think. More specifically, our lives are shaped by the way we think, what we think of ourselves, and how we interact with what is happening around us.

Of first importance is what we believe about our own potential. If we place limits on ourselves, they will become the limits of our success. Conversely, if we embrace change as a positive and believe we can learn and grow our abilities as well as our intellect, the door opens to enormous potential for

success. Then, we need to be thoughtful about how we interact with others as well as how we manage our environment. Employing the elements of emotional intelligence provides a foundation for positive interactions with others, even in tense situations, while managing our environment provides the framework for superior performance. Your ultimate success is not predetermined or limited; it is yours to pursue and achieve.

CHAPTER 5

THE VALUE OF A GROWTH MINDSET

"Whether you think you can or think you can't, you're right."

Henry Ford

I once took on the responsibility of leading a large organization, and in that process, inherited the administrative assistant from my predecessor. Apparently, she served her previous boss well, as evidenced by the many years she held her role. However, I had a very different set of expectations, which I explained in detail, but which she could not meet. During interviews for her replacement, I was careful to ask about adaptability and willingness to learn. I didn't know it then, but I was searching for someone with a growth mindset.

The concept of a growth mindset was developed by Carol Dweck over decades of working with children in academic settings and studying how different students dealt with setbacks and challenges while learning something new. Approaching challenges as learning opportunities was dubbed having a growth mindset, while giving up on trying to solve an unfamiliar problem was associated with those with a fixed mindset. [1]

While these descriptions are likely a significant oversimplification of Dweck's decades of study, they illustrate several important aspects of the workplace setting where novel problems, setbacks, and challenges are common. Those most likely to forge ahead in the workplace embrace

problems and challenges as part of their regular work and go about seeking solutions and building new skills in the process. When faced with setbacks or disappointments, they are not overly discouraged; instead, they look to see what they can learn from that experience.

A mindset is a person's deeply held beliefs that shape how they approach life and how they perceive the world around them. It also determines how they view risks and opportunities, playing a significant role in their relationship with success and failure. [2] The core difference between a growth mindset and a fixed mindset is the belief that we can improve not only our skills, but also our intelligence and creativity through effort and practice. A growth mindset is more than just being positive. It means taking feedback, learning from experience, and developing strategies to address problems and issues more effectively.

Studies on brain development associated with learning and building skills conclusively demonstrate that structural changes occur within the brain as a result of learning. The first time you face a new issue, topic, or problem, it can be easily overwhelming. I have had that experience where the flood of new information was more than I could process. In response, I would shut down my computer and go outside for a walk. Then, I would come back and dig into the topic. The more I learned, the easier it became to mentally organize the information I needed.

Learning itself rewires your brain for greater efficiency and faster information processing.

Your mental capacity continues to expand based on the type and complexity of your experience. Challenges and setbacks can be the springboard for launching our mental capacity to new levels, as they require us to execute new strategies, ask good questions, and seek solutions. [3]

Characteristics of Mindsets

Having a growth or fixed mindset changes one's approach to success and failure since both are built on different sets of beliefs. Someone with a fixed mindset believes that success and achievement are only confirmations of their

existing abilities. They perceive potential failure as a threat to be protected against, and are therefore risk-averse and tend to avoid challenges. A person with a fixed mindset is possessed by a fear of failure, fear of looking foolish, and fear of being wrong. As a result, they miss out on opportunities to stretch their abilities and learn, especially by making mistakes. They generally do not appreciate negative feedback, even if it is constructive.

On the other hand, someone with a growth mindset is process-oriented—they recognize and value the journey toward achieving their goals. They are internally motivated in their work and have less concern for the approval of others. They do not see failure as a personal shortcoming but rather as an opportunity to learn from their mistakes and expand their knowledge. [4] As a result, they are curious and willing to try new things. They are open to constructive feedback and seek it out.

The following table summarizes the differences between these two mindsets:

	Growth Mindset	Fixed Mindset
Intelligence and Abilities	Intelligence and abilities can be developed and improved	Intelligence and abilities are fixed and cannot be significantly changed
Challenges	Challenges are opportunities for growth and learning	Challenges are to be avoided, especially those that might lead to failure
Setbacks	Setbacks are temporary and serve as learning experiences	Setbacks are a reflection of inherent limitations
Feedback	Feedback is a valuable tool for improvement and learning	Feedback is a negative judgment of their abilities
Effort	Views effort as a path to mastery and achievement	Views effort as a sign of weakness or inadequacy
Success of Others	Inspired by the success of others and sees them as a role model	May feel threatened or intimidated by the success of others
Motivation	Driven by the desire to learn and grow, not just by external rewards	Driven by a need to prove intelligence and avoid failure
Learning	Embraces lifelong learning and views it as an ongoing process	May believe that learning is complete and that there is no need to continue learning

Of course, these descriptions are a bit idealized. The same person can and usually does have both fixed and growth mindsets—depending on the

subject matter. It is appropriate, for example, to have a fixed mindset about the nature of gravity! However, there may be specific areas where a person has a fear-based point of view, such as public speaking, but in other areas, they are very open to new and challenging experiences.

Cultivating a Growth Mindset

Developing and enhancing a growth mindset is desirable as it enables you to step out of your comfort zone, face new challenges, and learn from those experiences. A couple of related issues determining your mindset are the locus of control (LOC) and explanatory style.

A person's locus of control is somewhere on the continuum between an internal LOC and an external LOC. Those with an internal LOC believe they are responsible for their own success or failure, and outcomes depend on their actions. By contrast, someone with an external LOC believes that forces outside their control, such as luck or higher authorities, determine outcomes in their life. [5] Most people are somewhere on the continuum between these extremes, which may differ depending on the specific circumstances, such as at work or home. Even if a person is usually on the internal control side of the continuum, there can be moments of feeling overwhelmed and out of control under high stress. This is usually driven by strong emotions that come into play due to adverse circumstances, such as unexpected loss or failure. Regaining a sense of internal control can be achieved by talking about what is stressing you with a trusted colleague or journaling to write your feelings down on paper. This helps to calm the emotional brain and restore some rational thinking for problem-solving.

An exercise suggested by Shawn Achor in his book, *The Happiness Advantage* [6, p.123], is to write out all the stresses, challenges, and goals related to the situation at hand, and then divide them into the things you can control and those you cannot control. This will help clarify the stress factors that are outside your control versus those you can do something about. While it may be difficult to let go of those things outside your control, it is not logical to continue to be stressed over them. Therefore, you can focus more solidly on what is in your control. Making progress on

what you can do, no matter how small, will also help you regain a sense of control.

A person's explanatory style is how they choose to interpret or explain events in their life. This orientation can be either optimistic or pessimistic. A person with an optimistic explanatory style will interpret adversity as being local or isolated and only a temporary setback. A person with a pessimistic style will believe an adverse event is evidence of a more general failure on their part that could be permanent. [6, p.137]

You can enhance a growth mindset over time with work and persistence, as there are concrete methods you can pursue. The first step would be to evaluate your current thought patterns concerning success and failure in several areas of your life. This is an exercise in self-awareness, and you should pay special attention to any areas you try to avoid or are tempted to quit when faced with difficulty. Ask yourself the following questions:

- How afraid am I of failing?
- What is the worst thing that could happen if I fail?
- How worried am I about looking foolish?
- Do I believe that I can learn from the mistakes I make?
- Do I believe that my success depends on how hard I work?
- Do I believe that I can control outcomes in my life?
- Can I recover from making a wrong decision?

The answers to these questions will give you insight into your current mindset and areas where you may have the opportunity to make changes.

Seek Feedback: Be open to feedback, and when it comes, take it seriously. If you want to find out what you are really like in the eyes of others, request feedback from six people you can trust and have an intermediary capture the responses and remove the names. Examples of specific questions you could ask include:

- Everybody makes mistakes. How do you think I handled a situation when it was obvious I made a mistake?
- Do you believe that I am open to constructive criticism?

- Do you believe I make excuses for setbacks, or do I demonstrate accountability in my work?
- Am I open to hearing the opinions of others, even when I disagree with them?
- Do you think I have ever falsely taken credit for another person's work?

These example questions may or may not be appropriate for anyone's specific situation. However, the more specific you can make relevant questions, the better. Most importantly, what you do with the feedback after you receive it will speak volumes to your colleagues and direct reports. Beware! It is better not to ask for feedback than to ignore it once you receive it.

Embrace Failure as an Opportunity to Learn: When adversity or failure occurs, take the time to process what happened and why. A common practice in the military is to perform an "after-action" analysis, which details what went well and what did not. Another name for this, often used in business settings, is a "post-mortem," which is a technique for improving your thinking, strategy, and action, by analyzing what happened versus the intended outcome. It also helps identify process improvements, best practices, and what to do differently in the future. This is a core element of having a growth mindset and can be applied to any situation that does not go as planned, from a poor presentation to a failure in a manufacturing plant. [7]

Example of Post-Mortem Analysis: I once made a presentation to the CEO of the company I was working for and proposed a project to build a new production line that would replace the existing one that was becoming obsolete. I thought I had a substantial basis for this $10 million investment to ensure that the plant could continue to support the company's objectives. To say that the presentation went poorly would be an understatement, as the CEO nearly threw me out of the conference room. The post-mortem analysis helped me identify that I had developed the proposal based on a set of assumptions that made sense to me, but I failed to consider the CEO's perspective on the future of that product line. I developed the proposal

from a siloed point of view. What was worse was that my proposal included no options or analysis of alternatives to consider. What I learned from that experience and the post-mortem analysis provided long-term value as I never approached a senior executive again without first considering what might be at the top of their mind.

An example from the pharmaceutical industry for learning from mistakes and errors is the Corrective Action, Preventive Action (CAPA) program, which is part of the overall quality assurance requirements of the FDA. Any failure to follow the required procedures in manufacturing pharmaceuticals is captured as a "deviation." When a deviation is identified, a formal investigation into the cause is pursued, and it is expected to identify how to correct the current situation and prevent it from reoccurring. This has the long-term effect of continuously improving the operation. This program could identify Standard Operating Procedures (SOPs) that are confusing or poorly written and need to be improved or streamlined. It may also identify weaknesses in training programs that need to be addressed.

Everyone makes mistakes occasionally, but it is critical to bring mistakes to the attention of management and the quality organization for resolution when they occur. These situations need to be seen as an opportunity to improve the overall operation. This is the benefit of reinforcing a growth mindset for an entire organization so that it can learn from past errors and mistakes.

Pursue Challenges: We are all risk-averse to one degree or another as part of our survival instinct. For example, it is not a bad idea to avoid the risk of driving a car at 100 miles per hour! We make many choices on a day-to-day basis and often do not realize how much risk avoidance influences our decisions. A key part of promoting or enhancing a growth mindset is getting out of your comfort zone and taking on a new challenge. This could be something as simple as trying a new hobby or speaking in front of an audience.

In the work environment, we may decline a new assignment because we feel we do not have the required skills. While that be true, the deeper issue could be that we are afraid to fail. Every new challenge brings some

elements of risk as part of the package. It is better to make logical decisions and evaluate real risks and how to manage them. A challenge you see as "too risky" can be reframed as an opportunity to learn new skills.

Leading a project or a team for the first time is a crucial point in the development of any up-and-coming leader. While this can be intimidating, it is a significant growth opportunity that should not be missed. The new leader also needs to recognize that the members of the project or team are deep resources and should not shy away from seeking their input and help. Get curious about your team members, ask them questions, and find out what they know and their areas of expertise.

Ask Good Questions: There is no better way to learn than by asking smart people good questions. This requires curiosity and a willingness to be open to the ideas and viewpoints of others.

People are often reluctant to ask questions because they fear it might make them look dumb. But, in order to grow, you must be willing to admit when you do not know something and seek help and input from others. People are usually flattered when they are asked good questions out of curiosity and a desire to understand and learn. If someone says something you do not understand, ask them to explain what they mean. This helps to ensure adequate understanding by everyone present—especially those who have the same questions but are too intimidated to ask. Also, asking a question about something you believe you already know the answer to can be helpful. First, you might be surprised and find out that you didn't have the best answer, or maybe not the complete answer. Second, even if you know the correct answer, you gain insight into what other people know and how they think. Regardless, if asked politely and curiously, other people will usually respond favorably and would be happy to explain their thinking.

Even if you do ask a question about something that, in retrospect, is obvious, do not let it bother you or hinder your quest to learn. Everyone makes a dumb comment at some point; it is part of being human. I once walked through a newly built parking structure with a senior executive who wanted to see the completed project. He commented on why (in his mind) we wasted the money to install fire sprinklers, as the structure was

all made of concrete. He asked, "What is there to burn?" I politely pointed out that when the parking structure is in use, sometimes a car could leak gasoline and catch on fire. This senior executive was one of the smartest people I ever worked with; however, his expertise was in finance, not building codes or fire safety.

Success Factor Summary

Developing a growth mindset is a transformative journey that empowers individuals to face challenges head-on and view failures as stepping stones on the path to success. By understanding the interplay between mindset, locus of control, and the importance of feedback, individuals can cultivate continuous learning and improvement. Embracing curiosity and asking thoughtful questions not only enhances personal growth but also enriches team dynamics, leading to innovative solutions and collaborative success.

Take some time to evaluate your current mindset in various aspects of your life. Ask yourself the reflective questions mentioned in the chapter to identify areas where you may have a fixed mindset. Commit to embracing challenges and seeking feedback over the next month, and document your experiences and learnings.

Key Takeaways from Chapter 5: The Value of a Growth Mindset

1. **Understanding Mindsets**: The difference between a growth mindset and a fixed mindset lies in how individuals perceive challenges and setbacks. Those with a growth mindset view challenges as opportunities for learning and development, while those with a fixed mindset see them as threats.
2. **Embrace Failure**: Individuals with a growth mindset view failure as a chance to learn rather than as a reflection of their abilities. Analyzing failures through techniques such as post-mortem reviews can facilitate continuous improvement.

3. **Locus of Control**: A person's locus of control can significantly influence their mindset. Those with an internal locus of control believe they can influence outcomes through their actions, while those with an external locus of control feel that outcomes are determined by external factors. Recognizing and shifting toward an internal locus can foster a growth mindset.

4. **Seeking Feedback**: Actively seeking constructive feedback can help individuals identify areas for improvement. This practice promotes self-awareness and encourages a growth mindset by allowing individuals to learn from others' perspectives.

CHAPTER 6

DISTRACTIONS IN OUR MODERN AGE

"You will never reach your destination if you stop
and throw stones at every dog that barks."

Winston Churchill

In the busy challenges of leading a large organization, dealing with hundreds of emails a day, and constant notifications, I missed one reminder about an important meeting that I was supposed to lead! I actually walked past the conference room where the meeting was going on about an hour after it started without me. I was too embarrassed to walk in so late that I just walked away.

Today's world is chock-full of distractions to the extent that they have become the norm for most people. Hence, they do not recognize the impact on their ability to concentrate and get real work done or even listen when others are speaking. At the end of the day, we may feel exhausted, but in retrospect, we may not be able to say what, if anything, we accomplished. We have become victims of an environment inundated with a new level of internal and external distractions. See if you resonate with the following description of a typical day in the life of an office "worker":

"So, you arrive at work, sit at your computer, and do not have a real plan for the day. You first check the latest news feeds to

see what is happening in the world. After clicking on a few news stories, you check out a website or two. Then, you check your email and respond to a few that seem important. You leave your email open. Now that you have cleared the top of your mental list, you get down to work on that project you started yesterday but didn't get too far on. After 30 minutes, it is time for a coffee break. While you are getting your coffee, you meet a colleague that you have been meaning to call. You have a 30-minute conversation and then head back to your office. You sit down at your computer and notice that five new emails have arrived. You read them and respond to a couple. Now, you are back to work on that project. After ten minutes, you are interrupted by your boss, who has a question about the project you are working on, and he wants to know how it is going. You reply that 'it is going well.' Then the boss invites you to go to lunch with him. As you get up to go, you glance at your computer and notice five notifications that just popped up. You decide that you will look at them after lunch as the boss is waiting for you."

The definition of "distraction" is to draw your attention away from your primary focus. Whether you know it or not, there is a war going on to capture your attention and sell it to the highest bidder. You end up paying the price not only by the time lost in unfocused scrolling, but also the time it takes to get refocused on your real work.

The maturing of social media and digital communication over the last 15 years created a new and pervasive source of near-constant distractions. Text messaging first became popular in 2000, but it had limited capabilities. At that time, message volumes were averaging around 300 million texts per day in the U.S., whereas today, we send approximately 25 billion text messages every day in the U.S. [1]

From the late 1990s and through the first decade of the 2000s, there was an explosive development of social media platforms and digital communications systems, which were significantly influenced by various

operating systems that enabled mobile connectivity and application development.

- **Java** was introduced in the late 1990s and played a crucial role in developing mobile applications through its platform-independent capabilities. It allowed developers to create applications that could run on various devices, including early mobile phones. This set the stage for early social media interactions and text-based services.
- **The Symbian Operating System** was one of the first operating systems designed specifically for smartphones. During the early 2000s, it powered many devices from manufacturers like Nokia and played a significant role in the development of mobile technology.

In the midst of these operating systems developments, several key social media platforms emerged along with advanced smartphone technology.

- **Facebook** was launched in 2004 and dramatically changed how people connect and interact online. Initially designed for college students, it quickly expanded to the general public, becoming the largest social networking site globally.
- **YouTube** was started in 2005 and quickly became the go-to platform for video sharing. It allowed anyone with a camera to upload video content from their own computer.
- **Twitter** was founded in 2006 and introduced a new form of microblogging that emphasized brevity and immediacy. The 140-character limit encouraged quick, succinct messaging, making Twitter an ideal platform for real-time news updates and conversations.
- **The iPhone launched in 2007 (the turning point)**: The iPhone revolutionized mobile communication with its touchscreen, intuitive interface, and powerful web browser. This innovation allowed users easy access to social media platforms. Before the iPhone, mobile phones were primarily used for calls and basic texting, while accessing the internet and using applications required a desktop or laptop.

- **The Android** phone was released in 2008 and quickly transformed the mobile landscape with its open-source model, encouraging rapid development of applications. This supported the proliferation of social media apps.
- **WhatsApp** was founded in 2009 and quickly transformed how people communicated through text messaging by introducing a simple, user-friendly platform for instant messaging with end-to-end encryption.
- **Instagram** was created in 2010 as a photo-sharing platform and quickly became a cultural phenomenon, allowing users to share images and videos with filters and editing tools. This focus on aesthetics transformed social media into a platform for visual storytelling.

These independent platforms found incredible synergy when Apple launched the iPhone in 2007, which resulted in massive adoption as people now had the "internet in their pocket." [2] This was the inflection point where you no longer needed to go and sit at a computer to send an email or search the internet. This was embraced as an exciting leap forward for instant communication and convenience. The combination of these operating systems and the rise of social media platforms led to a new era of connectivity. Progressively, smartphones became more sophisticated and provided users with seamless access to social networks. This shift not only changed how people communicated but also how they consumed information and interacted with the world around them. We were now connected to the internet 24/7.

As social media platforms gained traction, they became more than just communication tools; they turned into pervasive sources of entertainment and distraction. The business models of these platforms began to revolve around competition for user attention, which became more and more intense.

In early 2009, Facebook introduced the "Like button" as an element to build engagement with its users. Within a couple of years, it was clear that this simple device would revolutionize the business environment of all social

media. [3] Other platforms quickly adopted this strategy, allowing them to track user preferences and behaviors, which now drives push notifications and advertising. Finally, the introduction of infinite scrolling kept users engaged by continuously loading content without requiring them to click through pages—the age of digital distractions was now in full force.

As disturbing as unwanted interruptions are, the more insidious factor is the addictive nature of social media. Social media addiction has been studied extensively in the last five years, especially in the context of its negative effects on young people. Behavioral studies have shown that excessive social media use can hamper the neurological development of teenagers who are at a critical stage of brain development. The addictive nature of social media stems from the dopamine hit the user receives, which is associated with likes, follows, and comments on posts. These dopamine hits affect the pleasure centers of the brain, which drive the user to seek that reward repeatedly. [4] Data collected by Facebook shows that the average millennial spends over an hour and a half every day just checking their phone. [5]

As human beings, we have a finite amount of attention we can allocate to tasks, work, interests, and others. The best use of our attention would be to focus on the highest and best elements in our lives: family, friends, faith, worthwhile causes, work, and areas of interest. Even if we are not addicted to social media, we must have a game plan to manage the constant barrage of digital interruptions if we are to recapture our ability to focus and accomplish deep, uninterrupted work.

The Impact of Distractions on Performance

Numerous articles and studies on the impact of distractions have created a somewhat confusing landscape on the topic. It seems straightforward that if you are concentrating on a task at work and are interrupted by a colleague, an email, a notification, or a text message, it would hurt your ability to focus and get your work done. It becomes more complicated when we define an interruption as something that requires our attention

(a call from the boss) versus a distraction that we can simply ignore (a push notification). Some studies surprisingly concluded that an occasional distraction could work like a mini break and give a person the chance to mentally regroup with better focus on returning to their primary task. [6] However, studies by Gloria Mark, a professor in the Department of Informatics at the University of California, Irvine, conclude that it takes over 20 minutes for a person to return to their previous level of focus after an interruption. [7]

To this point, we have been reviewing primarily external distractions. The other big contributor to the problem of distractions is us. Our minds are always churning with thoughts, causing us to easily lose focus on the task at hand. In the middle of an important task, we suddenly remember an email that needed a reply or a voice message from a friend that we should return. Additionally, as we are working, the phone next to us lights up with a notification. How we handle these regular distractions will determine how productive we will be and how much real work we can get done in a day.

How to Reduce Distractions and Strengthen Your Focus

Deliberate actions must be taken to defend yourself from the many external distractions that come your way. Turning off the notifications on your phone and computer is a great first step. You can virtually eliminate push notifications with various settings on your devices. Also, building disciplined habits for how often and when you check your email will help you avoid descending into a rabbit hole where one email leads to another, and before you know it, you have spent 30 minutes or more on minor or irrelevant issues. Below are some additional tips on how to protect yourself from external distractions.

- Manage your schedule by blocking out time to focus on important tasks
- Protect this precious time by building "Do Not Disturb" notifications

- Schedule breaks and downtime into your day for recharging, even if only for ten minutes
- Schedule time for a walk outside or exercise
- Build in some flex time to accommodate the unexpected
- Be deliberate and detailed about how you plan to spend the day

Learning to Listen

Although we live in the age of ever-increasing digital communication, we seem to have lost the art of making time to listen. In our busy world, we are increasingly impatient to voice our own opinions and ideas. As a leader, consider that you are essentially "paying your people" for their expertise and insight. Inviting others to give you their ideas and input is a sign of respect to them. If you are the first to talk and you talk a lot, you shortchange yourself by intimidating your people from speaking up and giving their best. A good rule to follow is to listen first and be the last to talk.

Listening skills are critically important to every relationship, whether in personal, social, or business settings. The more important the relationship, the more important it is to be a good listener. Listening is the most important skill in communication.

I had the assignment to lead an operation on the island of Puerto Rico for a couple of years. This was a great opportunity to learn how to successfully navigate a very different culture, one that was culturally hierarchical. It quickly became apparent that, as the leader of the organization, when I spoke first, I had 100 percent agreement with all my ideas. To some, this may sound like a good thing, but I realized I was losing out on the good ideas and creative talent that I was paying for when I spoke first. I decided that I would speak last in order to hear from every member of my leadership team, to get their ideas as well as their reactions to each other, before I weighed in.

At first, it was very uncomfortable for everyone in the room. Then I explained that I valued their opinions and that, after all, they were the leaders of the

facility, each with their own expertise as heads of their own departments. I didn't expect that they would all agree with each other, but that everyone should respect each other's ideas and opinions. I also made it clear that I was committed to speaking last. I clarified my expectations that they would each contribute their best to address our challenges and that, together, we would find the right path forward.

I didn't realize it at the time, but I was forcing dialogue to occur, which they were not experienced in practicing. This approach produced a lot of excellent interaction and sharing of ideas. As the leader of this team, I took on a facilitation responsibility. I made sure that everyone had an opportunity to give their input. This included managing the over-participators (extroverts) as well as the under-participators (introverts). Very often, the quiet members of the team had the most value to contribute. As natural thinkers and analyzers, they often have unique insights to share if they are asked, but they need to be invited to speak.

Listening is a skill that can be developed. Like any skill that is deliberately practiced over time, it can get better and better. Look for opportunities to practice this skill in your everyday life. You may find unexpected opportunities if you are present to the people around you. You may have a lonely neighbor, a troubled co-worker, or someone in your social circle who needs a listening ear. These are opportunities to show respect, demonstrate empathy, and build your listening skills. In every case, active listening is a deliberate focus on the other person without thinking about what you want to say in response.

- Listen to what is being said to understand.
- Listen to the underlying emotions, concerns, and needs that are being expressed.
- Listen to the human being behind the words.
- Listen to hear what is not being said as well.

There will likely be an opportunity to ask a good question at some point, but listen first.

A good question we can ask ourselves is, "Why is it so hard to listen today?" There are a number of factors that combine to create an increasingly demanding and intense corporate environment for most companies. This is especially true for highly regulated industries. Of course, there are normal business imperatives to meet production plans, corporate goals, and deadlines. We need to stay ahead of the competition by being creative and pursuing innovation. These all result in time pressures that have been around for a long time.

However, in recent years, overall productivity has also been significantly affected by the noise created through social media and digital communication. This new phenomenon seems to invade every waking hour with an unprecedented level of distractions and interruptions. This is true during working hours as well as in your personal time. The development of the personal computer was first thought to be a time-saving development that was quickly recognized as more likely a time-sink. Today, instant communication through emails, text messages, and notifications has become a serious time-sink that directly affects productivity and exacerbates our sense of being rushed and not having enough time to get things done.

It takes time to listen. If we are feeling rushed to meet the demands of the day and are constantly distracted by the technology that surrounds us, we will struggle to take the time to really listen. However, deliberately making time to listen can result in increased efficiency and ultimately save time by avoiding miscommunications, unnecessary conflicts, and bruised relationships. Building collaboration and alignment within your organization depends largely on your people getting to know and understand each other. This comes by listening.

Tips for improving your listening skills:

- Completely focus on what is being said.
- Absorb what is being said without judgment or bias.
- Consciously shut out background sounds, activities, and distractions.

- Pay attention to nonverbal signs, such as body language and tone.
- Be sensitive to word emphasis, sound level, and speed to sense what the speaker is feeling.
- Listen to understand.
- Be patient with the speaker.

The Myth of Multitasking

Lastly, I want to address the idea that multitasking is an efficient way to work. However, this is not supported based on the way our brains are wired. Multitasking is really task-switching, where you shift your focus from one activity to another and back again. This creates internal distractions and fragments your ability to focus effectively on either task. This is especially true if one or both tasks are complex. Our brains are designed to focus on one thing at a time. The cognitive load that develops from task switching includes the decision to switch tasks (executive control) and the need to re-orient (rule activation) from one task to the other. [8] In the end, not only is this less efficient, but it also can result in significant increases in error rates. This is why texting while driving is illegal in many locations. Studies have shown that interruptions, even as short as 2.8 seconds, double the error rates in a task requiring attention to detail, and a 4.4-second-long interruption is enough to triple the errors! [9]

Success Factor Summary

The modern age is filled with distractions that can impede our ability to focus and be productive. With the constant barrage of notifications, emails, and social media interactions, it's crucial to recognize how these interruptions affect our work productivity and relationships. By prioritizing our attention, practicing active listening, and rejecting the myth of multitasking, we can reclaim our concentration, enhance our productivity, and foster deeper connections with those around us.

Take a week to track your daily activities and distractions. Identify patterns where you lose focus, and experiment with strategies to minimize these

distractions, such as turning off notifications or setting dedicated work times. At the end of the week, assess your productivity and adjust your plans accordingly.

Key Takeaways from Chapter 6: Distractions in our Modern Age

1. **Nature of Distractions**: Distractions have become ubiquitous in our modern lives, largely due to the proliferation of digital communication and social media. These distractions pull our attention away from primary tasks, impacting productivity and leading to feelings of exhaustion without meaningful accomplishments.

2. **Managing Distractions**: To combat distractions, individuals can implement strategies such as turning off notifications, scheduling focused work periods, and taking regular breaks. Deliberate planning and prioritizing tasks can greatly enhance productivity.

3. **Impact on Focus**: Research indicates that even minor interruptions can significantly derail our concentration. It can take over 20 minutes to regain focus after being interrupted, demonstrating the cost of distractions on productivity.

4. **Listening Skills**: Active listening is essential in both personal and professional relationships. Listening effectively can enhance communication, foster collaboration, and lead to better outcomes within teams.

5. **The Fallacy of Multitasking**: Multitasking is often perceived as a productivity booster, but it is actually a form of task-switching that divides our attention and increases errors. Focusing on one task at a time leads to better performance and efficiency.

CHAPTER 7

MANAGING AND RESOLVING CONFLICTS

*"Peace is not absence of conflict; it is the ability
to handle conflict by peaceful means."*

Ronald Reagan

There are many reasons that conflicts, disagreements, and quarrels are part of our regular experience. During my career, I noticed three main categories of issues that foster conflict in the workplace, including different people's styles, conflicting or divergent goals, and misunderstandings. Remember that people come to work to do a good job, satisfy their boss, and build their careers in order to earn a living. So, when disagreements and conflicts erupt, it can be disorienting and upsetting. To alleviate such conditions, it helps to understand what is going on below the surface.

Roots of Conflict

Different Styles: People have distinct personalities and styles when interacting with others, which can be confusing or off-putting to some. Some people can be very gregarious to the point of being aggressive, while others are reserved, quiet, or even cautious in their approach. The reserved person may feel that the gregarious individual is obnoxious and begin resisting their ideas and suggestions. The gregarious person may think the reserved individual is disengaged, uninformed, or incompetent

and so writes them off as useless. An example situation would be a group working together to solve an important problem. Ideas are put forward, then discussed, and a solution seems to emerge. At that point, one of the quieter members of the group challenges that solution with a good question about how it will actually work. Instead of respecting a good question that deserves a thoughtful answer, one of the more aggressive members of the group attempts to degenerate the question as well as the questioner.

People who need to work together must make the time to get to know each other and come to understand and appreciate the different styles of thinking, problem-solving, and interacting that their peers have. There is great value in the diversity of thought represented in a team of people with different backgrounds, skills, and experiences working together. These differences can be recognized as a strength, not a source of conflict.

A wide variety of tools can be used to identify different personality types and the interpersonal preferences of each person. It is also essential to understand that these tests (Myers-Briggs, DISC, Enneagram, Big Five Assessment, etc.) all give helpful information but are not definitive. They generally cannot account for learning through experience, the development of coping mechanisms, or learned behaviors. People certainly have specific traits and preferences, but they are much more complicated and adaptable over time.

Getting to know each other through daily interactions, both at work and outside the workplace, is very valuable for forging strong working relationships. When properly organized and facilitated effectively, team-building experiences can be very helpful. This is especially true if conflicts have inhibited the work effort. Identifying the origin of a conflict and discussing solutions without the pressure of being in the workplace can make all the difference as part of an off-site team building.

Divergent Goals: In the workplace, people have goals and objectives they must accomplish as part of their work responsibilities. This is their job, which represents their livelihood. Anything that inhibits their progress can be emotionally perceived as a potential threat. This emotional reaction is

not easily recognized or understood when it occurs. As a result, people can react without thinking when their plans are hindered or thwarted by one of their colleagues. Their frustration can quickly lead to an angry reaction to an innocent or unintended interruption.

Another scenario ripe for conflict is having misaligned or conflicting goals. This happens more often between departments or between different teams, but can even be an issue within a group. A typical example from the pharmaceutical manufacturing environment is the natural tension between the manufacturing department responsible for meeting the production goals of the site and the quality organization charged with ensuring that the product produced meets stringent quality standards. The business's success depends on the ability to sell the product that is produced. It cannot be sold if it is not made, just as it cannot be sold if it does not meet the quality requirements. Both manufacturing and quality will always agree on this principle. However, the interpretation of exactly what meets the quality expectations is often more complex. The challenge for any organization is to write a detailed specification that clearly describes the quality parameters necessary for a saleable product, and that everyone can agree on.

Highly regulated industries often have an additional challenge with the required documentation of how the product was made, not just the test results on the final product. This is usually referred to as compliance with specific government regulations, especially those related to safety, environmental protection, and product quality. The problem with compliance questions is "How good is good enough?" It is not always clear how a regulation applies to specific circumstances. Unfortunately, the answer lies in how the regulating agency will interpret the documentation when they come to inspect the records. This is a subjective issue, and the quality organization may have a very different view versus the production organization. [1]

In Part Five, I discuss at length the challenges that can occur between quality and manufacturing as a result of how regulatory expectations are interpreted by each group.

Misunderstandings: This can be a very frustrating cause of conflicts. People work hard to do the right thing, and when their actions or words are misunderstood, it can be very upsetting. This can be especially difficult in a technical environment where engineers, for example, who have a technical mindset, need to interact with non-technical parts of the company, such as finance or human resources. Technical employees often become impatient with their non-technical peers, which creates unnecessary stress and potential conflicts. I have found that non-technical people genuinely appreciate it when someone takes the time to explain areas they may not be familiar with to help them understand more of the big picture. This becomes a measure of how well-versed a technical person is when they can explain a complicated subject in simple terms that anyone can understand. Of course, this also takes time and patience.

Misunderstandings can arise for many different reasons. However, the common solution is to take the time to unravel what is misunderstood and clarify any points of confusion. Usually, in this process, everyone learns something that will prove valuable over time.

Why conflict is an opportunity: One of the most significant issues is that many people are conflict-averse. When a conflict arises, they want to either ignore it or "run away" mentally or physically. However, this misses the opportunity to address the issue that brought up the conflict in the first place. If the conflict is not properly addressed, the misunderstanding will not be resolved, the learning will not happen, the goals will remain unaligned, and the disconnect will linger. The source of the conflict will most likely resurface again with an even larger negative impact.

Conflicts, disagreements, and misunderstandings come in all sizes and complexities. When any conflict occurs, there is always a reason for it. If the conflict is significant, it is an opportunity because people become energized and engaged when upset. They may not like it and will likely be uncomfortable addressing it. However, it is an opportunity to deal with an issue that could have been present for a long time but has finally come to a head. When people have had enough of dancing around an issue, they become committed to resolving it, rather than living with it. Also,

the sooner it is addressed and resolved, the better. When an issue remains unaddressed for a long time, relationships can be damaged, and a lot of time and energy can be wasted on unaligned activities, gossip, and drama.

Making the time to address something that has been hindering the operation for some time can be very valuable, but it takes courage and resolve. Addressing the source of a conflict and agreeing on how to work better together can improve efficiency, relationships, and trust.

Strategies for resolving conflict: A disagreement on perception is usually the core element of any dispute or conflict. I use the word perception as this is how we filter and process information to make conclusions about our environment and world. This is how we interpret events, situations, and people. [2] However, our filters include life experiences, cultural backgrounds, and unconscious biases, which can shape and distort our perception of any situation. As a result, we can easily perceive the same experience differently from others. Depending on the situation, we can also have strong emotions attached to our perceptions. Minor differences in how we perceive an issue are usually not significant. However, major conflicts can emerge if we perceive important issues differently, especially when strong emotions are involved. This type of conflict is the most important to resolve and can be the most challenging.

People in the heat of emotion can say and do things that are counterproductive to the effort of resolving a conflict. Therefore, it is important to manage the present emotions, so they do not get out of control. However, these emotions also create the energy for people to overcome their natural reluctance to address a conflict and seek resolution. When people are angry or upset, it is counterproductive to tell them, "They should not feel that way." People's feelings are real to them. It is far more important to ask some good questions to understand why they feel like they do. In resolving significant conflicts, do not deny the present emotions; instead, work to understand them and the associated perceptions. If you are leading an effort to resolve a conflict, it is also important to manage your emotions. If you have a part in the conflict, you need to be honest and own your involvement.

Focus on the facts: Because different people will perceive a situation differently, it is important to work on separating facts from the perceptions of different people about the facts. For example, a detail-oriented person may see things in a situation that others miss. Various levels of expertise may shape how one person understands a situation versus another with less insight. This can be a valuable dialogue to clarify the full situation and identify all aspects of a problem or issue.

Get curious to understand: People's perceptions are shaped by many things and may be influenced or changed when new information comes to light. In exploring the facts, new information can be identified and proven helpful. However, it is also important to understand what shapes the different points of view or perspectives present. While perceptions are how we interpret what we see or hear, perspectives represent our point of view on a matter. The simple diagram below demonstrates how easily our perspective (point of view) can differ from someone else's. Asking curious questions can also reveal hidden and false assumptions that have influenced someone's perception of a situation.
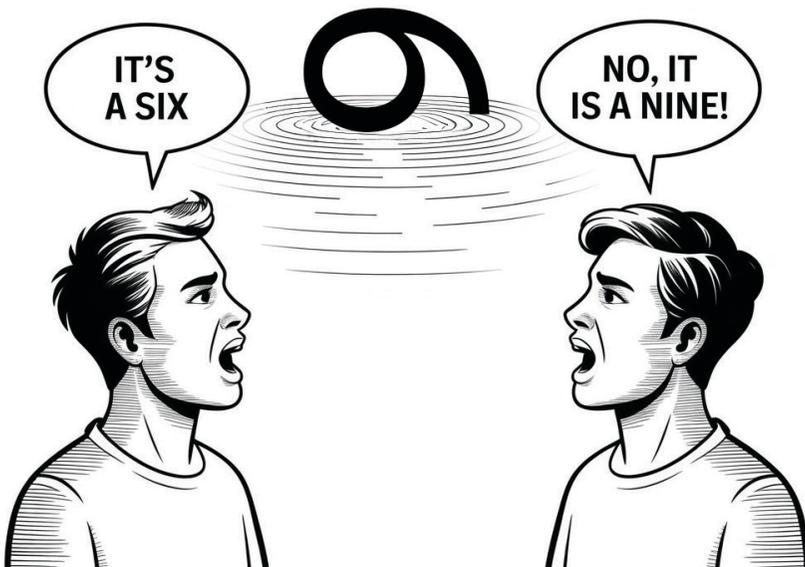
Illustration of different points of view

This simple diagram shows that trying to figure out whose viewpoint is right or wrong is not helpful. The important thing to do is to work to understand the different points of view that are present. It helps to suspend your point of view for a moment and try to see things from someone else's perspective. First, this builds trust as you take an honest interest in how someone else sees the situation. Also, you may be surprised to learn something you didn't know when you look at things differently. This demonstrates a growth mindset and an openness to new information.

Be Patient: Conflicts can erupt seemingly from nowhere, but they usually simmer below the surface beforehand. Because they can lie hidden for lengthy periods, they are generally not quick to resolve. The best approach is to engage in dialogue to understand the perspective of everyone involved, and this takes time. Even in a crisis, when quick action is necessary, it is valuable to take at least ten minutes to gather everyone's input in a rapid-fire manner. At least everyone can quickly provide their best thoughts. Also, in a crisis, most people will drop their personal fears and ego-driven behavior to address a more significant threat. They tend to be more honest than usual and get to the point quicker. When not in crisis mode, it may take several meetings or multiple sessions to resolve a major issue.

Build Trust: Finally, realize that if there is trust, conflicts may still happen, but they will be more quickly resolved. If trust is not solid or is absent altogether, this may be the source of the conflict. Building trust between management and the workforce, or among team members, or between two individuals, always begins with how the relationship is perceived. This is where the emotional mind starts to weigh potential threats to survival.

Our jobs or livelihoods are essential to our survival. This is not a conscious or even rational thought, but it is the central concern of the emotional mind. Also, anything that is a potential threat to our standing, status, or ego is perceived (emotionally) as a threat to our survival, literally to the image of ourselves. This explains the occasional emotional eruptions that can be completely disproportionate to the triggering event. A minor issue becomes a major issue when perceived as such, usually due to a previous significant experience that is somehow similar.

I will discuss how to build trust in detail in Part Four on Leadership. However, effectively addressing emotional outbursts is an essential skill for anyone. The first thing is not to get caught up in the emotions present and respond in kind. Train yourself to recognize the situation and be empathetic if someone is angry or upset. Work to calm them down, acknowledge their feelings, and indicate your willingness to understand. Let them know you are for them and want to help them. This is fundamental to relationships and building trust.

It takes emotional maturity (emotional intelligence) not to respond angrily to someone who is angry at you, especially when they are aggressive or shouting at you. It is natural for your emotional mind to kick in and take over because of a perceived threat. In fact, you may have a physical response that you cannot prevent, which will indicate you are under attack. However, with training and practice, your rational or thinking mind can overrule the default emotional reaction and deliver a thoughtful, empathetic response. This goes a long way to building trust and is the foundation for conflict resolution.

Success Factor Summary

Managing and resolving conflicts is not merely about avoiding disagreements; it's about transforming challenges into opportunities for growth and improvement. By understanding the root causes of conflict, you can develop effective strategies to address issues constructively. Ultimately, the ability to navigate conflicts effectively is a vital skill that can enhance both individual and organizational success.

Take proactive steps to establish open communication opportunities within your organization. Encourage others to share their perspectives, allowing you to understand each other's styles and goals better. By fostering a culture of trust and open dialogue, you'll create a collaborative work environment where conflicts can be resolved constructively.

Key Takeaways from Chapter 7: Managing and Resolving Conflicts

1. **Understanding Different Styles**: Conflicts often arise from diverse personalities and interaction styles. Recognizing that colleagues have different approaches can transform perceived weaknesses into strengths, enhancing teamwork and collaboration.

2. **Aligning Goals**: Misaligned objectives among individuals and departments can lead to frustration and conflict. Clear communication of goals and expectations is essential for maintaining harmony and productivity.

3. **Addressing Misunderstandings**: Misinterpretations and misunderstandings are common sources of conflict. Taking the time to clarify and dialogue on points of confusion can foster better relationships and enhance teamwork.

4. **Perception and Emotion Management**: Conflicts typically stem from differing perceptions shaped by personal experiences and biases. Managing emotions during conflicts is crucial as it creates the opportunity to work toward understanding the perspectives of others.

5. **Building Trust**: Trust is essential in conflict resolution. When trust exists, conflicts can be addressed more openly and efficiently. Building relationships and demonstrating empathy can create an environment where conflicts are resolved constructively.

CHAPTER 8

THE INTERSECTION OF PASSION AND WORK

"If you can hire people whose passion intersects with the job, they won't require any supervision at all. They will manage themselves better than anyone could ever manage them. Their fire comes from within, not from without. Their motivation is internal, not external."

Stephen Covey

So many people are unhappy with their current jobs, but are not sure why. One of my colleagues at work was recognized as a good leader and was responsible for a large organization. Unfortunately, she hated the job. When she was promoted, it felt to her like she was being manipulated into staying in a job that was killing her. She never mentioned her concerns until the day she turned in her resignation. If you are waking up and dreading going to work just to pay the bills, it may be time to think through what you are passionate about.

Many people are uncertain about their passions or have never considered what they would love to be doing instead of what they are currently doing. For many, the practical limitation to pursuing their passion (if they know it) is financial. So, the key question arises: "Can I earn a living doing what I love to do?"

People who do what they love are far more engaged, focused, and effective at work. When this happens, it is very good for both the individual and the employer. Not only does it significantly help employee retention, but people who love their jobs are more productive than the average employee. From my experience, if you are engaged with your job, you don't start thinking about the problems or challenges waiting for you at work until after you have had your second cup of coffee and checked your email. You start thinking about those issues while standing in the shower after waking up. Beyond the relentless distractions I discussed earlier that hamper productivity, the more engaged and committed you are, the more productive you will be.

Identifying Your Passions

Most people are unaware of their passions, even though these intrinsic interests usually manifest themselves at an early age and remain fairly constant throughout life. They show up in the hobbies and favorite activities children and teens pursue. They foster joy and satisfaction and are done for their own sake. Also, having two or three areas of intrinsic interest or passion is not uncommon.

As a child, I loved to garden. This reflected my interest in creativity and growth. Also, I loved to solve puzzles. So, in my career, first as an engineer and later as a general manager, I had ample opportunity to feed my passion for problem-solving.

People generally have not thought much about what they are passionate about doing, especially in the context of their working career. However, this can be a key insight that can guide you in the right direction in your life and career. There are four steps to identifying what you are passionate about [1].

1. Identify what you enjoy doing so much that you can do it repeatedly and never get tired of it. When you are engaged in this activity, time seems to stop, your concentration is complete, and nothing can distract you. Looking back on your life, what were the happiest and most engaging moments you can remember? These are clues to your passion. Ask yourself, "What do you value, and what are you good at doing?" Brainstorm and make a list of these things. Be

expansive and include everything you remember as a fulfilling and satisfying experience. Consider this your first or starting list of potential passions based on past experiences.

2. List all the things you always wanted to do but never could. Write as many things as you can think of that you would like to do if you had all the time and resources available.

3. Combine these two lists and refine them to the top ten. Go through each item and rate each as a #1 or a #2. The #1s are those in the list that "light you up" when you read it. The #2s are nice, but they do not grab your heart the way the #1s do.

4. The final step is to prioritize this list of the top ten. Read through the list two at a time and put a star by the better of the two. Star the one that captures your heart. Do this as you read through the list of ten at least three times to get down to the three with the highest priority. These are your top three passions.

Now that you have identified your top three passions, write a statement that combines all three into one short paragraph. This will solidify the meaning of these passions and make them more meaningful emotionally, not just intellectually. A succinct passion statement will also be a valuable guide for pursuing activities that bring joy to your life and help you map elements of your passion to your career.

Connecting Your Passions with Your Work

Almost every job has a variety of elements. Some you will (hopefully) enjoy, and others you may not. There will always be some drudgery in every job that needs to be done. Now, you have a guide to help identify elements in your current work that connect with your passion. Also, you may be able to negotiate with your boss to add things to your current responsibilities that sync with your personal passion statement. This might even be an opportunity to share with your supervisor the value and importance of paying attention to what people are passionate about doing. It is in the best interests of both the employee and their manager to explore and understand how to include a person's passion as part of their work responsibilities.

People with elements of their intrinsic interests or passions for at least part of their regular job are much more committed to staying with the company, and are generally much more productive. As a result, every leader would be wise to spend time with their direct reports to understand what they truly enjoy doing. It may not match their current job, but there may be ways to adjust over time and move some job responsibilities that overlap with an employee's passion. Even if the employee needs to transfer to another department to pursue their passion, retaining a highly motivated employee in the company is better than losing them altogether.

Understanding one's passion and the kinds of activities that bring joy and satisfaction to their work is a significant advantage for employees. Often, frustrated employees are unhappy with their current job without knowing why. As a result, they may change jobs only to experience the same frustrations at a different company because the new job didn't match their passions any better than the last one.

After more than a decade of research on the drivers of career satisfaction, Timothy Butler and James Waldroop published an article in the *Harvard Business Review* on how to improve retention through "job sculpting." This is described as employers attempting to match job requirements with an employee's "deeply embedded life interests," aka passions. [2] Their research identified eight core business functions that map how passions can be expressed in the workplace. The following is their list of eight areas, along with a couple of their chief characteristics.

1. **Application of Technology:** Curious about using technology more effectively in business.
2. **Quantitative Analysis:** Numbers are their thing, and mathematics is fun.
3. **Theory Development and Conceptual Thinking:** Abstract ideas and big picture strategy.
4. **Creative Production:** Brainstorming, inventing, and starting new projects.
5. **Counseling and Mentoring:** Natural teachers who love to help others learn and grow.

6. **Managing People and Relationships:** Working through others to accomplish goals.

7. **Enterprise Control:** Love of being in control and directing major strategies.

8. **Influence through Language and Ideas:** Love writing, speaking, and storytelling.

It is common for individuals to have two of these areas of passion that combine synergistically. The biggest challenge to the job sculpting process is identifying what people are passionate about. However, once identified, it can make all the difference for meaningful job satisfaction.

The idea that passion is important in the working environment was popularized in 2010 by Jim Collins in his book *Good to Great*, where he illustrated the Hedgehog Concept. He originally developed this concept to help organizations identify what they can be the best in the world at doing, and focus their efforts exclusively on that to achieve greatness.
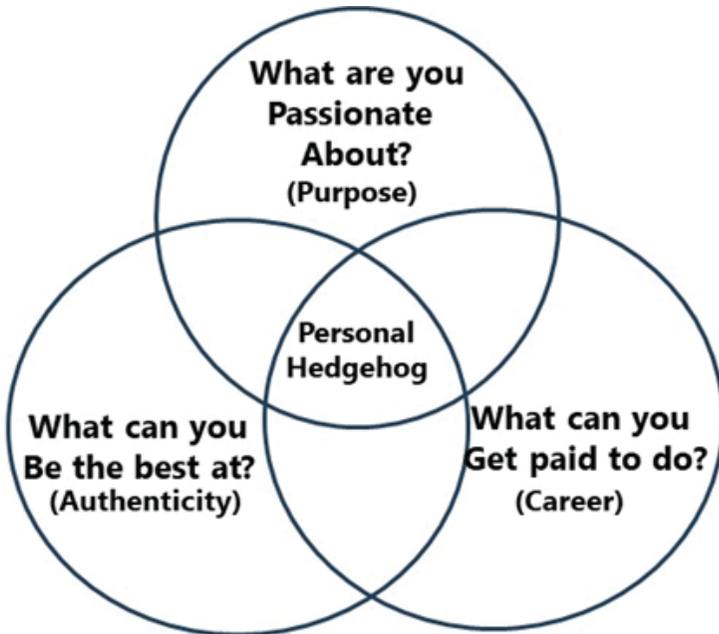
Adaptation of Collins Hedgehog Principle to a Personal Hedgehog Concept (PHC) by Ashley Guberman [3]

Later, this concept was adapted to the individual by equating being the best in the world (for a company) with what you are "genetically encoded to do," referencing natural talents and skills. So, the personal hedgehog focuses on what you are passionate about, what you have innate talents for, and what you can be paid to do. [4]

A similar structure called "Ikigai" (生き甲斐, pronounced ee-kee-guy) is an 800-year-old Japanese concept of how to have a fulfilled life with a sense of purpose and satisfaction. This model includes four elements: [5]

1. What you love,
2. What you are good at doing,
3. What the world needs, and
4. What you can be paid to do.

Finally, it is important to recognize that every person is born with innate talents and abilities. Of course, everyone builds new skills through life experience and expands on intrinsic abilities over time. However, for many, identifying intrinsic passions that bring joy and satisfaction to both life and work is an exercise in discovering what already exists.

Success Factor Summary

The intersection of passion and work is a powerful concept that can significantly enhance both personal fulfillment and organizational success. By identifying and embracing our passions, we can create more meaningful careers that resonate deeply with our true selves. This alignment not only fosters individual motivation but also contributes to a more engaged and productive workforce. Organizations that recognize and nurture this connection will reap the benefits of a committed and enthusiastic workforce, ultimately leading to greater success for all involved.

Take the time to reflect on your passions using the four-step process outlined in this chapter. Create your personal passion statement and actively seek opportunities within your current job or career path that allow you to integrate these passions into your daily work. Consider discussing

your findings with your supervisor to explore how your passions can be aligned with your job responsibilities.

Key Takeaways from Chapter 8: The Intersection of Passion and Work

1. **The Importance of Passion in Work**: Engaging in work that is aligned with your personal passions leads to higher levels of productivity, satisfaction, and overall effectiveness.

2. **Identifying Personal Passions**: Many individuals lack awareness of their true passions. A structured approach to self-discovery, including reflecting on enjoyable activities and prioritizing interests, can help individuals identify what truly excites them and how these passions can inform their career choices.

3. **Integrating Passions into Work**: Employees should identify elements of their job that resonate with their passions and communicate these to their supervisors. By aligning job responsibilities with personal interests, organizations can enhance employee retention and productivity.

4. **Models for Finding Fulfillment**: Concepts like the Personal Hedgehog and Ikigai highlight the intersection of what individuals love, are good at, and can be compensated for. Understanding these frameworks helps individuals find meaningful career paths that align with their intrinsic motivations.

CHAPTER 9

FLOW IN THE WORKPLACE

"Time slows down. Self vanishes. Action and Awareness merge. Welcome to Flow."

Steven Kotler

I have mentioned in several places that, as humans, we are wired for survival. This drives a lot of fundamental behavior, especially on a subconscious level. However, we are also designed to thrive, think deeply, create, and produce abundantly. Interestingly, this dichotomy is well described by Abraham Maslow's theory of the hierarchy of human needs, which he originally proposed in 1943. This theory is often represented as a tiered pyramid with five layers. The bottom layers represent one's physical needs and are often described as those essential for survival. The upper two layers relate to social and psychological needs, including personal fulfillment, with the top of the pyramid described as self-actualization, where one seeks purpose and meaning in life.
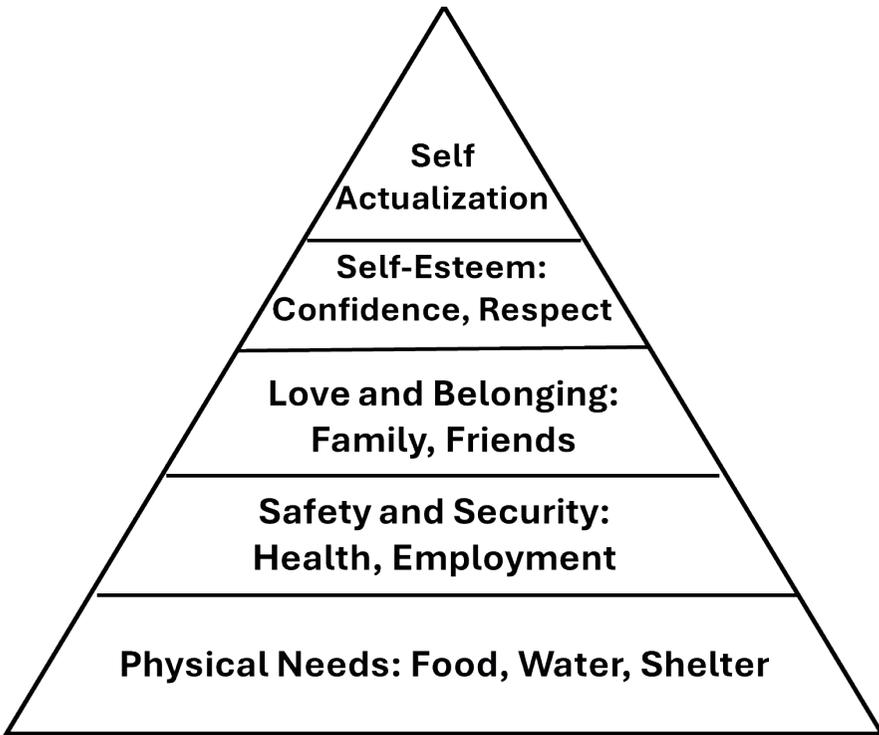
Maslow continued to evolve his theory over several decades, and despite some criticisms, his theory has provided a durable structure for understanding both the human drive for survival as well as the need to produce, create, and have peak experiences. [1]

There is a particular mental state of deep concentration and enhanced capability that athletes refer to as "being in the zone," but it is also known as "flow." Mihaly Csikszentmihalyi (1934-2021) was a Hungarian-American psychologist known for his pioneering work on the concept of flow, as a state of deep immersion and engagement in activities that lead to optimal experiences and heightened creativity. He was born in Hungary and faced the tumult of World War II, which shaped his understanding of happiness and fulfillment. He conducted extensive research at the University of Chicago on the conditions that foster human happiness. He summarized these studies in his classic book, *Flow: The Psychology of Optimal Experience,* published in 1990. [2] He wrote in his book:

"The best moments of life are found when a person's body or mind is stretched to the limit in a voluntary effort to accomplish something that is both difficult and worthwhile. This is the definition of an optimal experience, where one is so involved in an activity that nothing else seems to matter, and the experience is so enjoyable that people will do it even at great cost, for the sheer sake of doing it."

I have only formally studied the subject of flow in the last few years. While I have had this experience many times, I didn't have a framework to describe it properly. Flow is a mental condition of deep concentration in which time seems to stand still. There are no distractions, and whatever activity you are engaged in is wonderful. For me, specific activities that trigger flow include public speaking, writing, deep analysis, and games. These may seem like an odd collection of activities. However, they all have some very important characteristics, including the balance of skill and challenge, immediate feedback, risk, novelty, and unpredictability.

Flow Triggers

Csikszentmihalyi proposed that the key triggers for entering the state of consciousness he called flow include clear goals, immediate feedback, and, most importantly, the challenge-skills balance. The goal must be clearly understood if you are to engage in something worthwhile and demanding. Likewise, immediate feedback keeps such an effort on track and focused on the true goal. The challenge-skills balance is a bit more complicated.

If the challenge is much greater than your present skills can accomplish, this leads to anxiety. If your skills are much greater than the challenge, then you may feel bored and easily distracted. Anxiety, boredom, and distractions will inhibit or block entry into the flow state. However, when the challenge is just a little greater than your skills, you can stretch your skills to meet this worthwhile challenge. This drives you into the flow state where your concentration is absolute and your creativity is significantly enhanced.

Since Csikszentmihalyi's original work, many other studies have attempted to define what is necessary to experience flow and the characteristics of the flow state itself. Kotler proposed 22 flow triggers [3], 12 of which are related to individuals entering the flow state (see below), and ten are proposed triggers for the phenomenon of group flow, which I will address in detail in Chapter 12 on the discussion of Group Flow in Part Three. The following chart summarizes the key triggers for individual flow, how they build on one another, and their purpose.

Flow Triggers	Relationship to Other Triggers	Purpose/Type
Challenge - Skill Ratio in Balance	Fundamental	Essential
Clear Goals Defined	Purpose/Mission/Passion	Essential
Immediate Feedback	Progress on Clear Goal	Essenttial
Autonomy	Intrinsic Motivation (Passion)	Sense of Control
Curiosity Novelty Complexity	This group of Triggers Holds Attention	Helps Maintain Focus
Unpredictability	Complexity/Risk/Curiosity	Focuses Attention
Risk	Challenge/Skills Ratio	Focuses Attention

Much of the literature on triggers for individual flow seems to conflate actual precursors to achieving the flow state (triggers) with characteristics of being in the flow state. For example, complete concentration, deep embodiment, creativity, and pattern recognition are referred to as flow triggers by Kotler. However, I see them as characteristics of being in the flow state. This is why I do not include them in my flow trigger chart above. These characteristics of flow clearly demonstrate the value of being able to enter the flow state in terms of enhanced productivity. I discuss this in detail below.

The three essential triggers in the chart must be in place to enter flow. The other triggers support entering and maintaining the flow state once

achieved. Also, as the chart above shows, there seems to be a natural grouping of flow triggers that are likely synergistic. The more supportive triggers that are present, the easier it is to enter flow and remain in it. The flow state is also supported by the production of neurochemicals in the brain, especially dopamine and norepinephrine.

Both external and internal distractions can block a person from entering the flow state by disrupting the ability to concentrate and focus. If such distractions are part of the working environment (external), a change of venue may be needed to focus on the difficult but worthwhile task you are facing. Feeling the need to immediately respond to emails and social media notifications is an internal distraction. As discussed in the chapter on Distractions, our modern world has a greatly increased level of interruptions and distractions, largely due to technology, social media, and modern office design. It takes deliberate action to turn off notifications and shut down social media, and discipline to avoid both internal and external distractions that are so prevalent today. Anxiety, fear, and negative self-talk are also fundamental blocks to entering the flow state.

The Flow Cycle

There is a natural four-stage cycle to flow that starts with "struggle." As the name implies, some work will be necessary to enter the flow state. The four stages of the flow cycle, as outlined by Kotler, are [4]:

1. Struggle
2. Release
3. Flow
4. Recovery

The struggle stage is where many people get stuck and fail to progress through release and into flow. Even if the goal is clear and you have the skills to meet the challenge, the task still waits for you to focus and get started. Overcoming procrastination, distractions, and the associated inertia requires a deliberate, concerted effort. At this stage, stress hormones are released, increasing tension and frustration. Doubts creep in, and negative

thoughts try to take over. However, you must stay focused on your goal and remind yourself that you are prepared and have the skills needed. Then, channel the energy that comes with the tension of the struggle phase to launch into the release stage.

An easy example of the struggle phase in action is when I have worked hard to prepare a speech on an important topic that I know well, yet just before showtime, I start to feel nervous. This is true for virtually all public speakers, no matter how experienced they are or how many speeches they have given. However, experienced speakers have learned to take that energy from the struggle phase and release it at the beginning of their presentation. They do not show up nervous and awkward, but instead confident, energized, and excited.

The secret of moving from the struggle stage to the release stage begins with dismissing the negative thoughts that naturally come up. This is the time to take control of your mental processing and do the following:

- Recognize your negative thoughts are irrelevant to the task at hand,
- Focus on the important work before you,
- Remind yourself that you have the skills you need right now,
- Take your mind off your concerns, and
- Relax and reorient your pent-up energy toward your task.

The release stage can be as short as a walk to the stage or a walk in the woods to clear your head. The most important aspect is to relax in the sure knowledge that "you have this." Then, the stress hormones will start to dissipate and be replaced with feel-good neurochemicals like dopamine and norepinephrine, which assist with focus, pattern recognition, memory, and creativity. [5,6]

Characteristics of the Flow State

The flow state has unique characteristics that significantly enhance both productivity and creativity. It can be experienced in a wide variety of activities, from extreme sports to computer programming. Depending

on the activity involved, various characteristics may predominate. For example, in extreme sports, the merging of action and awareness becomes a key element, while in computer programming, enhanced pattern recognition and new insights become critical. In delivering an important speech to a prestigious audience, losing self-consciousness supports delivering a fearless presentation. However, important characteristics common to the flow state, regardless of the activity involved, include complete concentration that allows no distractions, time distortion where the individual loses the sense of time passing, and loss of self-consciousness that frees one from any concern for failure.

Below is a chart that summarizes my analysis of the key characteristics of being in the flow state.

Flow Characteristics	Related Experience	Benefits
Complete Concentration	Singular Focus	No Distractions
Merging of Action and Awareness	Total Absorption	Sense of Effortlessness
Enhanced Creativity	Heightened Pattern Recognition	New Insights
Time Distortion	Lose Sense of Time	Stay in the Moment
Loss of Self-Consciousness	No Fear, No Concern for Failure	Freedom to Act
Autotelic Experience	Pursue Task for its Own Sake	Peak Experience

The entire flow experience becomes autotelic or, as Csikszentmihalyi describes, it is the optimal experience. This experience is so enjoyable and intrinsically rewarding that it is pursued for its own sake, despite a clearly defined goal being part of the original driver. According to the Oxford Dictionary, the word autotelic is composed of auto, meaning self, and a Greek root word, telos, meaning end or goal. So, an autotelic experience is its own goal and is pursued repeatedly for the joy of the experience itself.

There are many benefits to being able to utilize the flow state at work. First, productivity and creativity are significantly enhanced, resulting in high-

quality work being done in less time. This is why when an organization faces a crisis, it often seems that the best work gets done as people rise to meet the challenge. When a significant risk is present, people are more likely to enter the flow state, leaving behind their petty squabbles and concerns in order to focus their efforts. As a result, they get amazing work done in a compressed timeframe.

Another significant benefit of people experiencing flow as part of their regular job is the retention of key talent. By being in flow on a regular basis, the intrinsic reward is the work itself, leading to enhanced job satisfaction and personal fulfillment. This should encourage individuals to seek flow opportunities as part of their regular job process and managers to assist their people in discovering them.

The final stage in the flow cycle is recovery. The flow state is intense and expensive in terms of brain energy and neurochemical production. As a result, the flow state typically lasts for ninety minutes to two hours and must be followed by the recovery stage to regroup and refresh in order to avoid neurochemical exhaustion. During recovery, you will benefit from taking time to reflect on what was accomplished during flow. This solidifies the learning and skill development you experienced during flow and files it into your long-term memory. Examples of deliberate recovery activities that are beneficial include exercise, stretching, a walk in nature, or even a nap. These types of activities give you time to recharge your mental and physical energy.

Personal Example of Flow in Action

I have experienced flow most often when speaking to large or even small audiences. Speaking in front of groups was a common requirement in my leadership positions, and I developed this significant skill early on. I have also coached many people in my organization who were reluctant or even afraid to make presentations or speak in front of an audience. There are several important steps involved in preparing to give a speech, such as:

1. First, you must have a deep understanding of the subject of your presentation.

2. You should write out most of what you want to convey. This can be notes, bullet points, or even your total speech.

3. DO NOT plan to read your speech to the audience. The notes you laboriously prepared are only used as a guide while speaking. The work of preparing these notes also solidifies the key points and overall content of your speech in your mind. Also, if your mind goes blank at some point during your speech, you can look down at your notes and reestablish your train of thought.

4. Practice, practice, practice. You should read through your speech a number of times and then give it several times out loud to someone you trust who will give you honest feedback.

5. Continue refining, adjusting, and editing your speech based on what you learned from practicing and using any feedback you receive.

6. Now that you are fully prepared for the big event, you will likely feel a bit nervous just before you get up to speak. That is normal and represents your energy level rising to the occasion! Channel that energy into the opening statement of your speech.

7. You should have rehearsed your opening comments so many times that they should be locked into your memory. Then off you go! You are now engaged with the audience on a subject you know very well, and you know they need to hear what you have to say, so focus on sharing what you know with them, and disappear yourself!

The last statement in step #7 (disappear yourself) describes my experience delivering a speech that was important both to me and my audience. It was my (uninformed) description of one of the distinctive features of the "Flow" experience. It is a way of describing the complete lack of self-consciousness versus the fear that many people are concerned about when giving a speech. Psychologists have a fancy term for this called transient hypofrontality, which translates as temporarily losing awareness of yourself. This allows you to focus your full attention on your audience and connect with them on a profound level.

I recently gave a speech to a group of young people (20 to 30 years old) running for state and local government positions. My subject was how to use storytelling in their campaign efforts to get their message across in a memorable way. I know this subject well and prepared by practicing multiple times. In practicing this speech out loud with my wife, I established the content in my mind, but the delivery was stilted and awkward. I point this out because, during the practice of a speech, it is unlikely you will experience flow, so don't be concerned if it feels awkward or unnatural. If you have prepared well, during the actual presentation with a live audience, you will engage, rise to the occasion, and flow! That is exactly what happened when I delivered this speech and during the question and answer session afterward. Some of the questions were unique and complex, but because I was in flow, I was able to respond with creative (and useful) answers on the spot.

Success Factor Summary

Flow represents an optimal experience that can transform the way we work. By understanding and harnessing the power of flow, individuals can unlock heightened levels of creativity, productivity, and job satisfaction. Embracing the principles that lead to flow includes developing clear objectives, meaningful challenges, and an environment free from distractions.

Reflect on the activities you engage in at work and identify those that bring you closer to a flow state. Consider how you can create or modify your work environment to facilitate flow, such as setting clear goals, minimizing distractions, and ensuring a balance between the challenges you face and your skill level.

Key Takeaways from Chapter 9: Flow in the Workplace

1. **Understanding Flow**: Flow is a mental state characterized by deep concentration, where time feels suspended, distractions fade away, and the activity becomes intrinsically rewarding. This state enhances creativity and productivity, making it highly desirable in the workplace.

2. **The Flow Cycle**: Flow occurs in a four-stage cycle: struggle, release, flow, and recovery. Overcoming the initial struggle and channeling tension into focused effort is crucial for entering flow, followed by a release phase that transitions into sustained concentration.

3. **Key Triggers for Flow**: To enter the flow state, three essential triggers must be present: clear goals, immediate feedback, and the right balance between challenge and skill. If the challenge is too difficult or too easy, anxiety or boredom can inhibit flow.

4. **Practical Application in the Workplace**: Employees and organizations can cultivate flow by minimizing distractions, avoiding micromanaging, and providing clear goals that support the conditions necessary for flow. This can lead to enhanced creativity and engagement in the workplace.

PART THREE

THE SUCCESS GUIDE FOR TEAMS

The use of a team has become the hallmark of business and other organizations worldwide for many good reasons. A collection of talented and experienced people working together will always outperform any set of individuals who have comparable skills and experience but work separately. In Part Three, I will cover the key distinctives that are necessary for developing a cohesive team as opposed to a group of individuals who have been thrown together. I will also cover the various types of teams that function differently depending on their nature and objectives.

Team formation does not happen automatically. There is a team development process that largely depends on the skills and abilities of the team leader, as well as the emotional maturity of the collective team members. Finally, I will review what is necessary for the development of a high-performance team and the elements that have been missed by many researchers who have spent years working to define the characteristics that differentiate between teams that perform adequately and those that consistently demonstrate superior performance.

CHAPTER 10

THE HISTORY AND USE OF
TEAMS IN BUSINESS

"If you want to go fast, go alone. If you want to go far, go together."

African Proverb

Teams have been studied extensively over the last 75 years by business leaders, government agencies, and the military. The U.S. Military began studying teams in the aftermath of World War II to determine what influences team or unit performance, especially under extreme conditions. These, along with many other civilian studies, have shown that teams outperform groups of individuals working solo on similar projects in both efficiency and effectiveness. [1] One of the drivers for these military studies on team dynamics came from observations during WWII that German units "demonstrated extraordinary tenacity" despite the fact that they were outnumbered and had inferior equipment. They concluded that this developed from a deep sense of loyalty and cohesion among the unit members.

Further studies conducted by the military from the 1950s to the 1970s identified team member attitudes and personal characteristics as important factors in determining team cohesion and performance. Another key factor is team leadership. The topic of team leadership has evolved over time,

with the focus changing from evaluating the characteristics and behavior of a single individual to the function of leadership within the team. In a broad sense, leadership within the team defines the team's direction, priorities, and decision-making process. While it is typical for a team to have a defined "team leader," the leadership responsibility within superior teams is often shared by multiple members of the team, depending on circumstances and requirements.

The U.S. Military, along with many civilian studies, has spent significant effort over many decades attempting to develop predictive models describing the essential elements that determine team cohesion, efficiency, and performance. Unfortunately, this goal has been elusive due to the multiple variables associated with human personalities, interactions between team members, communication styles, and individual abilities. However, it is clear that a cohesive team will consistently outperform a team that lacks cohesion. Strong team cohesion manifests as synchronicity in the team's actions, their interactions with one another, and their collective thinking.

There are many differences between military and business organizations; however, there is one common element: people. Military veterans entering the business world naturally carried the valuable lessons in leadership and teamwork they learned into their new setting. Today, teams have become the lifeblood of modern business and how business is typically done. Corporations have enthusiastically embraced teams over the last half-century, recognizing their potential for delivering superior performance and efficiency. However, in recent years, the focus of many articles and books has shifted to the exploration of why many teams fail to achieve their potential. [2]

Just as there are skills critical for individual success, there are specific skills, behaviors, and characteristics that highly influence how effective and successful a team will be in the work it is called to do. Just because a group of people is referred to as a "team" does not make them so. Working groups of individuals can accomplish much, but the focus is on individual performance and accountability, whereas the focus of a team is on collective

performance. The members of the team win or lose together. A number of significant distinctions must also be in place for a group of people working together to truly be a team.

I will review the different types of teams that can be formed and their specific purposes, as well as how they start, how they develop over time, and some of the fundamental work necessary for their success. Also, it is obvious that teams are made up of people who bring their own unique skills, talents, and experience, as well as their own personalities, perspectives, fears, and history. The process of melding these diverse individuals into one seamlessly working team takes time and focused work, but the benefits are many. [3]

What Makes a Team?

The American Society for Quality (ASQ) defines a team as a "group of people who perform interdependent tasks to work toward accomplishing a common mission or specific objective." This highlights the first and most important element necessary in forging a team: a shared goal that represents the team's purpose or the reason it exists. Most of the time, this overriding objective or mission is set or defined by the organization's management. If this mission is sufficiently aspirational, it will motivate and galvanize the team members to a common commitment, which is the second signature of an effective team. Each member of the team must clearly understand the team's mission and be committed to mutual accountability for the outcomes they collectively produce.

Many studies have identified additional characteristics that must be present, such as good communication, trust, alignment, and transparency between team members. Also, each member of the team must have a specific role or purpose for being on the team, which is acknowledged and understood by all team members. The larger a team becomes, the harder it is to achieve effective communication, true alignment, and trust across the entire team. Ideal team size will vary based on the nature of the work, but teams with greater than ten members often suffer a loss of efficiency and cohesion. Having five to seven core team members gives the best opportunity to be a

highly effective team and can be supplemented with technical advisors as needed, but who will not be considered core members.

Types of Teams and Their Purpose

Project Teams

Project teams come in several different types, including the following:

- Teams formed in response to a crisis.
- Teams formed to deliver a defined scope of work. (Normal Project Team)
- Teams tasked with long-term projects.

The key distinctions between these types of teams usually relate to the urgency of achieving its mission and the project's expected duration.

Crisis Response Teams are formed to address a problem or situation that must be resolved as quickly as possible. Given the circumstances, the goal of such a team is usually crystal clear, and both urgent and important. Examples of the situations they tackle include equipment failures, system failures, or a regulatory action that threatens the operation of an entire plant or operation. Crisis response teams are also formed to deal with natural disasters such as earthquakes, floods, and fires.

In essence, this crisis response demands immediate attention from those with the most relevant knowledge and expertise. This heavily drives team member selection. The higher the risk factors, the more intense and demanding the project will be, including long hours of work and potential meetings around the clock. Such teams come together quickly, and there is no room for superfluous members who cannot make an obvious and valued contribution. Deference to expertise is the order of the day, and titles and positions are not relevant to the work at hand.

The critical nature of the work also makes the normal petty differences and conflicts that sometimes hinder team cohesion irrelevant. Everyone is expected to "check their ego at the door" and focus on what needs to be

done. Disruptive or unsupportive behavior by anyone on such a team will be quickly addressed and, if not resolved, will result in that team member being expelled in one way or another. These teams dissolve just as quickly as they form once the problem or issue is properly addressed. Such teams usually have a time horizon of days or weeks at the most. However, it is not unusual for follow-up project teams to be formed in order to implement the solutions the crisis response team developed.

Interestingly, such "crisis response" teams usually produce excellent work in a compressed timeframe with less conflict, fewer errors, and more camaraderie. I have witnessed such teams in action and have participated in a few. It is also good that crisis teams are short-lived. The long hours and intense, adrenaline-driven activities cannot be sustained for lengthy periods without significant deterioration of work product and the ultimate burnout of the people involved.

The question I have asked many times is, "Why do we need a crisis to manifest such superior teamwork?" I plan to answer this question by the end of Part Three.

Normal Project Teams represent the most common type, where a team is assembled and tasked with an implementation effort or the delivery of a defined scope of work. This includes a wide range of potential activities, from developing a new marketing campaign to renovating an outdated laboratory. As opposed to the crisis response team, which forms quickly, normal project teams are formed methodically and take appropriate time to staff and organize. These teams typically last for anywhere from three to 18 months, depending on the scope of work. Often, their first task is clarification of the actual scope of work. Management may have given the overall goal that needs to be achieved, but the team is expected to flesh out the details involved and develop the strategy to achieve the goal.

Team members are often selected based on a combination of availability and expertise relevant to the scope of work. Depending on their role, various team members may be dedicated to this effort, or they may have commitments to other projects or duties. Defining the core team members

and having them dedicated to this project full-time is best. Other individuals may act as advisors or liaisons as necessary, but if core team members are only part-time, the team will have difficulty establishing cohesion and commitment. Management needs to monitor individuals who volunteer to be on multiple teams as a means of gaining recognition. Unless such individuals are truly the go-to experts on a specific technical area that multiple teams can tap into, their involvement with multiple teams will be superficial at best and more likely a waste of time, if not disruptive.

Often, team members have worked together on other projects or activities in the past and may know each other to some degree. However, there may also be hidden conflicts or unresolved issues between various team members who now must work together. This makes it important to pay attention to the team formation and development process, which, if followed, will uncover and resolve such issues.

Long-Term Project Teams are formed to deliver major projects that will take an extended period to complete. Typical examples include major construction projects, new site development, and expansion of manufacturing operations. The timeframes of such efforts are often three to five years, and there will be multiple stages of activity, such as design development, detailed design, construction, qualification, startup, and validation. Large projects can be very complex and will require multiple subproject teams whose efforts are focused on specific aspects of the overall project and must be coordinated by a governance team. These subproject teams will include company personnel, design firms, consultants, and representatives from construction companies. The composition and number of subproject teams and their members will evolve and change as the project moves through its various stages.

Some of the biggest challenges for long-term projects are the staffing and coordination of the various activities that usually progress concurrently. While consultants, representatives from design firms, and contractors play an essential role in providing specific technical expertise, they often do not have the perspective of the people who will inherit, occupy, and operate the facility once it is completed. This puts a special burden on

the company personnel dedicated to the project, as they must guide the design development as well as address and resolve the many questions and uncertainties that always come up during both the design and construction phases.

It is especially important to have key company leaders involved who are knowledgeable and experienced with such projects, as well as operational considerations. These multi-hundred-million-dollar projects do not happen all the time, so it is challenging to identify leaders who have such experience. In my over 40-year career, I have been directly involved in only three such major projects. Also, company personnel on subproject teams will need to make daily decisions on many detailed issues. They are chosen to be on the project because of their operational expertise, but they likely will have little or no experience in the context of design and construction. This often results in decisions and guidance that can over-emphasize operational convenience, drive project costs up, and may end up being impractical.

It is also true that every mistake in the design effort will be discovered during construction, and every mistake made during construction will be discovered during the facility's startup. Mistakes and errors are inevitable to some degree. The best approach is to avoid as many as possible and deal with them directly when they happen. No project I have ever worked on was perfect. Often, the people involved in making specific design decisions are no longer around when the new facility is started up, and those involved in operating the facility may have very different ideas about what should have been done. The key objective is to initiate operations as quickly as possible and start creating value for the company. As opportunities come, adjustments, changes, and fixes can be accomplished over time once the facility is in operation.

Leadership Teams

The typical organizational Leadership Team is composed of individuals who are directly responsible for a department within the overall organization, such as Manufacturing, Quality Control, Validation, Maintenance, Engineering, and Supply Chain. In a manufacturing plant,

department heads typically report to a General Manager, who also acts as the leader of this senior team. Additional members of the leadership team who may report directly to a corporate organization include the head of quality assurance, human resources, and finance. Each of these leaders will have years of experience in their field, technical insight, and expertise. Together, they set the tone for the entire operation and are responsible for reinforcing the Vision and Mission of the facility, as well as the critical nature of the work being done by each staff member, operator, technician, and analyst. Each department head wears two hats, one being the direct responsibility for his or her department, and the other their membership on the Senior Leadership Team.

How well this leadership team functions is the most important determining factor for the operation's overall success, which is measured on the basis of productivity, compliance, and the assurance of product quality. This leadership team's ability to work together smoothly and solve the issues of the day will be determined first by how well they know themselves and second by how adept they are at understanding each other. Important factors include how long the team has been together and what has been done to deliberately build or promote teamwork, collaboration, and understanding within the team.

One of the most important capabilities of the leadership team is being able to manage and resolve the inevitable conflicts that arise. This team sets the example for the entire organization, so if there is unresolved conflict, open disagreement, and infighting within the leadership team, it sets the stage for conflict and disagreements between departments within the organization. The ripple effect of negative examples by the leadership team can have long-lasting effects on the organization's success.

The leadership team has another distinguishing characteristic, that of being in place for a long time. This is usually an ongoing team due to the necessity of providing leadership and guidance for as long as the organization exists. Over time, it is natural for some members of the team to leave and new members to be added. Each time there is such a change, the team needs to spend some time to reform and clarify roles and responsibilities. These

instances are also an excellent opportunity to do some teambuilding work. The challenge for the leadership team is that their attention is often consumed on a daily basis by the needs of the organization. As a result, it rarely spends time addressing the needs of the team itself. Relationships can drift over time, unresolved issues accumulate, and organizational changes may require adjustments to agreed-upon norms for how the team functions. It is essential that the leader of this senior team has regular 1:1 meetings with team members to check how well the team is operating. He or she also needs to deliberately plan team-building opportunities to revisit the norms and roles if there are changes in the membership.

Success Factor Summary

The history of teams in business reveals their critical role in achieving organizational success. As teams continue to be the backbone of work in modern enterprises, understanding their characteristics, types, and the importance of effective leadership is essential. By fostering strong cohesion and clear communication, organizations can harness the collective strengths of their teams, leading to enhanced productivity and innovation. Investing in ongoing team development ensures that teams remain resilient, adaptable, and capable of navigating the complexities of today's business landscape.

Evaluate your current team dynamics and identify areas of improvement regarding communication, trust, and role clarity. Organize a team-building session to address any underlying conflicts and reinforce shared goals and mutual accountability. This proactive approach will enhance team cohesion and overall performance.

Key Takeaways from Chapter 10: The History and Use of Teams in Business

1. **The Importance of Teams**: Extensive studies over the last 75 years demonstrate that teams consistently outperform individuals working alone in terms of efficiency and effectiveness. Cohesion and loyalty within teams lead to remarkable performance, especially under pressure.

2. **Characteristics of Effective Teams**: A true team is defined by having shared goals, mutual accountability, good communication, trust, and clearly understood roles. Cohesion and alignment among team members are crucial for collective success, especially as team size increases.

3. **Types of Teams**: Different types of teams serve various purposes, including crisis response teams, normal project teams, long-term project teams, and leadership teams. Each type has specific characteristics and requirements for success, depending on the urgency and duration of the mission.

4. **Team Formation and Development**: The process of forming and developing teams is essential for their long-term success. Teams must address potential conflicts and establish clear communication and roles to foster cohesion and alignment among members.

5. **Challenges of Leadership Teams**: Leadership teams play a critical role in setting the tone for the entire organization. Their ability to function effectively, manage conflicts, and foster collaboration directly impacts the organization's success, productivity, and culture.

CHAPTER 11

HOW TEAMS DEVELOP AND FUNCTION OVER TIME

"I can do things you cannot, you can do things I cannot; together we can do great things,"

Mother Teresa

To become an effective team, a group of people must first go through a process of development. This was famously defined by Bruce Tuckman in his 1965 paper, *"Developmental Sequence in Small Groups,"* where he described four stages of team development as Forming, Storming, Norming, and Performing. [1] The four stages are briefly defined as follows:

- **Forming:** When a group of people initially comes together, they need to define their collective objectives and how they will work together to achieve them.
- **Storming:** The initial politeness is gone, replaced by the need to clarify roles and responsibilities and revisit previous agreements that are not working as planned.
- **Norming:** Good work is happening as agreements have been refined and are working with clear roles and responsibilities defined.

- **Performing:** This stage is not achieved by all teams as it reflects a level of superior performance based on exceptional team cohesion.

This model has endured as it captures the typical intellectual and emotional process that must occur when a group of people work together to accomplish a mission or objective. Understanding this process and what is happening at each stage can accelerate the maturation of the team and achieve effective performance more expeditiously. I will use this framework as an organizing structure for the remainder of Part Three.

Much has been written based on Tuckman's original work, which focused on psychological studies of teams and their formation, evolution, and performance. His research identified two major elements that determined a team's ultimate ability to perform. The first is attention to task, and the second is attention to the interpersonal relationships between team members. However, as an academically oriented model, it has some important limitations for use in the working environment. First, the model essentially assumes a linear progression from one stage to the other, when in practice, it is not unusual to have significant back-and-forth movement between various stages. [2] Additionally, Tuckman's model does not provide any guidance on the duration of each stage nor the requirements to move from one stage to another.

This is why I refer to the Tuckman model as a framework that is useful for tracking the evolution of a team from a new group of people who were "thrown together" and assigned a task to a smoothly functioning team that effectively capitalizes on the creativity and capability of each team member in a synergistic manner to achieve excellence. The team's assignment or task may be straightforward or complex, but in either case, the issue that more often derails or limits a team's performance is the team members' level of emotional maturity, both individually and collectively, which is manifested in their personal interactions. It does take both time and effort for the team members to get to know each other.

A quick measure of a team's collective level of emotional maturity is the willingness to ask questions and engage in dialogue on important issues.

Team members being afraid to speak up or challenge something that does not seem right are sure signs that more work is needed.

Every team is unique, thanks to the composition of its members and the stated mission or goal. Clarity on the mission is vital as it serves as a galvanizing force for the team. However, the working relationships between team members and their ability to capture the potential synergy of their combined creativity and expertise will be the major focus for the remainder of Part Three.

The Forming Stage

The major work of the team at this stage is to take the time to get to know each other in a structured manner and begin working together to clarify their purpose and mission. It is most important that the designated team leader has the skills to lead the team through this initial stage. Their skills at this level will be evident in their ability to not only clarify the purpose or mission of the team but also to ensure team members buy-in. The more aspirational the mission, the easier it will be initially for team members to become excited about it.

However, the leader also needs to supply sufficient details and granularity to support goal development and define the roles and responsibilities of each team member. The team leader is responsible for leading the dialogue to define what the team's success looks like and the key milestones to be achieved along the way. This is the essential work that will provide the basis for developing the team's strategy and setting executable goals.

The key task-oriented elements of the forming stage include defining the team's vision of success, clarifying its mission, establishing its strategic approach, and defining executable goals. This process will be discussed at length in Part Four for leaders in the chapter on the Vision Stack. The one element that is not task-oriented is the agreement on values, which represents how the team members will work together and what behavior is acceptable and what is not.

One challenge is the fact that people on a new team want to make a good first impression. Therefore, they are usually polite, reluctant to disagree with their peers, and may not speak up or share their opinions, even on important issues. The team leader needs to be adept at asking good questions, playing the role of facilitator, and managing everyone's participation. This is important to the initial development of the team's agreed-upon norms that will define the expectations of each team member in terms of behavior, contribution, and engagement. The team leader needs to pay careful attention to any existing relationships between team members.

As mentioned previously, it is very likely that some members of a newly formed team have had previous interactions or have worked together on other projects. This can have both positive and negative effects. If a good working relationship already exists between some team members, it can be a catalyst to help other team members quickly develop trust across the entire team. Alternatively, this could develop into a clique that creates a "we versus them" mentality, thereby splitting the team's unity.

A useful approach for the team leader to take at this stage is to plan a series of meetings to establish the foundational elements of the team. I suggest a series of meetings rather than the typical "two-day offsite" for several reasons. The team needs to clarify the mission, get to know each other, agree on roles and responsibilities, and develop initial strategies and goals. These are very divergent objectives from a mental processing standpoint. It is best to give some processing time between meetings that focus on specific topics rather than attempting to do them all within a one or two-day offsite. However, these meetings should be tightly scheduled over a two- or, at most, three-week period and address the key priorities listed below. The order of these meetings is also important as they build on one another.

- First, clarify the team's mission and agree on what success looks like. This is the equivalent of establishing the team's vision and mission.
- Next, hold a dedicated teambuilding session to create the opportunity for team members to get to know each other and

what they bring to the team. This will facilitate the assignment of roles and responsibilities in a subsequent meeting. Each team member should be given a chance to "tell their story," including their background, expertise, and what they hope to contribute to the team.

- Then, plan a meeting to develop targeted strategies to accomplish the team's stated mission. There will be a great temptation in this meeting to move on to defining goals. This is premature and should be avoided, as making the time to focus on refining the strategies will be more productive. Trying to combine strategic and tactical discussions in the same meeting is dilutive and creates cognitive dissonance. [3]

- In a separate meeting, establish roles and responsibilities, team goals, and individual goals. These will be based on the previous strategy discussions as well as the time spent getting to know and understand each other's areas of expertise.

- Finally, establish the initial norms or values for the team. This defines the acceptable behaviors of the team members and clarifies expectations. I use the term "initial norms" because, in the next stage of development, these norms will be tested and most likely need to be refined or expanded to include areas that were missed in this initial effort. Some of the most important behaviors for a team's success include:

  1. Respect for and trust in each other's expertise and a willingness to defer to those who are the most informed on an issue.

  2. Commitment to speaking honestly, especially when it is difficult because it may put someone in a bad position. This requires not only honesty but also tact and wisdom. More importantly, speaking honestly when it may put you in a bad light. This demonstrates accountability as well as humility.

  3. Putting what is best for the team ahead of any personal agenda.

4. Commitment to asking good questions when you do not understand, or you disagree with another team member. Good questions are designed to seek an understanding of an issue or another team member's perspective. This is also a key part of dialogue.

The ability of the team leader is critical to successfully navigating this Forming Stage. The team leader needs to be emotionally intelligent, skilled at asking good questions, experienced in facilitating group meetings, and understand the value of dialogue.

The Storming Stage

This stage develops when the team has stalled in terms of progress on its stated goals. This generates frustration and can quickly bring unwelcome tension to the surface.

An example of a team that slipped back into the Storming Stage from Norming occurred when I was working on a team responsible for the implementation of a new enterprise system at multiple manufacturing sites. The team included representatives from all the facilities involved. After working on this project for over six months, we discovered several of the facilities had very different ideas about how the implementation of this system was to be done. The project was put on hold until we achieved alignment across all of the manufacturing sites.

It is very common for disagreements or misunderstandings to develop between team members, or for questions to surface regarding the definition of its mission or goals. The agreed-upon norms, roles, and responsibilities are other areas that can become points of contention. The team leader can use this as an opportunity to initiate dialogue that would resolve these issues. Conflict is not necessarily negative. At this stage, people are ready to engage, even vigorously, because they care. They have reached the stage where it is more important to get things right than to be polite. When people are energized by an issue, they speak more honestly and get to the point quickly. That's why the team leader must step in and facilitate the

dialogue to ensure positive outcomes are achieved when people are willing to vigorously engage to solve disagreements, misunderstandings, and conflicts around goals, roles, and responsibilities. The team leader should emphasize the common goals that are important to each team member and make sure that personal attacks are not tolerated.

The issues that arise most often at this stage have to do with the responsibilities or assignments of the various team members. Territorial feelings can come up, or gaps can be identified that do not have an obvious home for resolution. Shared responsibilities can also cause conflict if the strategy is not clear. Decision rights may need to be clarified, and the process for shared decision-making may need to be refined.

At this stage, internal problems, including aggressive or disruptive behavior by one or more team members, can arise. Also, a poorly prepared or incompetent team leader can stall the team's development process, keeping the team stuck at this storming stage. External issues that can threaten the team include a change in priorities by management, which confuses the team's mission, or the refusal of management to provide sufficient resources needed by the team.

This stage demands a capable team leader to manage the dynamics at play successfully. Effectively managing both internal and external problems requires awareness of how each affects the team, and having the skill to lead the team through these challenges in a manner that keeps them focused and productive. The team leader needs the same skills mentioned in the Forming Stage, as well as the ability to address and resolve conflicts effectively for positive outcomes.

The Importance of Dialogue: There are three ways team members engage with each other while working together. They can debate issues, discuss issues, or dialogue on issues. When faced with a problem, teams will usually default to having a discussion in order to identify solutions. In this process, it is not uncommon to identify more than one solution to the problem at hand. Then, debate will sometimes ensue regarding which of the potential solutions is the best. This can quickly become unproductive and even damage team cohesion.

What is missing from this picture is the dialogue. The purpose of dialogue is to freely share ideas and get input from each other to clarify the problem at hand. Each team member may have a unique understanding of the issue and the insights they wish to share. When teams dialogue and exchange questions about the issue, shared learning occurs.

Dialogue is sometimes confused with brainstorming, where ideas are shared freely without judgment as either good or bad. However, in dialogue, opinions, insights, and information are shared through active evaluation. Brainstorming is expansive or divergent and generates lots of ideas. Dialogue, on the other hand, is convergent and focused on progressively developing clarity and agreement. Brainstorming usually results in listing ideas and approaches that need evaluation in another session. Dialogue is focused on achieving agreement within the group and clearly defining the issue or problem that needs to be addressed. Once everyone agrees on what the problem actually is, meaningful solutions can be pursued.

If dialogue is skipped and the team engages directly in discussion to solve a problem, it may be that various members of the team have different ideas or understandings as to what the problem really is. For example, most manufacturing environments are complex, which can lead to a potentially wide interpretation of the key issues at play. Also, different team members will typically have deep expertise in their areas of responsibility and less understanding of the areas their peers lead. Therefore, without first taking the time to dialogue and verify that all agree on the nature and extent of the problem to be solved, entering a discussion to identify solutions will be much less efficient, if not outright frustrating. In the worst case, team cohesion and comradery can be damaged due to unnecessary misunderstandings and lack of alignment.

The Norming Stage

This stage is achieved when the challenges the team faced in the storming stage have been generally resolved. The major questions about roles and responsibilities have been addressed to everyone's satisfaction, and the work of the team is clear. Regarding interpersonal dynamics, team

members have become comfortable with each other. Trust among team members is finally starting to develop, and shared leadership continues to develop. Both collaboration and confidence are good, being driven by sharing ideas with increased creativity.

All this sounds pretty good, but teams very often get stuck in this phase and fail to progress to the Performing stage. As Jim Collins stated in the opening line of his book *Good to Great*, "The enemy of great is good." [4] In the norming stage, the team is in a good place, making measurable progress on its key goals, and the interactions between team members are mostly positive. When conflicts occur, there is an agreed-upon method to address and resolve them in a reasonable timeframe. The team has learned to rely on the expertise of each of its members, and roles and responsibilities are defined, and the team can become satisfied with the progress they have made. At this stage, the team is still reliant on the team leader's abilities, but his or her role is evolving to be a member of the team as much as its leader.

While teams that reach the Norming Stage have made significant progress and overcome many obstacles to their ability to function effectively, they are still only at the "good" stage. Teams that are more likely to get stuck at this stage and fail to progress to the Performing Stage or even regress to the Storming Stage include the following: [5]

- Teams that have ten or more members, because the effort to maintain strong relationships between team members becomes much harder the larger the team becomes.
- Long-term teams working on major projects, mainly because they tend to be very large.
- Leadership teams that stay intact over a long period of time because the aspirational nature of the vision and mission tends to get lost in the day-to-day focus on operations.
- Teams that have a non-aspirational mission and so they lack that special galvanizing force necessary for superior performance.
- Teams where trust is superficial, leading to a variety of dysfunctional behaviors by team members.

- Teams that have an overbearing or micromanaging team leader who is reluctant to share the leadership responsibilities necessary for empowering the team members.
- Teams that allow inappropriate behavior by certain team members to go unaddressed, which deteriorates trust and respect.

At this stage, teams can get good work done and achieve their goals and objectives. As mentioned, every team is unique and made of individuals with skills and expertise as well as shortcomings and weaknesses. For the team to progress to the performing stage, they require a special mix of factors to galvanize cohesion, commitment, and trust, which creates synergy resulting in superior team performance. These factors will be reviewed in detail in the next chapter on the Performing Stage.

In the meantime, there are several tools that can enhance the performance of teams even if they do not progress beyond the norming stage. These include capitalizing on the skills and natural work preferences of each team member, being deliberate in making the best use of everyone's time in team meetings, and having clear processes for making decisions.

Team Members and Their Unique Contributions

Every individual on the team is expected to bring technical expertise, alongside a unique perspective and experience. The team's performance is naturally enhanced when its members have complementary skills, talents, and perspectives. Therefore, it is important to know and keep track of each member's specific talents and working preferences on a team. A wide range of personality tests can be administered to understand some of the basic preferences and talents different people have, as discussed in Part I.

Whether a new team is coming together or a new member is being added to an existing team, the ideal is to achieve and maintain a complementary balance in the thinking and working approaches of the different team members. The following is just one example that describes a project team with four different types of people whose working preferences and talents complement one another, giving the opportunity for improved

performance. This is sometimes referred to as the Z-Process or the C.A.R.E model [6], where:

- C = Creative skills
- A = Advancer skills
- R = Refiner skills
- E = Executor skills

These do not necessarily represent personality types but rather working preferences that demonstrate the value of diversity in thinking skills. A team working on an issue or a problem needs one or more members with the following thinking skills to be present.

- **The Creative** person is an out-of-the-box thinker who easily generates new ideas and has innovative approaches to problem-solving.
- **The Advancer** is enthusiastic, quickly embraces new ideas, and helps build tangible structures around them by adding important details and promoting them. He or she is very good at articulating why a specific idea has real merit and is an enthusiastic storyteller.
- **The Refiner** is someone who remains skeptical regarding new ideas and who asks good questions that deserve thoughtful answers. These people are sensitive to risk factors, help the team avoid costly errors, and are essential to finalizing the path forward to success.
- **The Executor** is an action-oriented individual who is good at logistics and can efficiently organize and execute a defined project or solution to a problem.

It is important that the group members understand not only their role but also the process involved. The group starts by identifying many possible ideas. This initial stage is led by the Creative member. Once the flow of new ideas has been exhausted, the Advancer takes over and makes logical arguments to highlight one of the ideas. The Advancer encourages others to agree that they should move forward with what he has identified as the best idea or solution.

The next stage is led by the Refiner, who is the skeptic of the group and asks good questions about the idea. This person is a cautious but deep thinker, the sort who is drawn to identifying potential downsides of the proposed idea. Being sensitive to risk factors, the Refiner raises questions that the enthusiastic Advancer would likely never think of. Often, there is back and forth between these two, where the Refiner will push the idea back to the Advancer for additional information and answers to the questions raised. Finally, the idea passes through the Refiner and on to the Executor, who leads the implementation or execution process.

While the C.A.R.E. model is one example of an idealized team of four different people, it illustrates the kind of balance between team members that can bring meaningful synergy. This does not imply that there will be a smooth hand-off from one person to the next. More likely, there will be a lot of dialogue and energetic discussion by all team members to come to an agreement. Sometimes, the good questions from the Refiner will identify a fatal flaw and send an idea all the way back to the brainstorming creative process.

Most people will have a combination of at least two of these problem-solving skills, with one usually being more dominant, but they have the ability to make significant contributions at multiple stages. I have referred to these talents as working preferences, as we all have them. However, they are not intended to be limiting. During a creative brainstorming session, the Executor may have extremely valuable input to the process by helping to eliminate impractical solutions. Likewise, during the execution phase of a project, the Creative may be called on to assist in developing innovative solutions to problems when they come up during execution. It is important that all members of the team participate in every phase of a project. However, it is also very valuable to the team that specific expertise and talent are available at each phase.

As noted, this is typically not a straight-line process. Depending on the nature of the issues, this process may take multiple meetings or be done in one session. But when one stage is completed, the process must move forward. I once was in a group discussion where one of the creative members didn't want to stop developing new ideas, even though the rest of the group

was satisfied and wanted to move on. This became a problem because Mr. Creative became upset and felt slighted by the group.

This is where the team leader needs to step in, remind everyone of the process, and recognize the creative group members for their input. It is vital to the team's long-term success that everyone understands their role as well as the skills and preferences of the other members. Also, each member's contribution needs to be recognized and honored. The natural clash between the enthusiastic Advancer and the skeptical Refiner is another area that requires education and facilitation to keep harmony within the team.

Meetings, Meetings, and More Meetings

Meetings are the lifeblood of how teams coordinate, share information, develop consensus, and solve problems. Every team must have regular meetings to keep everyone up to date on progress against their stated goals, share critical information, and jointly address challenges and roadblocks. However, meetings are notoriously considered a waste of time and, at best, inefficient.

In Part Four for leaders, I go into significant detail on what makes a good meeting and how to avoid the typical pitfalls that make meetings a waste of everyone's time. However, since meetings are such a key part of creating successful teams, I want to provide a brief summary that focuses on how team meetings can be not just useful but engaging, exciting, and something that everyone looks forward to.

Other than the initial meetings described above during the forming stage, teams will generally have only a few types of meetings. The first and most important is the standing team meeting, which is generally scheduled weekly and where the entire team comes together. A second type will be ad hoc and sub-team meetings that may not be scheduled regularly but are put on the calendar as needed to address specific tactical issues. There will also be an occasional need for a strategically oriented meeting to review and dialogue on overarching issues that may affect the team.

Ground Rules for Team Meetings: No matter what type of meeting is being held, there must be an agreed set of ground rules that ensures the

value of team meetings and defines the expectations of all team members. Some typical ground rules for team meetings are as follows:

- The meeting's purpose must be clearly communicated ahead of time. This can be accomplished using an agenda or any other means, but it is critical to have the necessary people in the meeting to accomplish its stated purpose.

- Scheduled meetings need to start on time. Team members should not arrive late, as this is disrespectful to the other team members.

- Everyone in the meeting needs to participate and provide their insights, opinions, and expertise for the benefit of the team.

- Minimize distractions during the meeting. This usually means cell phones are silenced or left out of the meeting altogether. Everyone needs to stay focused and engaged during the meeting.

- The team leader or meeting facilitator can call on anyone at any time for their input on the current topic. The facilitator is responsible for managing effective participation by all team members. This includes moderating extroverts who tend to over-participate and introverts who may be shy about sharing their input.

- There needs to be a designated scribe to document agreements, action items, and decisions made during the meeting as a permanent record for the team. This does not necessarily mean meeting minutes, but documenting the essential deliverables from the meeting will be important to share with any team members who cannot attend.

- The meeting should end when the purpose of the meeting is achieved. Do not let the meeting linger on to use up the time that was allotted if the primary purpose of the meeting has been realized.

Decision Making

Another area that is very important to clarify as part of the Norming Stage is the decision rights of the team and its members. Establishing a decision-making process that is articulated and understood by all members of the

team is important. There are four approaches that can be used for decision-making in general, and each can be appropriate depending on the nature of the decision, who will be impacted, and if there are any concerns about confidentiality.

1. **Unilateral Decision:** The team leader can make the decision unilaterally without input from the team.
2. **Team Provides Input Only:** The team leader can ask the team for input on the issue and then make the decision himself or herself.
3. **Team Decision:** The team leader can bring the issue to the team for collaborative dialogue and then make the decision as a team.
4. **Delegated Decision:** The team leader can delegate the decision-making responsibility to the team or any subset of the team without participating.

Unilateral Decision: Unless there are concerns related to confidentiality, the team leader should be careful about making unilateral decisions without input from the team. This approach may not only lead to a less informed decision but can also deteriorate trust between the team members and the team leader. Even if there are good reasons for the team leader to make a unilateral decision, he or she should update the team as soon as possible so they are not surprised or find out through the rumor mill. In general, this approach can be challenging for the team's morale and should be used only when truly necessary.

For a leadership team that reports to a general manager, there may be a number of instances where unilateral decisions may need to be made or made with only limited input from one or more of the leadership team members. This usually falls into the category of personnel issues that could impact other team members, planned reorganizations that are not finalized, or legal issues.

Team Provides Input Only: In this case, the team leader meets with all team members, either as a group or individually, to get their input on the issue at hand. The leader needs to indicate that he or she wants to include the ideas, opinions, and insights of all members of the team in order to make the right decision. It must also be clear that the leader will weigh the input

from everyone and then make the decision. It is most likely that different views from the team members may not be in agreement, especially if their input is given to their team leader 1:1 rather than in the context of a team meeting. This is especially true if the subject is controversial or impacts the roles and responsibilities of some of the team members. In this approach, at least the team has the opportunity to provide their input and will feel heard, even if their ideas are not included in the final decision.

Team Decision: In a healthy team, this approach would generally be used for the majority of issues and decisions that need to be made. The purpose of the team is to assemble individuals who have complementary skills, perspectives, and insights so that the work of the team is far superior to that of a group of similarly talented people working as individuals. This includes decision-making. Also, the collective insight and judgment of the team will almost always be better than any one individual, including the team leader. The one exception would be for a leadership team where the general manager may have access to confidential information, limited to the rest of the team.

Delegated Decision: The team leader may opt for this approach due to the nature of the decision to be made and the recognized expertise of various team members that relates to the issue at hand. This may also be used by the team leader when he or she is unable to participate due to scheduling conflicts. This approach also has the benefit of demonstrating the trust that the team leader has in the members of the team.

No matter which approach is used, it is important that the team leader ensures that all team members understand which approach is being implemented and why. Of course, the normal team decision approach requires little or no explanation, as this would be the regular way the team makes decisions.

Success Factor Summary

Understanding how teams develop and function over time is crucial for fostering effective collaboration and achieving shared goals. The stages of

Forming, Storming, Norming, and Performing provide a framework for recognizing the natural progression of team dynamics. By actively engaging in dialogue, resolving conflicts, and maintaining a collaborative focus, teams can harness their collective strengths and achieve high performance. Ultimately, the journey through these stages is about building relationships, trust, and a shared commitment that enhances not only the team's output but also individual satisfaction and growth.

Assess the current stage of your team using the insights from this chapter and identify areas where your team may be struggling, whether in communication, conflict resolution, or complacency. Plan a series of meetings dedicated to addressing these challenges, focusing on establishing clear goals, roles, and values, while encouraging open dialogue.

Key Takeaways for Chapter 11: How Teams Develop and Function Over Time

1. **Tuckman's Stages of Team Development**: This model outlines four essential stages of team development: Forming, Storming, Norming, and Performing. Understanding these stages helps teams navigate the emotional and intellectual processes necessary for effective collaboration and performance.

2. **Importance of the Forming Stage**: During the Forming stage, the team establishes its mission and goals while team members get to know each other. The team leader plays a crucial role in facilitating discussions, defining roles, and creating a shared understanding of success and the values of the team.

3. **Navigating the Storming Stage**: The Storming stage often involves conflict and disagreement as team members confront challenges and clarify roles. Effective leadership is essential to encourage open dialogue, resolve conflicts, and maintain the team's focus on common goals.

4. **Significance of Dialogue**: Engaging in dialogue, rather than merely discussing or debating issues, fosters shared understanding and

collective problem-solving. This approach allows team members to share insights and clarify perspectives, enhancing collaboration and cohesion.

5. **Norming and Moving to Performing**: In the Norming stage, teams develop trust and collaboration but can become complacent. To progress to the Performing stage, teams must actively cultivate synergy, maintain motivation, and address any superficial trust issues that could hinder performance.

CHAPTER 12

THE PERFORMING STAGE

"Building a high-performance team is more than just grouping talented individuals; it's about creating a synergistic unit that excels together."

Sharon Gill

Even though this stage is traditionally considered the ultimate goal in team formation, I decided to make this a separate chapter for several reasons. First, many teams fail to reach this stage of performance. Some teams never evolve past the Storming Stage because they do not have the collective skills to manage the inevitable conflict that occurs when a group of people is learning to work together. The team leader is often the one who makes the difference for the team at the Storming Stage. Other teams may progress to the Norming Stage, but then get comfortable with making good progress and subconsciously decide that good enough is good enough.

The second reason for making this a separate chapter is that the changes needed to achieve the Performing Stage depend less on the leader and more on the emotional maturity of the team members themselves. Up to this point, the team leader has been the critical factor in successfully transitioning through the Forming and Storming stages and into the Norming stage, as previously discussed. However, the Performing Stage demands that the individual team members coalesce into a seamlessly

functioning unit where the goals and purposes of the team supersede their individual concerns.

Finally, there is a unique blend of factors that must be present within the team to facilitate reaching the Performing Stage. I believe the failure to recognize these factors has hindered so many efforts to define what makes a team able to operate at a significantly superior level compared to other teams with similar talent and expertise. These efforts have only had limited success, even though they identified key characteristics that must be present, such as good communication, trust, alignment, and transparency. While these and other characteristics are important, they are only part of the recipe for achieving peak performance. The missing element is understanding how these characteristics come together and are leveraged synergistically by the "group flow" experience. [1]

Recognizing what truly empowers teams to achieve superior performance is essential for teams in every corporate setting. Over the last 30 years, I have had the privilege of leading teams responsible for the manufacture of biopharmaceuticals. I consider the work of these teams to be of the utmost importance, as they are responsible for the consistent production of lifesaving medicines that make a difference in people's lives around the world. It is, therefore, critical to clearly identify what can fuel or limit the success of these teams.

In this chapter, I will briefly summarize the results of a recent study on team dynamics and its conclusions. Recognizing that group flow is often missed in the context of such studies warrants a detailed discussion of what group flow is, how it manifests within the team, and its power as an autotelic experience to influence both team dynamics and performance. Finally, the limitations of group flow will be summarized, as well as how it can easily be disrupted or even blocked by certain behavior patterns of team members.

While I have been inspired by the importance of leadership teams responsible for biopharmaceutical manufacturing operations, the benefits of group flow apply to all teams regardless of their industry. This is especially important when they are faced with a crisis.

Team Dynamics

Team dynamics has been well studied and generally focuses on the behavioral relationships between team members. This includes key interactions such as communication, goal alignment, transparency, and mutual accountability [2]. In addition, good team dynamics will include a clear definition of the team's norms, how decisions will be made, and how conflicts will be resolved.

A study done by MIT on group dynamics focused on the key characteristics of high-performing teams and made a somewhat surprising conclusion. Using advanced wireless proximity technology to track team members' movements and interactions, they identified that the manner of communication between team members was more important than the content of the communication itself [3]. As a predictor of enhanced team performance, those teams with the following characteristics reliably demonstrated superior performance.

- Everyone on the team talks and listens in roughly equal measure.
- Communication was face-to-face, and their conversations and gestures were energetic.
- Members connect directly with one another. Not just with the team leader.
- Members carried on back-channel or side conversations within the team.
- Members periodically take a break, go exploring outside the team, and bring information back.

This study's data established several interesting outcomes, including individual reasoning and talent being less important to team success than the manner of communication, the most important being face-to-face. This study also noted that social interactions between team members were critical to team performance.

After reviewing the report on these studies, I believe their conclusions failed to recognize the presence of group flow, where trust and communication styles, for example, were acting as group flow triggers. These teams

were likely enjoying the benefits of group flow based on a confluence of group flow triggers, resulting in heightened collaboration and creativity manifesting as superior performance. These studies focused on individual characteristics without recognizing the synergy of multiple group flow triggers at work. In essence, they focused on important parts but missed the synergy of the whole.

Individual Flow versus Group Flow

In a state of flow, an individual becomes absorbed with undivided attention to the task at hand, usually a stimulating and challenging activity that is accompanied by a sense of well-being and enhanced creativity. Goleman describes the ability to enter the flow state as "emotional intelligence at its best, or the ultimate form of harnessing the emotions in service of performance and learning." [4] As discussed in Part Two, Chapter 9, the flow experience for individuals has twelve recognized triggers, most importantly the skills-challenge balance, clear goals, and immediate feedback. Supporting triggers include curiosity, novelty, and complexity. When experienced as a team in group flow, the intensity of the experience is multiplied, and the members of the group attune to one another in subtle unconscious ways. This results in heightened collaboration, a sense of unity, and synergistic creativity. The intense social interaction within group flow is distinct from the individual experience, where at least seven of the ten group flow triggers are exclusively social in nature.

Group flow was first explored by Sawyer in evaluating the natural rhythms of successful jazz musicians and basketball players, where spontaneous improvisation and creativity demonstrated group flow in action. He further studied working professionals in a wide variety of industries and identified group flow as an essential element for teams to achieve peak performance [5].

Group Flow Triggers

Sawyer identified ten "flow enabling" conditions for group flow or group flow triggers. I have categorized Sawyer's original conditions into two

groups of five each. I call them the "Must Haves" and the "Necessary Learned Behaviors." These two groups are as follows:

Must Haves:

1. **Shared Goals:** The team's goal or purpose for coming together must be meaningful and inspiring, representing the team's ambition. This is the galvanizing force that solidifies each team member's focus on what the team needs to accomplish rather than on their individual needs or concerns.

2. **Autonomy:** Team members must have a sense of control and autonomy in their field of expertise as they contribute to the team effort

3. **Equal participation:** All team members have complementary skills of similar caliber that are recognized, appreciated, and expected to contribute.

4. **Familiarity** with one another and a clear understanding of the strengths and traits of each team member. There is common knowledge that enables seamless communication.

5. **Shared Risk:** The potential for failure is the shared risk the team embraces with the knowledge that they have the collective skills to be successful, but success is not guaranteed.

Necessary Learned Behaviors:

1. **Close listening:** This demonstrates complete engagement within the team and the task at hand, as well as respect for each team member.

2. **Complete Concentration:** This is the ability of team members to stay focused on what is important to their goals, with irrelevant issues and distractions being ignored if not actively prevented.

3. **Blending Egos:** The real sense that everyone's input is valued and appreciated. This could be described as the group becoming egoless, which requires a high degree of established trust among team members.

4. **Constant Communication:** There is open and honest communication between all team members, especially in informal settings. This includes the workplace as well as social gatherings outside of work.

5. **Keeping it moving forward:** This is the practice of accepting what other team members are saying and adding your perspective and expertise to further the dialogue for clarity. This is also known as the "Yes and" approach, which values other people's points of view while adding your own.

The five "Must Haves" are conditions that need to be in place to create an environment where superior collaboration can occur. They do not all typically appear spontaneously. However, they all need to be deliberately cultivated, explained, and reinforced. The learned behaviors are also critical to achieving group flow, but they are behavioral in nature and need to be diligently fostered and reinforced as part of the way the team functions. These will be reflected in the values and behavioral norms that the team has adopted and agreed to follow.

These flow-enabling conditions must be deliberately pursued to set the stage for group flow to occur. The more of these elements or triggers that are present, the easier it will be for group flow to occur. One of the more intriguing distinctions of group flow is the blending of egos. The review of Sawyer's work by Duncan and West [6] summarized this unique characteristic as a "continual conversation... where every contribution is valued and builds on the previous contribution." The group is in sync and acts as a collective unit rather than as a group of individuals.

The shared goals need to be sufficiently aspirational to drive the engagement of all team members and solidify cohesion. Also, the shared risk needs to be sufficiently motivating to help team members stay focused. The combination of these two preconditions (or triggers) for group flow is essentially the equivalent of the challenge/skills ratio discussed in Chapter 9 as essential for individual flow. The need for autonomy is listed as a trigger for both individual flow and group flow. However, as part of a team or group flow experience, it is focused on a team member's area of expertise and their contribution to the team effort. [7]

Neurochemistry and Group Flow

Once triggered, the flow experience is accompanied by several physiological changes in the brain, including the release of specific neurotransmitters, as listed below. Many are common to both individual and group flow experiences; however, group flow has an additional neurotransmitter, Oxytocin, which is critical to positive social interactions.

- **Dopamine** enhances one's ability to analyze and recognize patterns and helps us solve problems more efficiently. It also allows us to recognize things we might never notice otherwise. Dopamine drives humans to take risks and do new things while also increasing heart rate, blood pressure, and muscular contraction speed and force. Therefore, it makes us braver and more physically capable.
- **Norepinephrine** increases heart rate, blood pressure, muscular tone, and respiratory rate. It also releases glucose to provide readily available energy and increases arousal, attention, neural efficiency, and emotional control, thereby increasing our ability to ignore distractions.
- **Endorphins** act as a natural opiate to relieve pain and increase pleasure.
- **Anandamide** is a cannabinoid that elevates mood, relieves pain, increases our ability to link ideas together, and makes us fearless.
- **Serotonin** is a happy hormone and is released near the end of the flow experience. It is responsible for the fantastic feeling of calm and happiness at the end of a flow experience.
- **Oxytocin** is particularly important in group flow as a bonding or relational neurotransmitter.

These neurotransmitters cascade during the flow experience and balance one another, creating the characteristics of concentrated focus, enhanced problem-solving, superior creativity, and synergistic collaboration. In addition to the autotelic nature of the flow state in general, group flow solidifies the collaborative mindset of a team and establishes a pleasurable sense of unity, trust, and commitment that lasts well beyond the group flow experience itself. This is what makes gathering for team meetings something that the team truly looks forward to.

Balboa and Glaser reported on a study by eNuro [8] that identified unique neural signatures present in the group flow state that demonstrate neural synchrony between team members. This enables a "positive mental state superior to individual flow" and requires established mutual trust to be present. One of the keys to establishing this level of trust is the specific type of communication and listening that occurs when team members dialogue. Balboa describes this type of communication as transformational and rooted in sharing and discovering. This type of communication is distinctive from discussion and debate, where individuals focus on defending their point of view instead of co-creating partnership, trust, and creativity.

Group Flow Blockers

The primary hindrance to individual or group flow is the absence of flow triggers. In a group or team setting, achieving flow can be blocked by negative interactions within the group. In reviewing the ten group flow triggers discussed above, the most important is the need to have established trust (Blending Egos). Without established trust, some members of the group will likely be distracted by self-preservation instincts, which often lead to defensive arguments and conflict rather than seamless collaboration.

With each of the ten described group flow triggers, there is an implied opposite that can become a flow blocker. For example, if the shared goal is not sufficiently aspirational or the shared risk is not sufficiently motivating, many of the group flow triggers will be weak, if not absent. If one or more of the team members is disengaged and demonstrates apathy toward the shared goal, then the learned behaviors of Close Listening and Complete Concentration will be thwarted, hindering the group's performance. If this or any similar problem stems from only one or two members of the team, the usual outcome will be the expulsion of those hindering progress, especially if the shared goal is sufficiently important.

One of the more subtle indicators that a team is not functioning effectively occurs when Equal Participation (Must Have #3) is not happening. I have witnessed many team meetings where one or more of the team members aggressively dominate the discussion. This is especially a problem if the

aggressive member is also the designated team leader. The team leader must actively participate but works best in the role of facilitator, allowing the team to function mostly on its own at this stage and stepping in as a facilitator only when necessary. A truly high-functioning team is almost always self-facilitating, as the agreed norms are actively reinforced by all team members.

Limitations, Benefits, and Unique Aspects of Group Flow

One underappreciated aspect of the flow experience is that it does not last indefinitely. During the flow experience, the drain on the physical brain due to the production of complex neurotransmitters requires subsequent recovery. Ninety minutes to two hours is generally the limit that the flow state can be maintained, either for individual flow or group flow. However, the aftereffects from the flow experience are powerful in that the experience is so satisfying and pleasurable that there is a strong desire to re-engage in the same activity as often as possible.

On an individual basis, this is what leads to mastery in a given area. This mastery becomes creative genius for artists, musicians, and computer programmers. For teams, the desire to reengage with the group becomes a powerful, cohesive force that fuels great team dynamics, even outside of the group flow experience. As a result, teams that can tap into group flow regularly can significantly outperform other teams that do not experience group flow.

In the normal day-to-day activities of corporate teams, there is a general ebb and flow of challenges and pressures related to their responsibilities. In a manufacturing environment, there is a constant stream of problems and challenges. For highly regulated industries like pharmaceutical manufacturing, there is the added pressure of compliance with the expectations of regulatory bodies such as the FDA, along with the normal business pressures. In his study of group flow, Sawyer identified an important aspect of teams that work together for long periods. He

observed that after two to three years, the experience of group flow begins to fade when the team members become too familiar with each other. Flow triggers dull over time, with communication patterns becoming routine and close listening becoming less necessary.

Sawyer goes on to identify that solutions to this problem can be realized when new or unusual problems occur or if the team is reformed in some manner. Either of these can reenergize the team's attention to focus on flow triggers. Another important scenario is the appearance of a major crisis that could even threaten the survival of the team. When such a crisis occurs, the goal of the team becomes averting or mitigating the impact of the crisis.

This becomes the galvanizing force that reestablishes many of the group flow triggers, resulting in a step-function increase in creativity, collaboration, and innovation as the group addresses the crisis at hand. For example, the FDA has an escalation process for concerns regarding the quality of an operation, which starts with an initial inspection and the related observations. If not properly addressed, the continued employment of the leadership team can be at risk. When facing such challenges, the leadership team's capability to embrace group flow can be the deciding factor for heading off a major crisis before it occurs or dealing with it effectively if it occurs.

Success Factor Summary

Studies of teams that achieve superior performance often focus on the critical elements that must be in place for excellent team dynamics. However, they usually miss the synergistic effect of group flow, which empowers superior performance. The group flow experience is autotelic in nature and creates a unique mindset of unity, trust, and collaboration within the group. This also has an enduring cohesive effect on the team, even when they are not experiencing group flow.

It is important for teams to not only be aware of group flow triggers but also be deliberate in cultivating them consistently. The more of these group flow triggers that are present, the easier it will be for group flow to

manifest. If one or more team members engage in negative behaviors, it generally affects the entire group and hinders group flow.

A team that has a history of being able to tap into the benefits of group flow will usually outperform those that do not. The enhanced collaboration, creativity, and innovation that develops in the group flow state can make the difference in being able to manage or even mitigate a major crisis.

Evaluate your team's current state and identify the factors that may be hindering its progression to the Performing Stage. Consider conducting a workshop to discuss the importance of group flow and explore the ten group flow triggers. Evaluate the status of the must-haves and the team's progress in developing the learned behaviors. Encourage open dialogue about team dynamics, communication styles, and the shared goals that unite the team.

Key Takeaways for Chapter 12: The Performing Stage

1. **Reaching the Performing Stage**: Transitioning to the Performing Stage requires more than just leadership; it depends on the emotional maturity and collaboration of team members. Teams often fail to advance to this stage due to unresolved conflicts or complacency, highlighting the importance of individual accountability and group dynamics.

2. **The Role of Group Flow**: Group flow is a critical element that distinguishes high-performing teams. It occurs when team members achieve a synergistic connection, enhancing collaboration and creativity. This state is achieved through two categories of conditions necessary for group flow: "Must Haves" and "Necessary Learned Behaviors."

3. **Must Have Conditions for Group Flow:** include shared goals, autonomy, equal participation, familiarity among team members, and shared risk. These elements create a foundation for effective focus and collaboration by ensuring that all team members are aligned in purpose, feel empowered in their contributions, and understand each other's strengths.

4. **Learned Behaviors for Group Flow:** include close listening, complete concentration, blending of egos, constant communication, and the "Yes, and" concept. These elements define the way the team functions and are reflected in the values and behavioral norms the team has adopted and agreed to follow.

5. **Neurochemistry of Flow**: The flow experience is accompanied by the release of neurotransmitters that enhance focus, creativity, and collaboration. Understanding the neurochemical basis of group flow can help teams harness these experiences to improve performance and motivation.

PART FOUR

THE SUCCESS GUIDE FOR LEADERS

Introduction

The primary thesis of this book is, "The way people think is the origin of all spectacular failures and the genius of all superior accomplishments." One of the most striking examples of how this plays out in the real world occurred in 1979 when Steve Jobs visited the Xerox Palo Alto Research Center. There, he was shown their work on the Graphical User Interface (GUI) and their concept for a computer mouse. Jobs had the vision to see the potential of these inventions and ultimately incorporated them into the first Apple Macintosh in 1984. The Xerox research center had also invented Ethernet, laser printing, and a prototype personal computer, but failed to capitalize on any of these inventions. The leaders at Xerox were fixated on photocopiers and missed the strategic opportunity to capture multiple billion-dollar markets. [1]

It is vital that leaders understand not only their own thinking processes but also the thinking processes of those they lead. While exploring various factors that lead to success, it may not always be obvious that at the heart of each of these subjects are the thinking processes involved.

Throughout this section, I will explore the importance of thinking strategically about everyday activities, such as ensuring meetings have value and driving alignment through regularly speaking about the organization's mission. I will also explore some "must-haves" that are critical to the

success of every leader, including self-awareness and the ability to foster trust within the organization.

Finally, I will explore the importance of storytelling, which can be a vital leadership skill for helping everyone in the organization see what may be possible. This can energize the creativity and innovative thinking that may be necessary if the organization is to make progress on its vision.

A successful leader must be able to think beyond what is obvious while helping people stay grounded in today's reality. One of the most important tools a leader can use regularly is asking good and useful questions. Throughout this discussion on leaders, I include examples of asking good questions to understand what people are thinking, clarify what is not obvious, and gain insights for both the leader and those he or she leads.

CHAPTER 13

BUILDING SELF-AWARENESS

"It is wisdom to know others; it is enlightenment to know oneself."

Lao-Tzu, Chinese philosopher

Self-Awareness, The Antidote to Unconscious Leadership

An unconscious leader is generally unaware of their own behaviors and emotional reactions. This can lead to reactive, emotional, and sometimes unintentionally negative leadership behaviors. During my career, I have worked with several colleagues who profoundly lacked self-awareness. Ironically, they were extremely focused on themselves, their own needs, and plans. This blinded them to the needs of others and the impact their behavior was having on those around them. As a result, they were perceived as uncaring, which demotivated their team.

Self-awareness is one of the most important qualities that you can have as a leader, and developing self-awareness is important to both your personal and professional life. Self-awareness is a key aspect of emotional intelligence, and it is a cornerstone of successful interpersonal relationships. As mentioned in Part One, it is important to be aware of one's own feelings as they occur and be capable of managing them. This is the interplay between the rational mind and the emotional mind, where one can observe what is happening and consciously resist being caught up in the flow of emotions at play.

The ability to "sense" your own emotions in real-time as you are experiencing them is the key to being able to name them and then manage them. Often, there are body sensations that signal strong emotions. Learning to recognize these sensations and name the associated emotions is critical to self-awareness and self-governance. Some examples of primary emotions and their associated body sensations include:

- **Fear:** Can trigger a racing heart rate, rapid breathing, and tingling or trembling
- **Anger:** Tightening in the chest, clenched fists, increased heart rate, flushed face
- **Sadness:** Heaviness in the body, feeling tired, having a drooping face
- **Happiness:** Sense of lightness, joyful, expansive, smiling

The ability to recognize when you are angry or anxious, as well as what triggered these emotions, allows you to think through how to respond rather than just reacting to the situation without thinking.

An important aspect of self-awareness is the ability to sense how your behavior is affecting those around you. This is sometimes referred to as social awareness and will be discussed in more detail later. However, what you say and, even more importantly, how you say it will make a significant difference in the minds of those listening. A thoughtful, calm, and respectful response will be received quite differently than if you just react out of whatever emotion has its grip on you.

What Is Self-Awareness?

Self-awareness can be measured by the alignment of how you see yourself, your behavior, and your leadership style with how others see and experience you. It seems that the higher you go in an organization, the more isolated you can easily become. People want to please the boss, so there is a natural reluctance to bring you bad news, especially if the bad news is about you, your behavior, or your style of leadership.

I was responsible for a very large capital project to build a new pharmaceutical manufacturing site. This was a significant challenge as my leadership team didn't have any experience with such a project. To make matters worse, I felt that some members of the team had their own agendas that would potentially impact our success. We had spent a lot of time defining the goals of the project, and I believed everyone was committed to working diligently to meet them.

One day, at a team meeting, it was announced that we could expect significant cost overruns. This was the first time I heard of this, and it was not the time or place to make such a proclamation. My behavior at that moment was less than emotionally intelligent. I made it clear that our objective was to meet the stated goals for both schedule and cost. To emphasize the point, I spoke in a loud voice and pounded my fist on the table. The room went silent for a long moment, and then we moved on to another topic. At that moment, I thought I was enforcing accountability, but I failed to see the fear I was instilling in the team.

Some time later, in a one-on-one meeting with one of my direct reports, she commented on my behavior and the effect it was having on the team, specifically addressing the table pounding when I was upset. This feedback helped me to develop greater self-awareness. I could see the negative effect my behavior was having. I committed myself to never doing that again. There are many better ways I could have handled that situation, such as suggesting we address that subject in another focused meeting with a smaller group. Another approach that I pursued in subsequent meetings was to practice asking curious questions. This has a significant calming effect when the discussion becomes heated and opens the door to dialogue, which is focused on clarifying and gaining agreement on the actual problem at hand.

Social awareness, or social competence, as mentioned, is another aspect of self-awareness. It is also a critical ability for leadership success and interpersonal effectiveness. This is the ability to understand other people, what motivates them, and to work cooperatively with them. It includes the capacity to recognize and respond appropriately to their moods, emotions, and temperaments.

There is a tight relationship between listening skills, which I covered in Part Two, and social awareness. Successful listening is focused on what people are saying and following their logic in real-time. It is critical to avoid getting lost in your own thoughts and ideas about what is being said. Poor listening skills create a blind spot in social awareness. I had a colleague who missed many social cues because he was so focused on his own thoughts and not the flow of conversation in team meetings.

A real-life test of your social awareness skills is the ability to calm negative emotions in others and point them in a more positive or useful direction. The first challenge is seeing the situation from a bigger perspective and not allowing yourself to be entrained by someone else's emotions. To accomplish this, you need to be "other-focused," as a leader should be, and think about how to effectively diffuse or manage the situation, not just react.

For example, a good approach with someone who is angry or upset is to first distract them with a good question. This can be as simple as asking, "Can you tell me why you are upset?" or "What can I do to help?" Then, it is important to empathize with their feelings and help them see that their concerns are legitimate and addressable. Finally, draw them into an alternative focus that has a positive range of feelings, such as the possible solutions to whatever is upsetting them. This is a skill that can be developed but takes practice and commitment.

For example, the behaviors of someone who has a high level of self-awareness include being considerate of the needs and feelings of others. Such a person takes responsibility for their own mistakes and is humble about their strengths, never thoughtless in responding to others, and recognizes how their words and actions affect others. [1]

You are simply more effective in a leadership role when you understand your internal state, as well as the emotions of those around you.

Barriers to Building Self-Awareness

- Not asking for feedback.
- Not listening to the feedback once it is given.
- Refusing to understand feedback when received.

The problem is one of focus. Many times, we face a job that is demanding, stressful, and all-consuming. This leaves very little space for taking the time to evaluate your leadership style. However, not asking for feedback leaves you in the dark about your own shortcomings. No one is perfect, so there is always the opportunity to improve your leadership style to be more effective.

It is important to be deliberate and systematic in seeking feedback on oneself. It can easily feel awkward for both parties involved to ask your direct reports or colleagues for their input and evaluation on how you are performing as a leader. This is why a systematic approach is preferred, and it is part of your normal business process. This establishes the expectation that feedback will be requested, so it does not come across as a surprise. However, too often, this becomes an HR-driven process based on generic questions whose answers rarely provide any real insight. For a better approach, see the section below on How to Develop Self-Awareness.

Sometimes, feedback can signal a significant lack of self-awareness. The following responses would be such a signal: [2]

- You often appear to be defensive and respond to others as if you are under attack.
- Your actions are unpredictable, and therefore, you create an environment of distrust.
- You overestimate your value to the organization and tend to take credit for the accomplishments of others.
- You offend others without knowing it and are unaware of the impact of your own behavior.

How well do you know yourself? What are your hot buttons? What sets you off emotionally?

For the classic type A personality, it seems that the following are often triggers for emotional responses:

- Perceived incompetence of others.
- Perceived inability of others to be decisive.
- Perceived inability of others to stay focused on the topic at hand.
- Perceived lack of urgency to address the problem at hand.

All of these have a common element: impatience with others.

One of my hot buttons is pushed when I have important and serious work to do, and it seems that people are playing games or trying to work their own agenda at my expense. My natural response is to become aggressive, defensive, and unpleasant. This is me being impatient, task-focused, and insensitive to how my behavior was affecting others. Over time, and with genuine feedback from trusted colleagues, I could see that this impatient behavior was not helpful. It was only exacerbating the problem. I needed to enroll my associates in what I needed to get done, not create more division and hard feelings. The solution was to focus on being patient and asking good questions to understand the other person's concerns. Taking some time to explore mutual needs and seek common ground could greatly accelerate the progress I was after. Even if this effort was a failure, at least this approach didn't damage relationships that may be essential to future efforts.

Unfortunately, many times, leaders have an unrealistic concept of themselves. They are not aware of either their strengths or weaknesses. Most people have encountered a leader who is completely unaware of a glaring weakness. This lack of self-awareness often leads to disengaged employees and derails important work.[3]

How to Develop Self-Awareness

Here are four ways to develop greater self-awareness. Keep in mind, however, that this takes time and effort.

1. **Know Your Strengths and Weaknesses** – There is a wide variety of tools that you can use to identify your natural areas of strengths,

preferences, proclivities, and weaknesses. The Personalysis Test [4] was very helpful in the early stages of my career and provided an easy way to understand not only my work preferences but also what was important to others in doing their work.

You can explore various tests to gain insight into your natural thinking processes and work preferences. Some are complicated, while others seem more straightforward and easier to understand. What they typically do not measure is the wealth of experience and learned behavior that you have accumulated over time. Through a variety of these tools, I learned that I have a blind spot related to risk tolerance. In other words, I am not good at seeing or sensing the potential risks associated with a decision or course of action. As a result, I determined that I needed to get the input of others before I acted on an important decision. I have often been surprised at the insights I gained that helped me avoid potentially costly mistakes.

2. **Reflect on the impact you are having on those around you.** How does your behavior influence your team? A good method to build some time into your day for reflection is to keep a journal. At the end of the day or the end of the week, summarize the meaningful moments you experienced. What worked well for you, and what didn't seem to work so well? Was a particular day stressful? How did you handle that? Was there conflict? How did you manage that? Were you triggered during the day, and what happened next? Were you proud of any moment you recall, or are there situations you wished you had handled differently?

3. **Become other-centered** and focus your attention on those in your sphere of influence. Learn to respond thoughtfully in the moment and not just react to what is happening. Even if one of your "hot buttons" is stepped on, you can learn to recognize the emotions building in your body physically, then take a deep breath and think about how to respond. Focus on the other person and become curious about why they said what they did or why they behaved the way they did. Remember that we are all emotional beings and that our emotions are contagious. You can acknowledge

that someone is angry, but you do not have to be caught up in their anger. You can choose your response.

4. **Ask for feedback.** Self-aware leaders understand their own emotions as well as how their behavior affects those around them. However, it is difficult to get to that place of understanding unless you solicit feedback from those around you. This is best done in such a way that no one feels they may be "caught out" for giving their honest feedback. Have a trusted colleague collect the feedback and eliminate the names. It is also more useful to craft a specific set of questions for at least five people to respond to rather than the open-ended "What do I do well?" and "What is the one thing I could do to improve?" The following are some examples of specific questions that will provide useful feedback to help you build self-awareness.
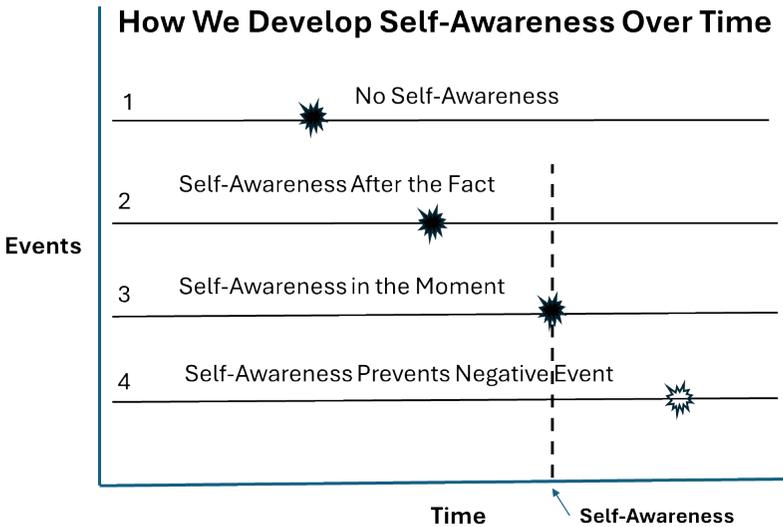
    *   How well do I handle conflict when it arises in our team?
    *   How well do I handle conflict when I am directly involved?
    *   Do I come across as open-minded to the ideas of others, or do I appear opinionated and closed-minded? Can you provide an example?
    *   Do you find it difficult to give me negative news or disappointing updates?
    *   Do you find it difficult to disagree with me? Can you provide a specific example where I have not been receptive to your ideas or opinions?
    *   What kind of climate have I created for our team? Is there openness and trust or not?
    *   Describe the level of fear that you believe exists in our team.
    *   How well do I listen when others are speaking?

Asking for feedback from the people around you allows you to see your behavior from their point of view. Also, it can identify weaknesses you may not see or highlight issues you would prefer to ignore.

After receiving feedback, what you do with it will make all the difference. It is important to realize that you are soliciting the opinions and perceptions

of others. Feedback is a gift that needs to be taken seriously. However, it needs to be thoughtfully analyzed. This is why getting feedback from as large a group as possible is most helpful. This could include direct reports, members of your team, and colleagues. Look for what is consistent in the feedback. Are there any outliers? What are the key learnings for you? What, if anything, is a surprise?

Once you have analyzed the feedback, you need to decide what it means for you. What changes do you think you should make? What is your strategy to take this information and really use it to become more self-aware and, therefore, more effective in your leadership role? Do you need to make agreements with anyone to help you manage your impact on others? Who will you be accountable to for the changes you need to make?

How We Develop Self-Awareness Over Time

1   No Self-Awareness

2   Self-Awareness After the Fact

Events

3   Self-Awareness in the Moment

4   Self-Awareness Prevents Negative Event

Time   **Self-Awareness**

It takes time and effort to build self-awareness; however, making a concerted effort over time will pay huge dividends. Do not get discouraged if you miss opportunities to demonstrate improved self-awareness. This is like learning a new skill that takes thought and focused effort over time to build. The chart above shows an idealized progression from having no self-awareness to gradually recognizing that you are about to cause a negative event. Having a good sense of how your actions are affecting those around

you allows you, either in the moment or ahead of time, to adjust your own behavior to maximize your effectiveness. Also, you can enlist others to help you by appropriately pointing out when you demonstrate behavior you wish to change.

Example: One leader acknowledged to me that he knew his propensity to dominate the conversation in team settings, but was surprised by the feedback on how this affected the team. The members of the team indicated they didn't feel comfortable interjecting their ideas or comments while he was talking virtually nonstop in some of their team meetings. As a result, important issues that needed resolution were not brought up, and many good ideas were never shared.

Based on this feedback, the leader changed the structure of their team meetings and indicated that he expected participation from all members of the team. While this was positive, he also missed the opportunity to forge an agreement with his team that whenever he reverted to his old behavior and started on an extended discourse, someone on the team was authorized to "raise a flag of surrender." This would be a reminder that he should stop talking and invite others to speak. He didn't think of it, and apparently, no one on the team was brave enough to make that suggestion. Of course, this kind of agreement can only be forged in an environment of trust, and the leader must be willing to be vulnerable. However, this kind of agreement helps to build trust as it sets ground rules, clarifies expectations, and builds cohesion within the team.

As people, we are all emotional creatures. We typically want to look good, be in control, and do the right thing in every situation. Often, we can become blind to our own faults and foibles. This is why we need input from others we trust to provide valuable insights into what we can change to be more effective. No one is perfect, and we all have areas we could improve in. This means we should not be reluctant to ask for feedback. However, once feedback is received, it must be taken seriously and put into action.

Success Factor Summary

Self-awareness is not just an individual asset; it is a critical component of effective leadership that fosters healthier team dynamics and relationships. By understanding and managing our own emotions, we can better navigate the complexities of interpersonal interactions and create an environment where team members feel valued and heard. The journey to greater self-awareness requires continuous effort, an open mind to feedback, and a willingness to change. Leaders who cultivate this vital skill not only enhance their own effectiveness but also set a powerful example for their teams, ultimately leading to a more engaged and productive workplace. Recognizing that self-awareness is an ongoing process will empower leaders to adapt and grow, benefiting both themselves and their organizations in the long run.

Take proactive steps to enhance self-awareness by implementing a feedback loop within your team. Schedule regular check-ins where you ask specific questions about your leadership style and behavior. Additionally, keep a reflective journal to document your experiences and emotions, focusing on what worked well and what could be improved. Use this information to create actionable goals for your personal development.

Key Takeaways for Chapter 13: Building Self-Awareness

1. **The Importance of Self-Awareness**: Self-awareness is a crucial skill for effective leadership and is foundational to emotional intelligence. It involves recognizing one's own emotions, understanding how they impact behavior, and managing them in a way that fosters positive interactions with others.

2. **Social Awareness**: In addition to understanding oneself, social awareness, or the ability to perceive and respond to the emotions and motivations of others, is vital for leadership success. This skill enhances interpersonal effectiveness and helps in navigating complex social dynamics within teams.

3. **Feedback as a Tool for Growth**: Actively seeking feedback from colleagues and direct reports is essential for developing self-awareness. Leaders should ask specific questions to gain insights into their behavior and its impact on others, acknowledging that feedback is a valuable tool for personal growth.

4. **Barriers to Self-Awareness**: Common barriers include not seeking feedback, being defensive when receiving it, and having an unrealistic view of oneself. Recognizing these barriers is the first step toward overcoming them and improving one's leadership effectiveness.

5. **Developing Self-Awareness**: Building self-awareness requires deliberate effort over time. Techniques include reflecting on personal strengths and weaknesses, maintaining a journal to track behaviors and emotions, and fostering an other-centered mindset to enhance empathy and understanding toward team members.

CHAPTER 14

WHAT MAKES A GOOD MEETING?

"When leaders know how to lead great meetings, there's less time wasted and less frustration. We have more energy to do the work that matters, realize our full potential, and do great things."

Justin Rosenstein

How many times have you sat in a meeting and wondered why you were there? When was the last time you thought a meeting was a good use of your time? I have been in meetings that were so boring that one of the attendees actually fell asleep. Everyone noticed once he started snoring!

There is an endless supply of articles and books on how to make the meeting process a more meaningful and valuable use of everyone's time. Numerous recommendations are made on how to structure meetings, prepare for meetings, and run them for better outcomes. However, in a Harvard Business School survey involving 182 senior managers in a range of industries, 71 percent said meetings are unproductive and inefficient. [1]

The fact is that meetings are essential to business communication and connection. Meetings represent opportunities to solve problems, create alignment, resolve differences, develop strategies, plan for the future, communicate critical information, and build camaraderie. This is what good meetings can and should do.

So, why are so many meetings disorganized, poorly run, and held at the wrong time? I believe the answer is primarily due to a lack of thoughtfulness and structure, as well as poor leadership. This is especially true of standing meetings, which happen week after week.

Meeting Types and Structure

First, the purpose of any meeting must be clear, or it should not happen. It is important to state the purpose at the beginning of every meeting and clarify the deliverables. An agenda can meet this need for many meetings, but Patrick Lencioni, in his book, *Death by Meetings*, recommends that for regular staff meetings, the agenda be created and agreed to after a "lightning round" where meeting participants briefly share their current challenge or pressing issue. [2]

Second, the type of meeting must be made clear. There are primarily three different types of meetings: informational, tactical, and strategic.

Informational meetings are used to communicate important information and get feedback from the participants. These types of meetings are critical for organizational change management, such as leadership changes, reorganizations, the rollout of new programs, or any event with a significant impact on the business.

Tactical meetings are the most common and focus on decision-making and addressing daily challenges. They are critical to keeping the business moving and involve developing action plans to achieve short-term goals or seize new opportunities. An example is dealing with an unexpected equipment breakdown and how to return to normal operation. Another is a key operator who is out sick with a severe illness. This may require moving qualified personnel from another shift to fill the gap. Standing staff meetings or team meetings are necessarily tactical in nature and are typically held weekly or bi-weekly. They are focused on clarifying the present state of the operation and making short-term plans to address current issues. Informational and tactical meetings can be combined, but need to be organized into distinct segments to avoid confusion.

Strategic meetings have a different focus as they are future-oriented. Strategic meetings should be held less frequently as they address broad issues and long-term plans. Examples would be anticipating new technology that may either be disruptive or an opportunity to improve the operation. Such discussions would include what is needed to prepare for such a situation, where hiring plans might be adjusted to identify candidates who have familiarity and skill with such technology. This could include brainstorming on opportunities as well as potential threats and preparing contingency plans for many scenarios, from natural disasters to cyber-attacks.

In any organization, there may be a large number of potential strategic issues that need to be addressed on a scheduled basis. In the meeting model proposed by Lencioni [2], he suggests holding monthly or bimonthly strategic meetings. However, it is important to allow sufficient time for deep discussion, so the number of topics should be kept to one or two. With such a schedule, 12 to 24 strategic topics could be properly addressed in the calendar year.

There is a famous saying, "If you do not know where you are going, any path will take you there!" This is an important concept regarding developing strategies for your organization. In the next chapter on the Vision Stack, I show that a tight relationship exists between your organization's vision and its overall strategy. The overall strategy is usually composed of many subparts that work together to move the organization in the direction of its vision.

Finally, it is a mistake to combine tactical and strategic discussions. There is a significant difference in the thinking required for effective tactical dialogue and decision-making versus the thinking necessary for strategic thinking and long-term planning. When the two are combined into one meeting, cognitive dissonance results, creating confusion and inefficiencies. An example is a project meeting called to develop strategies for containing a projected cost overrun, where a member of the team brings up an error in the design that requires the addition of a major piece of equipment. Trying to address both issues in the same meeting would be frustrating and even disorienting.

Strategic thinking involves trying to anticipate the future; however, it is natural to drift into tactical thinking, which is more comfortable and concrete. A meeting focused on discussing, reviewing, and dialoguing on a strategic topic will provide huge value in the long run, but everyone needs to fight the tendency to start discussing tactical issues. It is the job of the team leader to keep everyone on track and table tactical issues for a future meeting when they are brought up.

Ground Rules for Meetings

Every team needs to discuss and agree on the ground rules for their meetings. This is especially important for teams that will be together for extended periods of time. The ground rules, sometimes called team norms, represent what each member of the team expects regarding the behavior and contribution of all the other team members.

While every team can have its own unique set of rules, there are some common elements that will provide solid structure and improved functionality to any meeting. These include the following:

1. **The Parking Lot:** This is an essential element that can keep a meeting on track and focused on its purpose. In a tactically oriented meeting, strategic issues are often brought up. The Parking Lot is used to capture the idea for the next strategy meeting without disrupting the tactical discussion. The reverse is also true when tactical issues come up in a strategy discussion. A tactical issue can be captured for resolution in the next staff meeting.

2. **Agreement on Tech:** We live in a world rife with distractions. In the chapter on Distractions in Part Two, I reviewed methods for managing your tech effectively as a person. The same methods apply to avoiding distractions in a meeting. Everyone should agree to either turn their cell phones off or have them on silent. Realistically, if someone receives an important call, it is appropriate for that person to step out of the room if they feel they need to take it. However, no one should be using their phone in a meeting to check emails, stock quotes, or play games while the meeting is

underway. Laptops are a more complex issue. Many people like to take notes on their laptops during meetings, or they are used to access information that may be needed in the meeting. The group needs to agree on a "laptop etiquette," for example, where notifications are turned off, and people are expected not to use it to check emails, etc., during the meeting.

3. **Meeting Minutes, Decisions, and Action Items:** In my experience, laboriously capturing everything discussed in a meeting is not worth the effort. Hardly anyone reads them, especially the longer they are. However, a "Meeting report" or meeting summary is a useful way to document the decisions made and the action items that will need follow-up. Action items need to be assigned to an individual accountable to the group to report back on progress in future meetings. This is the record of the deliverables from the meeting and can be shared with all stakeholders.

4. **Engagement and Participation:** Everyone in the meeting has talent and expertise as well as a role and an area of responsibility. Also, everyone has an important perspective on what is being discussed. Therefore, everyone should be expected to contribute to the purpose of the meeting and participate in the discussions. Some people may be naturally reluctant to speak up and share their perspectives and insights. These are often the most thoughtful individuals, and their contributions can be very important. Whoever has the role of facilitator in the meeting needs to deliberately invite them to participate, if necessary.

This is certainly not a definitive list of ground rules, but these are important things I have seen as lacking in many meetings I have attended. Of course, there are a number of obvious expectations, like being on time, respecting each other's point of view, and being collaborative. Behavior that denigrates trust and team cohesion should not be tolerated.

The Right Timing and Frequency for Meetings

The question of *when* to hold meetings has not been given significant thought. In his book, *When: The Scientific Secrets of Perfect Timing*, Daniel Pink makes it clear that the majority of people are at their most productive in the morning hours. He also warns that what is often referred to as the afternoon slump is a dangerous time to make important decisions. [3]

It is common for knowledge workers to have back-to-back meetings all day long, leaving little time for them to do their "real" work. Trying to catch up after hours or at home is unsustainable and can cause burnout, frustration, and even resentment. Nicole Herskowitz, VP of Microsoft Teams, commented that "meeting overload and inefficient meetings are draining our time and energy, posing a threat to innovation and business outcomes." [4]

A 2022 MIT survey of 76 major companies experimented with "no-meeting days" because of widespread frustration with excessive meetings that were deemed a waste of time. [5] Companies that experimented with "no-meeting days" reported improved communication, engagement, and satisfaction, as well as an increase in productivity. [6]

While reducing the frequency of meetings and implementing more rigorous criteria for justifying holding meetings in the first place has many positive effects, a more strategic approach would also concentrate on when is the best time to schedule them. If people are in their most productive and alert state of mind in the morning hours, leaders would be wise to strategically make the most of this valuable period. This timeframe of enhanced productivity is a true resource for tackling complex issues both individually and in a meeting or group setting.

Meetings are important; however, I suggest leaving at least two or even three mornings a week meeting-free so that individuals can do deep work on their own during their most productive time of the day. Then, strategically schedule the most important decision-making meetings on the other mornings of the week. This cadence would maximize the most productive time of the staff and provide the best outcomes for both solo work and important group meetings.

The obvious question is what to do with the rest of the day and how best to manage the inevitable afternoon energy slump. First, there are many strategies for contending with diminished alertness in the afternoon. Do not make important decisions in the afternoon unless it is absolutely necessary. Even then, be cautious about implementation. A 15 to 20-minute power nap can be a big help to minimize the afternoon slump, but it is likely not possible for most people. Other approaches include a 20-minute workout with aerobic exercise. A walk outside in the sunshine can be a significant help. Have a mid-afternoon snack, take a break, and make sure you stay hydrated. One additional strategy to make excellent use of that time when your energy is lower and your brain is a bit fuzzy is to take on a creative task or even deliberately schedule a brainstorming meeting in the early to mid-afternoon. [7]

People's most creative thoughts occur not when they are focused on work-related tasks but more often when they are unfocused or in what we refer to as downtime. This is when we take a walk in nature, play with the dog, relax with a book, or exercise. [8] Making use of the natural occurrence of "mind wandering" in the afternoon by engaging in brainstorming meetings or focusing on creative tasks may be the best solution. [9]

Making a Meeting Engaging: The Leadership Imperative

One of the team leader's most important jobs is to ensure that team meetings are engaging, dynamic, and interesting and that they achieve their purpose. The team leader has the dual responsibility of participating in the meeting and facilitating it.

When a leader calls a meeting, it would be wise to understand the cost of that meeting, either in terms of the collective salaries of all involved or the time that the meeting is taking away from the "real work" of each individual. Each member of the team has skills, experience, and insight to contribute. The facilitator's responsibility is to maximize the realized value of the time the team spends together.

The leader/facilitator needs a variety of skills to consistently orchestrate effective and efficient meetings. In addition to clarifying the meeting's purpose and ensuring adherence to the ground rules, the facilitator needs to be skilled in the following areas:

- Managing the participation of all team members. Appropriately invite those who are reluctant to contribute to give their input and manage the extroverts who over-participate without damaging relationships.

- Encourage dialogue rather than debate, and model the "Yes and" approach for greater collaboration and discovery of creative solutions.

- Ask good questions of individuals to encourage participation. Also, when a team member asks a question of the leader, rather than giving an answer, the leader has the opportunity to invite the group to answer it to foster collaboration. It is sometimes surprising that members of the team may have a better answer than the leader.

- Ability to drive decisions and keep the meeting on track. The skill is particularly crucial when the dialogue has become circular and the leader needs to succinctly summarize the collective input for agreement and then move on.

- If the meeting is a problem-solving effort, consciously follow the CARE model discussed in Chapter 11 on Team Members and Their Unique Contributions. This requires that the leader be skilled in the problem-solving process and aware of the capabilities and preferences of each of the team members.

- Ability to verify consensus and ensure that everyone has had the opportunity to input their ideas. This is the critical skill to ensure that even those whose ideas were not included in the final decision agree to support the decision of the group.

- The ability to recognize and moderate disagreements within the group when they arise and seek common ground and understanding. This is the critical skill of conflict resolution.

This summary is not intended to be comprehensive, but highlights some of the most important skills that can significantly enhance the effectiveness and efficiency of meetings. Many courses and workshops exist where you can learn and practice facilitation skills, participate in role-playing, and sharpen these important skills. Like it or not, meetings are part of the lifeblood of business. Team meetings are especially important as they happen regularly and represent a significant business investment as well as a valuable opportunity to capture the synergy of enhanced productivity and creativity of a superior team.

Success Factor Summary

Meetings are a fundamental aspect of organizational communication, yet they often fall short of their potential due to poor structure and lack of purpose. By fostering a culture of effective meetings, leaders can maximize productivity and engagement, turning them into valuable opportunities for collaboration and innovation. Implementing well-defined structures, ground rules, and facilitation skills can transform meetings from mundane obligations into dynamic forums for problem-solving and strategic planning. Recognizing the importance of effective meetings is crucial to harnessing the collective strengths of teams, ultimately leading to enhanced performance and success.

Evaluate your current meeting practices and identify areas for improvement. Consider implementing a structured approach by defining the purpose and type of each meeting, establishing ground rules, and scheduling meetings during peak productivity hours. Encourage team members to provide feedback on the effectiveness of meetings and adjust practices accordingly to enhance engagement and outcomes.

Key Takeaways for Chapter 14: What Makes a Good Meeting?

1. **The Necessity of Meetings**: Meetings are essential for effective business communication and collaboration, serving as platforms for problem-solving, strategy development, and team building. However, many meetings are viewed as unproductive, highlighting the need for improved structure and purpose.

2. **Types of Meetings**: Distinguishing between informational, tactical, and strategic meetings is essential for setting expectations and achieving desired outcomes. Each type serves a distinct purpose and requires a different approach to ensure its objectives are clear and achieved.

3. **Ground Rules for Success**: Establishing clear ground rules or norms for meetings helps maintain focus and encourages participation. Elements such as the "Parking Lot" for off-topic discussions, agreement on technology use, and documenting actionable items and decisions are essential for productive meetings.

4. **Timing and Frequency**: The timing and frequency of meetings significantly impact productivity. Scheduling important meetings during peak productivity hours (typically mornings) while allowing for "no-meeting days" can enhance focus and reduce burnout among team members.

5. **Leadership and Facilitation Skills**: Effective facilitation is critical to successful meetings. Leaders should cultivate skills to manage participation, encourage dialogue, drive decisions, and resolve conflicts while ensuring that all voices are heard and valued.

CHAPTER 15

THE VISION STACK

"Vision without execution is hallucination."

Thomas Edison

I n the early 1990s, the fall of the Soviet Union triggered a spike in global instability. As a result, the U.S. military developed a concept called VUCA—Volatility, Uncertainty, Complexity, and Ambiguity—to establish a framework for how to deal with this situation. The Army War College studied leaders who did the best in a VUCA environment and concluded that "they had the capacity to create and communicate a story of the future, a story broad enough to adapt to changing circumstances, yet accurate enough to yield a competitive advantage." They called this visionary leadership. [1]

The business community quickly embraced the concept of VUCA during the first decade of the 2000s in response to the rapid development of modern technology, including the maturing of the internet and the associated, sometimes overwhelming, data accessibility and instant communication. Since that time, VUCA has been picked apart, studied, and analyzed for how to effectively respond in the midst of complexity and chaos. Today's business environment is being heavily impacted by the growing number of VUCA elements, including rapid changes in technology, geopolitical tensions, economic disruptions, and evolving consumer preferences. These current trends will likely only accelerate in the near future with the rapid development

of artificial intelligence and robotics. Therefore, it is more relevant than ever for businesses to embrace the principles of responding effectively in a VUCA environment.

Here is a brief explanation of each element in VUCA and some useful actions in response to the challenging situations they represent. [2]

Volatility: The experience of rapid, unstable, and significant change. Seemingly, small events can produce large changes. Effective approaches include:

- Strategically develop contingency plans and stockpile resources.
- Develop a mindset to embrace change and sift incoming raw data for what is meaningful. Implement technology to assist with efficient data analysis.
- Communicate often with clarity and direction.

Uncertainty: Events and their outcomes become unpredictable. This often includes novel circumstances where previous experience may not apply. Effective actions include:

- Be flexible and embrace the idea this may be a completely new situation where previous experience does not apply.
- Gather as much information as possible and use it to try to understand this new situation.
- Get creative and pursue out-of-the-box solutions.

Complexity: Situations where issues are obscured by layers of factors that seem unrelated but may actually be interconnected. Potential solutions can have significant unintended consequences. Effective approaches include:

- Knowing where the expertise and talent exist in your organization and nurturing it deliberately.
- Deferring to the expertise that is relevant to a complex situation.
- Resist the temptation to try to simplify a complex issue. Instead, work to understand it.
- Ensure your organization is highly collaborative and technologically capable.

Ambiguity: Situations that lack factual clarity and can be easily misinterpreted. Effective approaches include:

- Develop the ability to ask good questions. Be curious. Be patient.
- Train your people to engage in dialogue to clarify ambiguous situations.
- Make progress based on what you know and learn along the way.

I use this review of the VUCA concept as an introduction to the Vision Stack, as it effectively illustrates the necessity of having all elements of the Vision Stack working together. Because the vision statement is future-oriented, it can be challenging to develop a meaningful vision that everyone agrees with, especially in light of the very real VUCA elements that most organizations are experiencing today. The Vision Stack chart below shows an important relationship between an organization's vision, mission, values, strategy, and goals. As you go down this V pattern, the statements become more specific and actionable. As you go up in this stack, the statements are less specific but must become more inspirational. I refer to this as the "Vision Stack" because the effort to coordinate direction (vision of the future), purpose (mission), and the strategic actions needed to move in the direction of the future state must begin with the Vision Statement.

In the midst of all the daily challenges, the ability to see beyond the here and now is an essential skill every leader needs in order to grow his or her organization. A proper vision is not an unrealistic dream, but a practical potential future state. It may take years to achieve, but it is doable. Properly developing such a vision requires a deep understanding of the current state of the organization, both its current limitations and its future potential. By definition, a leader takes people somewhere or leads them in pursuit of a goal or destination.

A visionary leader needs to have clarity on the following:

- Complete understanding of where the organization is today in reality
- Clarity on the organization's current limitations as well as its opportunities.

- A clear vision of the potential of the organization.
- An appreciation of the challenges the organization faces in growing and realizing its future potential.
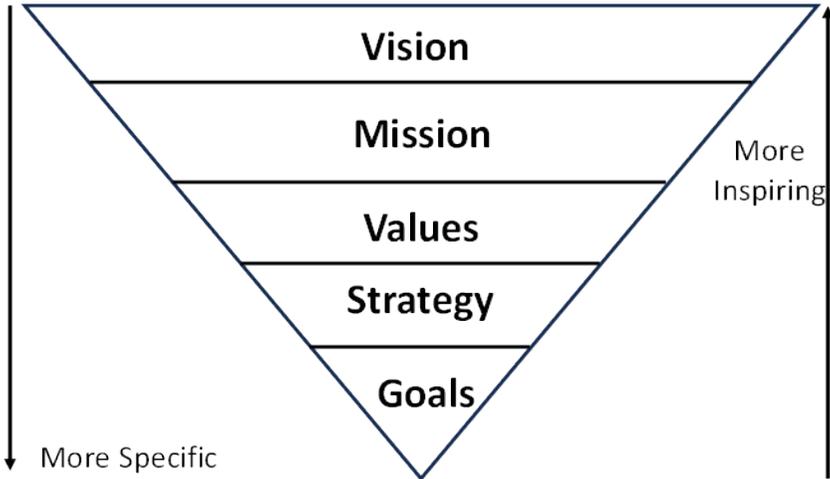
The Vision Stack: Relationship between Vision, Mission, Values, Strategy, and Goals.

Developing a Vision Statement – Where Are We Going?

The most challenging item to get right is the vision for the organization. By definition, a vision statement looks far into the future and defines what the organization is striving to become and where it is going. It is an aspirational statement meant to inspire, encourage, and engage the members of the organization. A well-written vision statement defines not only what the organization will be like in the future but also the opportunity for the members of the organization to grow with it. This drives employee engagement as they see the opportunity (even the necessity) to learn new skills that they can leverage to build and grow their careers. It is an aspirational statement that cannot be achieved in even a few years, and it is primarily directional, open-ended, and not meant to be a "final destination." In Part Five, I develop a specific example of how the Vision Stack can be used for a pharmaceutical manufacturing facility.

A useful vision statement is focused on the capabilities that need to be developed to achieve the desired future state. It should include statements related to the technical capability of the organization and how it will grow and adapt to changes in technology and opportunities in the business environment. It is best not to include statements related to specific elements of growth, such as the number of employees, square footage of buildings, or specific financial measures. These will be the outcomes of a successful strategy based on the vision.

Key questions a vision statement must answer include what your organization wants to be recognized and known for as a leader in your industry. It must also paint a picture of the breadth and depth of the excellence you are striving to achieve. However, while aspirational, it must be realistic in the context of the present and demonstrate a directional growth that can logically follow from where the organization is today.

Initiating the development of a vision statement for the organization is a leadership responsibility, but it is best done inclusively. For a team, the key members would have several brainstorming sessions and then review it with the entire team for their ideas and buy-in. For a large organization, the leadership team should brainstorm in several meetings and then set up dialogue sessions with the broader organization to get additional ideas as well as buy-in.

Developing a vision statement for your organization is a significant task that can be very challenging due to its future focus rather than on the pressing problems of the day. Also, trying to think about where you want the organization to be 5, 10, or even 20 years into the future is not something that can be done in one or two sessions. It is also challenging to stay with the open-ended nature of dialoguing on a future vision. As a result, there is a natural inclination to drift into discussing more concrete topics that are elements of mission, strategy, or even goals. Lastly, it is also not uncommon for the effort to fail due to a lack of sufficient commitment, time, or alignment. However, it is very important to realize that making time to brainstorm on a future vision is a powerful exercise to do as a team, whether or not it results in a successful vision statement. This exercise can reveal significant misalignment issues within the team that need to be addressed,

as well as unexpected opportunities that might never have been identified otherwise. There will always be value in the dialogue, and sometimes, a credible vision statement may result.

I have researched several large biotech companies to identify their published vision statements. They are often globally focused, so their vision statements tend to be very broad and similar to one another, as shown in this short list below.

- Gilead Science's vision statement is "To create a healthier world for all people."
- Merck's vision statement is "Sparking Discovery, Elevating Humanity."
- Amgen's vision statement is "To be the world's leading biotechnology company that develops innovative therapies to improve patients' lives."
- Roche's vision statement is to "Transform people's lives through personalized healthcare."

Notice these are all aspirational statements; however, if you look closely, some are very broad, like Gilead's desire to create a "healthier world," while Amgen's is more focused and ties innovative therapies to patient outcomes. All of these companies have a group of details following these statements that more often than not conflate elements of vision, mission, and values in an attempt to summarize how they will pursue their vision. I believe that a division, department, or site can be more successful at developing a focused vision for the future that will provide better direction to employees than its global parent.

Once you have developed a vision statement, it provides a long-term view that will help guide decision-making in the organization for years to come. Many times, the brainstorming on the vision will reach a point where it is best to let it rest and turn the group's attention to developing a solid Mission Statement. While the vision is an effort to paint a picture of the future, the mission of the organization is best captured in a short, but powerful statement that everyone in the organization can quote verbatim from memory. It should be crisp, powerful, and memorable.

The Power of a Mission Statement – Our Purpose

The mission statement defines the purpose of the organization and what it exists to do. The best mission statements are usually succinct and highly motivating. They explain not only the purpose but also the bigger "Why" of the organization. Most importantly, a good mission statement galvanizes the focus of the entire organization so that all groups and departments work in unison to achieve the purpose of the whole. Therefore, the mission statement must be crystal clear and focused, easily remembered, and motivating. Do not make the mistake of creating a plaque and nailing it to the wall. This will be forgotten in just a few weeks. Instead, let the mission statement live in the hearts and minds of every employee. Speak of it often. Explain its importance and how it applies to everyone in the organization. Every employee should be able to recite it exactly and understand their role and contribution.

The example mission statement for a pharmaceutical manufacturing plant presented in Part Five demonstrates how a concise but inspirational statement can be a powerful tool for engendering cooperation and alignment throughout a complex organization. It also implies important connections with other parts of the larger organization. For example, the purpose of any manufacturing operation is to successfully make the products the company intends to sell. This ensures the company's finances, supports sales and marketing, and ultimately drives customer satisfaction.

The mission or purpose of an organization can usually be identified and agreed on much more quickly than the vision statement, as it speaks about what the organization is doing today. However, getting the mission statement refined to a concise and inspirational sentence or two will take some work. Once the mission statement is completed, it will endure as the defining purpose of the organization.

The Importance of a Values Statement – The Foundation of Culture

The third element in the Vision Stack is the statement of values for an organization. While many companies have developed a set of values, these

are often not fully understood in the business context. It is very common and appropriate for companies to highlight values such as integrity, collaboration, customer service, and excellence. The real question is whether these values influence the way things are done in the day-to-day routine of business. Do they really reflect the culture of the company? In a business context, the organization's values represent important decision-making criteria as well as guidelines for acceptable behavior. When a decision needs to be made regarding the deployment of the organization's resources or what strategic objective to pursue, the company's values should help to guide that decision. The values also define what behaviors are acceptable and which are not.

The Statement of Values is in the "less specific" and "more inspirational" portion of the Vision Stack. As a result, it is not uncommon for the effort to define vision, mission, and values to become conflated and confused with one another. To clarify, the vision directs the organization, the mission is its purpose or what it does, while the values represent commonly held beliefs and commitments that define the standard of behavior expected of every employee.

It is important to note that the values must be consistent for an entire company, while the vision and mission can be organizationally specific. It is good practice for the values of the company to be a meaningful part of the regular performance evaluation, hiring, and promotional processes that apply to all parts of a company. This will drive alignment across the company on how employees are to behave.

Once defined, the Statement of Values will also be enduring as it defines the way the business is expected to be done. As time passes and things change, minor adjustments or clarifications may be made to any of these core statements, but this should be rarely done and with a significant amount of dialogue to ensure agreement across the organization. While the development of all three of these core statements is a leadership responsibility, it is important to share them broadly while in draft form for input, comments, and buy-in.

The company leadership must set the example of demonstrating these values by how they run the daily business of the company. Any failure of the

leadership to adhere to the values once defined and shared broadly will result in cynicism and disbelief that they have any meaning at all. It is, therefore, critical that the values be meaningful and authentically represent what is truly important and define how the business will operate. A list of values that are nothing more than nice-sounding platitudes ignored by leadership will be far more destructive to employee morale and engagement than having no statement of values at all.

It is worth noting that at the time of Enron's collapse, its stated company values included Integrity, Communication, Respect, and Excellence. These words were painted on the wall at the corporate office and proudly displayed in their annual report. Unfortunately, the company failed to live by these values and instead embraced unethical practices and a lack of transparency, which resulted in a systemic breakdown of corporate governance. [3]

Some guidelines for crafting a good set of company values include being specific and focused on what is authentically important to the company. The structure should be based on memorable keywords so that every employee can recite them exactly. Most companies will have five or six key values in their statement. Having more than five or six will make it difficult for the employees to remember them all. Each value also needs a short but detailed explanation of how it is expected to be implemented on a daily basis. Finally, they should all relate to the mission of the company.

Examples of core values frequently quoted by many companies with a short, detailed elaboration on what each word means, including the following:

- **Integrity:** Being honest, making ethical decisions, and following moral principles.
- **Trust:** We are committed to building and maintaining a culture of trust where each of us can be relied on to do our best, keep our word, and be accountable for our actions.
- **Respect:** We listen and stay present, showing consideration for each other's point of view, acknowledging contributions, and dealing with setbacks fairly.

- **Teamwork:** Working cohesively and collaboratively together, we achieve superior results that are both creative and innovative.
- **Creativity:** We pursue innovative solutions and new ways of thinking and working that enhance both efficiency and effectiveness.
- **Accountability:** Each of us owns the decisions we make as well as their outcomes.
- **Quality:** An uncompromising commitment to ensuring the quality of our products and services
- **Customer focus:** We seek to exceed the expectations of our customers to their delight.

A Statement of Values, along with a brief elaboration of each value, is the starting point for dialogue on how they are to be utilized and incorporated into the fabric of the company. Of course, there are many other keywords that could be used to form the values statement, such as excellence, communication, collaboration, openness, and innovation. However, as you can see, the elaboration of one keyword often includes some of these other important concepts. The main point is to develop a set of values that accurately and authentically represents and reinforces the company culture.

The Importance and Role of Strategy – How We Will Get There

Next, we move into the area of the Vision Stack, which has more specificity. As opposed to the enduring nature of vision, mission, and values, the Strategy Statement has at most a 3-year time horizon and will likely be updated and adjusted annually. The purpose of the organization's strategy is to provide a near-term roadmap on how the organization will pursue its vision. It should define the concrete steps, actions, and plans to be undertaken over the next few years to move toward achieving the vision.

As it is being developed, the strategy must be guided by the previous three elements of the Vision Stack. Strategy is action-oriented, and there are many ways to pursue a long-term vision. Whatever actions are contemplated, they must be consistent and aligned with both the mission and the values. These

strategic courses of action must be realistic, doable, and focused on building the capabilities needed to progress toward the long-term vision. The best strategic brainstorming sessions will focus on defining the capabilities that may not be present today but will be needed to achieve the ultimate goals of the organization in the future.

When building the strategy, it is important not to slip into just defining goals for the next couple of years. A good strategy will directly shape the goals, as discussed in Part Five, but must provide the logical progression of the capabilities that will be needed in the near term and how these increasing capabilities support progress toward achieving the vision.

The vision can imply many strategic initiatives that cannot all be pursued at the same time. The next step would be to translate the identified strategic implications into defined initiatives that will be actionable in the near term. See the detailed review of the many strategic implications that can be derived from a Vision Statement in Part Five.

Many strategic initiatives will build on themselves over the years. For example, ensuring the development of an environment that fosters creativity and innovation will set the foundation for many of the strategic initiatives to be undertaken over the long term. Also, personnel trained in collaboration and communication skills will be critical to strategies based on building relationships with other organizations.

The resulting strategies will be a roadmap for the next three years, which implies a sequence of initiatives to be pursued. Out of the possible strategic initiatives implied by the organization's vision, which ones can be pursued in the next 12 to 18 months? This will help define the organization's near-term goals. Strategic initiatives that need to be addressed beyond 18 months will define long-term goals. There may be some initiatives that cannot even be started in the next three years (e.g., site expansion) but may be important in the long run. The near-term goals will likely set the stage for longer-term initiatives. An example is the commitment to stay current with cutting-edge technologies. This will not only keep the organization informed of new developments, but also build skills and assist in determining what technology is relevant to the future and what is not.

While it may not be possible to pursue expanding the physical infrastructure in the near term, it would be important to stay current on real estate trends locally and/or start preparing an outline of what expansion is possible on the current site.

The Goal Cascade – What We Must Do

Finally, we arrive at defining the goals of the organization.

The previous work is essential to developing a dynamic Goal Cascade. It is called a cascade because we start with the impact and meaning of the Vision Statement that defines what the organization wants to be like in the future. The vision must be inspirational and a significant stretch from where the organization is today. To achieve the vision, the organization will need to grow, develop new capabilities, and acquire new technology. The strategy defines several overarching goals that may take years to achieve and, in some cases, may take years to fully define.

The strategy also defines how the organization will evolve, considering both long-term goals as well as what needs to be accomplished in the next 12 to 18 months. The more clearly defined these goals are, the more helpful they will be. The Goal Cascade can be defined by the following three categories with suggested timeframes:

- Long-term goals inspired by the Vision Statement (beyond 36 months)
- Strategic goals that result from the implications of the organization's vision. (18 to 36 months)
- Operational goals consistent with the Mission Statement. (12 to 18 months)

Long-term goals will be focused on what is not in place today but will be necessary in the future. These will not be that precise but more directional and consistent with the vision. They provide an important link between near-term activities and the future vision. For example, if the long-term vision requires a larger site, there are likely near-term strategic goals that

will help to shape and define that future. This could include a defined program for staying current with technology developments that relate to the site operation, as well as industry trends that may affect future market demand for the type of products to be made.

Strategic goals are best defined as capabilities that need to be pursued over the next few years to move in the direction of the vision. This could include building key relationships with other sites or departments and demonstrating excellence in current capabilities, as well as knowledge of the latest technical advances in the relevant areas. Capabilities such as advanced automation, machine learning, and artificial intelligence could provide breakthroughs in production efficiency and result in a competitive edge for the organization. A related strategic goal would be to identify current employees who will be specifically tasked to become knowledgeable in these new technologies. This could also focus current hiring efforts to find candidates who already have these skills.

Operational goals are the ones that most people think of first when discussing the goals and objectives for this year and possibly next. These are consistent with the mission of the organization and would include production targets, operational excellence programs, quality metrics, and personnel development activities. These goals must be crystal clear, measurable, meaningful, and doable in the stated timeframe. While every department will have goals focused on their area of responsibility, it is important to have several cross-functional goals that require collaboration across departments and establish the opportunity for innovation and creativity. Innovative ideas and solutions are often realized when groups of people with divergent backgrounds and skill sets come together to solve a problem or execute a project.

The last element of the Goal Cascade is the assignment of both strategic goals and operational goals to the various departments in the organization and, ultimately, to the teams and individuals within each department who will do the work. Both strategic goals and operational goals must be clear on what needs to be done and in what sequence. There will be goals that cannot be addressed until other objectives are completed. This also helps to prioritize work and avoid confusion between departments.

Success Factor Summary

In today's fast-paced and unpredictable business landscape, having a clear and inspiring vision is more important than ever. The Vision Stack framework provides a comprehensive approach for organizations to define their future direction, articulate their purpose, and establish the values that guide their actions. By effectively communicating these elements and aligning them with actionable strategies and goals, leaders can foster a culture of engagement and innovation that empowers employees to contribute meaningfully to the organization's success. Ultimately, a well-defined vision and its supporting structures not only serve as a roadmap for achieving strategic objectives but also create a shared sense of purpose that unites and aligns the efforts of everyone in the organization.

Take the time to assess and refine your organization's Vision, Mission, and Values. Organize a series of workshops with team members to brainstorm and discuss these key statements and ensure that they reflect the aspirations and the purpose of the organization. Once established, create a clear Strategy and Goal Cascade that aligns with these elements, detailing actionable steps for each department to ensure cohesive progress toward the shared vision.

Key Takeaways for Chapter 15: The Vision Stack

1. **Understanding VUCA**: The concept of VUCA (Volatility, Uncertainty, Complexity, and Ambiguity) is essential for modern organizations to navigate an increasingly unpredictable business environment. Leaders must develop strategies to respond to these challenges effectively, emphasizing the need for visionary leadership that can adapt to change.

2. **The Vision Stack Framework**: The Vision Stack consists of a hierarchy of statements—Vision, Mission, Values, Strategy, and Goals—that guide an organization. Each layer serves a distinct purpose, with the vision providing long-term direction, the mission defining current purpose, and the Strategy outlining actionable steps to achieve the vision.

3. **Importance of a Clear Vision Statement**: A well-crafted Vision Statement is aspirational and inspirational, providing a long-term view that aligns the organization's efforts. It should focus on the organization's future potential and capabilities, encouraging engagement and growth among employees.

4. **Role of Mission and Values**: The Mission Statement articulates the organization's purpose and is meant to galvanize the workforce. Values define the expected behaviors and decision-making criteria within the organization and must be authentically integrated into daily operations to avoid cynicism.

5. **Goal Cascade Structure**: The Goal Cascade translates the vision into actionable objectives. It distinguishes between long-term goals driven by the vision, strategic goals that outline capabilities to pursue, and operational goals that focus on immediate tasks. This structured approach aids in prioritizing work and fostering collaboration across departments.

CHAPTER 16

BUILDING A TRUST-BASED ORGANIZATION

"Trust is like the air we breathe. When it's present, nobody really notices; when it's absent, everybody notices."

Warren Buffett

A manufacturing operator is formulating an intermediate product and accidentally adds the components in the wrong order. He isn't sure if it matters or not. However, he is afraid to ask his supervisor because in the past, people who made mistakes faced blame and punishment from the plant leadership. He decides not to say anything. Unfortunately, this lot of intermediate product gets blended with ten other lots, and they all fail their specification.

Fear typically becomes the dominating factor in an organization when the leadership takes a strongly hierarchical or command-and-control approach. People are motivated by fear of losing their jobs or having their careers damaged if they make a mistake. They seem to work hard, keep their heads down, and not raise controversial issues. Unfortunately, many organizations think this is acceptable or even good. However, this type of environment is counterproductive to creativity, collaboration, and real productivity as it saps the energy that should be used for positive progress and siphons it off to survival behaviors.

By contrast, in a trust-based environment, people are not punished for making mistakes. Instead, these situations are treated as an opportunity to learn and grow. People feel free to voice their concerns and raise questions when they see a chance to improve their work practices. There is a free exchange of ideas and dialogue unhindered by concerns about being disrespected or embarrassed for asking a "dumb question." As a result, people share their best ideas and creative energy. They ask good questions and collaborate seamlessly to address problems and challenges.

Leadership sets the tone of the organization and reinforces the behaviors that are expected on a daily basis. If the leader of the organization berates someone for asking a difficult question, not only will he stop getting questions, but he will also have established a fear-based environment.

One approach to fostering an environment of trust is to deliberately connect with your people in their work environment. It is one thing to have people come to the boss's office or hear you speak at a large all-hands meeting. It is a very different experience if you come to their workplace to learn and understand what they are dealing with on a day-to-day basis. This is sometimes referred to as a *Gemba Walk,* where the purpose is to develop a better understanding of what is happening in the workplace. The term "Gemba" is Japanese for "actual place," i.e., where the work is done. Some of the literature describing a Gemba Walk suggests questioning the employees about their tasks, taking notes, and seeking opportunities for improvements. That is all well and good, but depending on how it is handled, the employees may feel like they are under the microscope or that you think something is wrong with what they are doing. It is better to ask some good open-ended statements like "Help me understand more about this operation" and then let them do the talking. A good question would be "What changes could make your work easier?" Try to take mental notes. I have made the mistake of taking copious notes in these situations, only to find out later that it made them nervous and concerned that I might be writing about them.

Lately, there has been a great deal of discussion on the importance of creating a psychologically safe environment. Amy Edmondson popularized

the concept through her book, *"The Fearless Organization."* She makes the case that psychological safety is essential for learning, innovation, and growth in any organization. She also does an excellent job of identifying critical moments in historical situations where someone could have spoken up and prevented a catastrophe, but didn't feel psychologically safe to do so. Her argument that psychological safety is somehow different from trust seems like a narrow interpretation of trust. [1] This is why I refer to an environment of trust, which is a pervasive sense of trust established and reinforced by the leadership of the organization, where people feel free to speak up and disagree, even with their boss, without fear of reprisal.

The term "psychological safety" seems to carry an inherently negative connotation that we have to be concerned about our safety or need to be wary of an attack of some sort. This subconsciously implies that we need to be on guard and careful. I believe a much more positive way to look at the same issue is to focus on building trust. Trust is the most important characteristic of a well-functioning team and is critical to the success of any organization.

Defining and establishing an environment of trust starts at the top of an organization and must be reinforced down through every level of management to be effective. Every manager and every supervisor must understand their role and responsibility to reinforce the climate of trust in their part of the organization. I use the word "environment" to refer to the entire organization and "climate" to describe the culture of the divisions, departments, or groups that make up the organization. Trust must be a part of the company's stated values and be recognized as a cornerstone in every part of the organization.

The lack of trust manifests as people being afraid to speak up and ask good questions when it would be helpful. They are quiet in a meeting, but then gossip about the meeting in the hallways or around the coffee pot. They try to hide their mistakes and never question the boss. Conversely, in an environment of trust, people are not afraid to speak up and ask a difficult question, or offer suggestions and creative ideas. They willingly share when they make a mistake in order to learn how to avoid them in the

future. They are even willing to challenge the boss when they think he or she is wrong, but respectfully.

Many leaders have not thought carefully about how to create an environment of trust. People often believe that you must earn someone's trust by simply being trustworthy. However, this is not helpful as it does not explain how to build trust. Building trust in any organization is not simple and takes deliberate action. Encouraging people to ask good questions is the place to start.

Asking Good Questions to Build a Framework of Trust

The two most essential activities in communication are actively listening and asking good questions. Good questions are born from curiosity and a desire to learn and understand. Unhelpful questions are based on a judgmental attitude with the objective of assigning blame. However, the right questions can build relationships and rapport among colleagues.

Young children are known for asking lots and lots of questions, often to the annoyance of their parents. Children have an inborn curiosity to understand the world around them and start out entirely uninhibited. I have five grandchildren, and they have incredible curiosity and creativity. Often, when playing a game with my eight-year-old grandson, he gets very creative about changing the rules in the middle of the game. This usually happens if he thinks he is losing!

As we mature and grow, we are often discouraged from asking too many questions out of fear of being annoying or disrespectful. It is also common for people to be concerned about "asking a dumb question" and embarrassing themselves. Unfortunately, all of this easily carries over into the workplace. Unless asking questions is actively encouraged, most people will keep their questions, concerns, good ideas, and creative thoughts to themselves.

Leaders themselves are often reluctant to ask questions for fear of giving the impression that they do not know enough. Good leaders understand that they are not experts on everything. They rely on their people to keep

track of the details of their operations and regularly seek their advice and input. This builds relationships and trust, which demonstrates that the leader values their ideas and appreciates their expertise.

In 2008, Google initiated an effort called Project Oxygen to identify the critical characteristics of effective managers and leaders in the organization. They asked a lot of good questions of their workforce and correlated the responses with the performance of various teams. They found a strong correlation between specific leadership attributes and highly performing teams. [2] After analyzing the data, they arrived at the following list of eight key qualities of good managers and leaders. [3]

1. Is a good coach.
2. Empowers the team and does not micromanage.
3. Expresses interest in and concern for team members' success and personal well-being.
4. Is productive and results-oriented.
5. Is a good communicator who listens and shares information.
6. Is deliberate about engaging in career development.
7. Has a clear vision and strategy for the team.
8. Has key technical skills that help him or her advise the team.

Most importantly, Google made these results the basis for all their leadership training programs, which demonstrated they took the feedback they received seriously. They included these identified behaviors as part of the performance evaluation of leaders, which built trust throughout the organization. I believe that Google made these behaviors a part of their annual evaluation program to show that this was not just a good idea that would eventually fade away. In my experience, most people who receive feedback that they need to change their behavior rarely do. Change is hard for people unless they have a strong incentive to do so. I know one senior leader who often belittled people in meetings and was condescending to his direct reports. He must have gotten some strong feedback because he made a fundamental change and stopped his aggressive and demeaning behavior. Instead, he became encouraging and supportive.

Leaders need to be good coaches for their direct reports. One of the hallmarks of effective coaching is the ability to ask relevant questions, depending on the situation, in order to spark creative thinking. Good coaches are also good listeners and recognize that the people they are working with have the answers to essential questions, but may not be aware that they do. The role of a coach is to help someone tap into the insight and wisdom they already have.

The leader of an organization needs to encourage people to ask questions and demonstrate openness to the ideas and perspectives of others. Given the right environment, people may be willing to ask provocative questions or challenge the status quo. In an environment of trust, creativity blossoms, and people can freely offer innovative suggestions and ask thoughtful questions. This can be accomplished by asking a variety of open-ended questions that invite dialogue, such as:

- What do you think? [about a specific issue]
- I find what you are saying very interesting, but why do you think that?
- Can you help me understand?
- What do you think is the best approach?
- What can I do to help?

Many good questions can be asked depending on the situation. This is why good leaders must also be good listeners. They need to understand the specific situation in the context of the big picture and the perspective of the people they lead. Whatever the issue, the people closest to it likely have important insights to share if asked. But they need to be asked the right way. Some questions will hinder effective communication because they put people on the defensive by trying to assign blame. An example is "Who is at fault here?" A better way to approach a situation where a failure occurred is to ask, "Can you help me understand what happened?"

Questions can be empowering to those you ask, or they can be disempowering. Disempowering questions are judgmental, close off communication, and stifle the free flow of information, creative ideas, and

valuable insights. These questions can also undermine relationships and lead to disengaged employees who try to hide their mistakes and failures.

However, even when facing a bad situation, leaders can use good questions to foster a learning environment where people feel supported so they can focus on solutions rather than defending themselves. The following are examples of questions that can be helpful in a negative situation:

- How could we have done better?
- What can we learn from this situation?
- What was working well, and what was not?
- Where do we go from here?
- What are the options to make this situation better?

Finally, how you ask a good question is equally important, especially in tense situations where emotions may be strained. It is important to stay calm and use a curious or respectful tone when asking questions. Make sure that your questions are focused on wanting to understand and not casting blame.

Managing Emotional Situations to Maintain Trust

Effectively managing uncomfortable situations is one of the most significant challenges leaders face in today's workplace. When strong emotions are evoked, especially during moments of conflict, the natural response is often "fight or flight." Whether in the office or on the manufacturing floor, these instinctive reactions rarely yield constructive outcomes and can easily damage trust. Aggressive or defensive behavior and conflict avoidance will not resolve the underlying issues. Instead, a cool-headed, rational response is crucial. Several techniques can assist in managing the collective emotions of those involved, including yourself.

Calming Emotional Responses

The first step in diffusing a heated situation is to try to calm down anyone who has become emotionally charged. This can be done simply by asking everyone to take several deep breaths. As a leader, modeling this behavior

can be very powerful. You will be surprised that those present will follow your lead almost involuntarily. This simple act can lower tension levels and create a calmer environment conducive to dialogue.

It is also important to acknowledge that upset feelings are present and validate those emotions without letting them dominate the conversation. A reminder of the shared goals everyone is committed to achieving can redirect the focus from personal grievances to collective aspirations. Statements like the following can be grounding: "I understand that this is a difficult situation for all of us, but let's remember the objectives we're working toward together."

Engaging Minds Through Inquiry

Once the atmosphere has shifted toward calmness, the next step is to encourage critical thinking through open-ended and clarifying questions. This approach not only helps in gathering information but also facilitates a more thoughtful dialogue. Questions such as the following can pave the way for a constructive conversation.

- "Can you tell me the facts about what happened?"
- "What are you most concerned about?"
- "How will this impact our ability to accomplish our shared goals?"
- "What do you suggest we do about this?"
- "What is the first thing we should do?"

The goal is to engage team members in a creative, solution-oriented process that emphasizes honesty and transparency. This not only addresses the immediate issue but also fosters a culture where individuals feel heard and valued. When employees believe their ideas and perspectives matter, it strengthens trust within the team.

Cultivating a Culture of Inquiry

In a workplace where asking questions is both honored and encouraged, everyone should feel empowered to engage in dialogue if they have

concerns. This openness should permeate all levels of the organization, from coworkers to bosses and even higher management. Creating an environment that welcomes questions contributes to a culture of trust and collaboration where people can seek clarity. For instance, consider the practice of regular team check-ins where team members are invited to share their thoughts on ongoing projects, challenges they face, and questions they have. This encourages communication and positions everyone as a valuable contributor to the organization's success.

Emphasizing the Importance of Expertise

Leaders need to acknowledge the importance of recognizing there are individuals who possess unique insights and firsthand knowledge about specific issues. Deference to expertise is one of the fundamental tenets of a *Highly Reliable Organization (HRO)*. [4] Unfortunately, it is all too common for groups of managers to convene to address a problem while overlooking those with direct knowledge and experience.

For example, if a manufacturing line faces persistent delays, it would be prudent to involve the operators who work on that line daily. Their insights into the workflow, equipment, and potential bottlenecks can provide critical information that may be hidden from management. Engaging these individuals leads to more informed decision-making and fosters a sense of ownership and accountability among plant personnel.

The Power of Questions

Bobb Biehl, President of Masterplanning Group International, succinctly captures the importance of inquiry: "If you ask profound questions... you get profound answers. If you ask shallow questions, you get shallow answers. If you ask no questions, you get no answers at all." This underscores the need for leaders to cultivate an environment where inquiry and dialogue are encouraged and integral to the culture. [5]

By consistently posing deep, thoughtful questions, leaders can guide their teams toward innovative solutions while also reinforcing the value

of collaboration. For example, after identifying a conflict between team members, a leader might ask, "What can we learn from this situation to prevent its recurrence?" This type of questioning encourages reflection and helps the team to develop strategies for future interactions, reinforcing trust and mutual respect.

Building Trust Through Transparency

Transparency plays a crucial role in maintaining trust during emotionally-charged situations. Leaders should aim to be open about their own feelings and reactions in a way that is appropriate for the context. By sharing their thoughts and acknowledging their emotions, leaders can humanize themselves and create a space where others feel safe to express their feelings as well.

For instance, if a leader is faced with a significant change that may cause anxiety among employees, being willing to openly discuss their own concerns can help to alleviate fears. Saying something like, "I understand that this change might be unsettling, and I have my own worries about how we will adapt. Let's work through this together." This not only acknowledges the shared emotional landscape but also reinforces the leader's commitment to collaboration and support. This approach cultivates an atmosphere of mutual understanding, further solidifying trust among team members.

Feedback is another critical aspect of maintaining trust during emotional situations. Constructive feedback helps individuals understand how their behaviors impact others and the overall team dynamic. However, feedback must be delivered thoughtfully, especially in emotionally charged situations.

Effectively managing emotional situations in the workplace is crucial for maintaining trust and fostering a positive organizational culture. Leaders must strive to create an environment where open communication, inquiry, and emotional maturity are prioritized. By calming emotional responses, encouraging engagement through thoughtful questions, and recognizing all team members' expertise, leaders can confidently guide their teams through conflicts.

Empowering Employee Engagement Builds Trust

There are three foundational elements in the work environment that drive employee engagement based on trust. The first is that an employee needs to know their direct supervisor cares about them as a person (trust that they are valued). Second, they need to believe the work they do is important (trust that they are adding value). The third element is clarity on the opportunity to learn in their current position and grow their career at the company (trust that they can increase their own value).

Trust and employee engagement work hand in hand and reinforce each other. If the work environment has become fear-based, many employees will be disengaged, apathetic, and afraid to speak up about issues they face every day. Fear can become embedded in the culture due to unconscious behavior by the leader. This creates a cloud of uncertainty that can kick people into survival mode, where the generally accepted advice is "to keep your head down and don't make waves." In terms of employee behavior, this means not taking any unnecessary risks, not proposing anything controversial, and avoiding interactions with management. It takes proactive and deliberate action by leaders at all levels to establish and reinforce a culture of trust. This does not happen overnight, yet it is very doable. It takes diligence, patience, and discipline, and the rewards are huge.

Demonstrate You Care: This first element is also the most important, as an employee's direct supervisor must clearly demonstrate they care about their employee in a meaningful way. This is the foundation of any relationship. This needs to be meaningful to the employee and goes beyond compensation, promotion, and recognition for the work accomplished. For leaders, the challenge is to identify those opportunities to demonstrate caring on a personal level as they come up naturally. This takes vigilance and patience.

A simple example is when someone needs to take a day off unexpectedly because their child is sick and must stay home. When the employee returns to work, the supervisor has an opportunity to ask how the child is doing. It is also an opportunity to go further and engage the employee about their family

naturally and ask some general questions. Be sensitive to any resistance to sharing personal information and be willing to share information about your family as well. Generally, people are very open to sharing about their children and their accomplishments, as well as the challenges they may be facing. Be respectful; keep it natural and brief. This goes a long way to show you care about them as a person. Try to remember their children's names. Afterward, make notes about your conversation if you need to. This may seem like a small thing, but being intentional about getting to know your employees as people is important to establishing a trust-based relationship.

Sometimes, managers and supervisors torpedo their own efforts to establish trust with their employees through unconscious behavior that causes confusion or doubt about how much they really care. This can be as simple as inadvertently snubbing or ignoring one of your employees as you pass in the hallway because you have a pressing issue on your mind. Be mindful and present to your current circumstances and greet people as you pass. If someone tries to get your attention, stop and engage with them on their issue or concern. Practice your listening skills, be patient, and do not be in a hurry. It may be the only opportunity you have to demonstrate you care about that individual. Of course, we are all human and subject to making mistakes and missing opportunities that present themselves. Over the course of time, your continuous deliberate efforts to get to know people, having regular 1:1s with your direct reports, and being present, real, and transparent will make the difference.

Highlight the Importance of Every Employee's Work: The second element that increases employee engagement is the need for people to see the work they do as important in the context of the overall mission and vision of the operation. It is energizing for people to realize that they are part of a cause that is larger than themselves. This may not always be as straightforward for some industries as it is for the pharmaceutical industry, where the focus is on healthcare—improving the quality of life, and saving lives. No matter your industry, the leadership challenge is to consistently highlight the mission of your organization and refer to it at every opportunity. This may seem redundant after a while, but people

do not get tired of hearing how important their work is to customers and clients who rely on what your organization produces. The challenge is to get creative about how you express the importance of your mission in a real and meaningful way.

If you have a site that manufactures a life-saving drug, you can talk about how many people's lives are being saved every year. Talk about how that affects a family to have their loved ones brought back from the brink of death because of the medicine your plant manufactures. You can talk about how that fact changes the trajectory of the future for an entire family. The work every employee does changes the future for potentially thousands of patients and their families. Also, make it clear that it does not matter if an employee is working on the manufacturing floor, in a lab doing release testing, or in the warehouse moving boxes; the work they are doing is saving lives because every job contributes to achieving the mission of the site.

If your products improve people's quality of life, bring that value to life in a way everyone understands. If possible, arrange for a customer to speak at one of your all-hands meetings. Hearing firsthand from a customer how much their life has benefited from the products your plant produces is a powerful experience for every employee.

One manufacturing plant I oversaw ten years ago produced a treatment for Cystic Fibrosis—a genetic disease that typically manifests in young children. Historically, this disease was fatal at an early age, with many patients dying as teenagers or young adults. Modern treatments have progressed rapidly over the last ten years, with many patients now living past 60 years of age. [6] Early in the last decade, we had a patient come to speak at one of our all-hands meetings when the average mortality had improved to the late twenties or early thirties, partly due to the drug we were producing. This woman had been diagnosed early in life and was told that she might not live past her teenage years and would likely never marry or have a full life. She shared her life journey, including the times she was hospitalized and on the verge of death, as well as the many different treatments she experienced and the hope she now has. She expressed her deep gratitude to all of us that, due in part to the drug we produced, she was now in her early twenties, married,

and the proud mother of a beautiful baby boy! There was not a dry eye in the entire room by the time she was finished.

Discuss Growth and Career Opportunities: The third element is the clear understanding by the employee that they can grow and learn in their current position and that advancement opportunities exist at the company. This is the result of career development discussions that should occur occasionally between the employee and their supervisor. These discussions are best seen as a mutual clarification of career aspirations by the employee and potential future opportunities by the supervisor. Note that these discussions are best if they are done separately from formal performance reviews. Also, it is vital that these discussions are based on reality by both parties. If the employee has unrealistic expectations, it is best to have an honest conversation sooner rather than later. If the opportunities for in-line promotions are limited, this should be acknowledged, but can be followed by an exploration of other alternatives.

Depending on the size of your company and your organization within it, there may be opportunities that require the employee to be willing to move to a different location or site. While I was leading a site in Puerto Rico, there were limited opportunities for advancement "on the island," but that site was only one of a half dozen for the company. Some employees were not willing to relocate but chose to stay on the island for personal reasons, even if it limited their career potential.

It is important for the supervisor, at some point in these discussions, to realistically commit to supporting the aspirations of the employee. An example of a realistic commitment by the supervisor to the employee is the following statement:

> "As your supervisor, I want you to know that I am committed to helping you continue to improve your capability and skills so that you can make an ever more valuable contribution to our company while you are here, and that if and when the day comes you decide to leave, you will go with much greater capability and skills than when you arrived."

This is a realistic commitment because the future is unknown, including how long the employee will be at the company. Also, the supervisor acknowledges that it is his job to maximize the productive capability of all his direct reports for the benefit of the company as well as the employee. This type of statement is also a powerful reinforcement that the supervisor cares about the employee and wants the best for them now and in the future.

Success Factor Summary

Building a trust-based organization is essential for fostering a productive and innovative workplace. Trust empowers employees to take risks, voice their ideas, and collaborate effectively, leading to improved outcomes for the entire organization. Leaders must be intentional in their efforts to create a culture of trust, which involves prioritizing open communication, demonstrating genuine care for employees, and creating an environment where questions are welcomed. As trust flourishes within an organization, so too will creativity, resilience, and commitment, enabling the organization to navigate challenges and achieve its vision effectively.

Assess the current trust climate within your organization by soliciting anonymous feedback from employees regarding their feelings of trust at work. Use this feedback to identify areas for improvement and develop actionable strategies based on the principles of this chapter to enhance trust and engagement among your team members. Commit to asking open-ended questions that promote dialogue. Establish clear channels for feedback and career development discussions to reinforce your commitment to employee growth and engagement.

Key Takeaways for Chapter 16: Building a Trust-Based Organization

1. **The Impact of Trust on Organizational Culture**: A trust-based environment fosters creativity, collaboration, and open communication, while a fear-based environment stifles these traits. Leaders play a crucial role in establishing a culture of trust by encouraging dialogue and treating mistakes as learning opportunities.

2. **The Role of Leadership**: Leadership sets the tone for trust within an organization. Leaders must actively demonstrate behaviors that build trust, such as engaging with employees in their work environments (e.g., through Gemba Walks) and responding thoughtfully to feedback.

3. **Psychological Safety vs. Trust**: While psychological safety is important for encouraging open communication, a broader focus on building trust creates a more supportive organizational climate. Trust enables employees to voice concerns without fear of reprisal, enhancing team collaboration and morale.

4. **Asking Good Questions**: Effective communication hinges on asking thoughtful, open-ended questions that encourage dialogue and understanding. Leaders should cultivate an inquisitive mindset, as this approach fosters trust and empowers employees to share their insights.

5. **Foundational Elements for Engagement**: Employee engagement is driven by three key elements: feeling valued by their supervisors, understanding the significance of their work, and recognizing opportunities for personal and professional growth. Leaders must actively reinforce these elements to build a trust-based organization.

CHAPTER 17

CRITICAL COMMUNICATION SKILLS EVERY LEADER NEEDS

"The talent you attract is directly proportional to the quality of the questions you ask."

Lou Adler

For leaders to carry out their duties successfully, they need a set of skills in their arsenal, without which they are bound to stumble and stagger for the length of their tenure. The ability to communicate effectively is one of the most important of these skills. One of the challenges of effective communication is that communication has as many forms as it has goals. For example, listening to understand is a vital communication skill. Dialogue is critical to the exchange of ideas and unlocks creativity. Sharing your vision of the future for the organization inspires alignment and commitment. In today's rapidly changing environment, there are three aspects of communication that can make a fundamental difference in the overall effectiveness of a leader and in their potential for success. The three key skills are:

- Hiring the "right" employees by asking the right questions.
- The SBAR method for concise communication.
- Understanding the importance and power of storytelling.

At first, this may look like an eclectic set of skills; however, the unifying theme is not just effective communication, but understanding the critical nature of how to communicate in different settings with different styles, focus, and goals. Jim Collins famously emphasized the importance of "getting the right people on the bus" in his book, *"Good to Great."* [1] Of course, he was talking about getting the right people into a company, and that once the right people are in place, you can take the company anywhere. In this chapter, I will explore how to find the right people in the hiring process by asking the right questions.

There are times when succinct communication is critical, especially when ambiguity of any type could be disastrous. Also, clarity in communicating with senior management in a structured manner with concise information not only respects their time but can also provide a solid foundation for success. I will describe and demonstrate how to use the SBAR method of communicating on an important issue in a clear and concise manner.

Finally, developing your abilities as a storyteller opens new avenues for inspiring your people and communicating important issues in a memorable way. Skillful storytelling can be used to convey even controversial messages in a way that people can hear the heart and meaning of what you are saying. This chapter will explore the art and science of how to craft a powerful story that can be used to enroll and engage others in your vision of the future and how you will get there.

Hiring Employees that Add Value

There are few things more important and, at the same time, fraught with significant risk than the decision to hire a new employee. The standard approach begins with collecting resumes and comparing the background, experience, and technical skills to decide who may be a sufficiently "good fit" to move to the interview stage. Most often, the interview process is focused on the technical competence of the candidates (i.e., their qualifications), with some effort being put into determining their leadership capability and social skills. Usually, there is little or no effort to really get to know the candidates as people, including their thinking style and ability to build trust. These are the

true keys to determining if they are a good fit for the organization, not just their technical knowledge.

My experience with the standard approach to hiring has a success rate somewhere between 50 percent and 75 percent overall. That means at least one out of four new hires into key positions will ultimately fail to succeed. Some may voluntarily move on, either quickly or over time, due to a variety of reasons. Those are the easy failures to deal with, where you "only" lose the time, effort, and money in the hiring process. The most difficult situations are the failures that become toxic and detrimental to the entire team and can linger for months or years. Even if they get their job done, they poison the team with negativity, continual unresolved conflict, and stubbornness.

Building a great team is challenging enough, but it becomes impossible if you have the "wrong people on the bus." It is usually not the lack of technical competence that leads to a new hire's failure, but the lack of emotional intelligence and social skills. While these are broad categories, specific personal and social skills are critical to being an effectively functioning, value-producing leader or team member. This is more than just being able to get along with others. Great leaders and great team players must have the following essential characteristics:

- A growth mindset where failures and setbacks are regarded as learning opportunities.
- Ability to foster a culture of idea-sharing with a "Yes, and" mindset that seeks to embrace each other's ideas and expand on them to achieve creative solutions.
- The ability to effectively manage conflict for positive outcomes.
- Willingness to admit a mistake and take responsibility for an error, even when it is uncomfortable to do so.
- The ability to maintain a positive attitude, stay calm, and stay focused in high-pressure situations.
- Demonstrated ability to build trust among team members and create an environment where everyone is valued and appreciated.
- The humility and willingness to set aside their ideas and preferences in support of the team.

These are key characteristics that every employee needs to aspire to, not just newly hired employees. However, in hiring additional personnel, the opportunity exists to ask specific questions and determine if a candidate has these essential traits. Of course, this is not an exact science by any means. However, any effort to question a candidate on these issues may go far to improving the overall success rate of hiring new employees, especially when working to fill key positions. The following are examples of questions that candidates can be asked that focus on these essential skills and abilities.

1. **Growth Mindset:** How have you handled failures, setbacks, or frustrations in your work? Do you have an example of when you encountered a setback and how you handled it? What did you learn from that experience?

2. **"Yes, and:"** Can you provide an example where you actively built on someone else's idea to enhance a project or initiative as part of a team? Note: This is not "stealing someone else's idea" but collaboratively working with them to advance creative solutions. This is the process of appreciating the ideas of others and building on them, not dismissing them.

3. **Managing Conflict:** Do you have an example of how you successfully managed a challenging or difficult team member or how you managed conflict between team members?

4. **Personal Responsibility:** Describe a situation when you took responsibility for an error, mistake, or poor outcome with transparency and honesty. How did this affect the team?

5. **Positive Attitude:** How have you managed tight timelines and a heavy workload and yet stayed positive and focused? What strategies have you used to stay motivated and productive in such high-pressure situations?

6. **Environment of Trust:** What steps have you taken in the past to create an environment where everyone on your team felt valued and appreciated? What is most important to establishing and maintaining trust in a team?

7. **Putting Team First:** Describe a situation in which you set aside your own preferences in support of what the team needed. Can you describe the key characteristics of a high-performance team?

Potential job candidates could be asked an endless list of questions to gain insight into their level of emotional maturity, honesty, and resilience under stress. Rather than asking a general question about how they have demonstrated leadership, I believe it is better to probe the details of these fundamental characteristics of leadership. With technical competency as a given, the key to how well a new employee fits into your organization and delivers significant value depends on their ability to demonstrate these essential characteristics.

The real value of an employee to your organization is the value they create minus the costs they engender. Their "cost" can be much more than the salary you pay them. The negative impact of an emotionally immature professional, who may have great intelligence and experience, but who cannot function effectively as part of a team, can be a significant "cost" to the organization. One member of a senior leadership team I served on was consistently critical of anyone who disagreed with his perspective or ideas, which created a lot of unnecessary drama. He had a lot of technical expertise, but as a result of his behavior, team cohesion was broken, and a lot of time was wasted trying to work around him to get things done. The actual cost of an emotionally immature person may be hard to quantify, but it hinders the team's productivity while taking an inordinate amount of management attention.

> **Quote from Cy Wakeman:** "An employee's value is their current performance plus their future potential minus 3X the drama they bring to the workplace. If emotions are not managed well, they will override and negate intelligence, experience, and expertise." [2]

Communicate Effectively Using the SBAR Method

The SBAR communication system was originally developed by the U.S. Navy in the 1950s primarily to convey critical information clearly and quickly on nuclear submarines. SBAR is an acronym for Situation,

Background, Analysis, and Recommendation, which represents a structured communication framework used to facilitate clear and concise information transfer. The SBAR system quickly spread to aviation crews, firefighters, and healthcare workers, among others, as its use helped to overcome communication challenges, especially in high-risk situations.

Over the years, organizations in various sectors, including business, critical care nursing, and manufacturing, have adopted SBAR to improve internal communication and decision-making processes. I have used it effectively to inform upper management about an issue or problem and how I planned to address it. It is, in effect, a structured way to provide an executive summary for busy executives. It is also a way to give a concise justification for approving a request for capital or expense funding that will be needed. SBAR communication is typically very focused and brief, usually only one or at most two pages in length.

S = Situation – This section is used to clearly explain the problem or issue being addressed. The need for brevity forces careful thought on how to describe the problem or issue without a lot of extraneous information, and is focused on defining the key aspects of the issue at hand.

B = Background – The background section provides the following types of relevant details on the issue or problem:

- Root cause of the problem and should answer why this is a problem.
- How long the problem has been occurring, and summarizes when the problem started or occurred.
- Clear description of how the business is being impacted.

A = Assessment – This section summarizes the analysis that has been performed and the details that impact the business. It can highlight business risks and the benefits of addressing the problem or issue.

R = Recommendation – This section typically discusses the solution approach, timeline, and resources needed to address the problem or issue. It is defined as a recommendation or recommended course of action.

In 2002, Kaiser Permanente started using this tool in its rapid response teams investigating patient safety. Since then, many hospitals have adopted this tool to reduce communication errors, which were identified as a common cause of adverse patient safety events in critical care situations.

The SBAR tool removes uncertainty from important communications by preventing assumptions and vagueness and requiring a recommendation on how to address the problem at hand. This is important when staff are uncomfortable making a recommendation to senior management due to inexperience or their position in the hierarchy. Senior leaders are usually impressed when someone comes to them with a recommended solution and not just the problem.

This tool is valuable anytime a communication error can be very costly, as it provides clear and concise information in a structured format. This can be done in several different ways. It can be developed as a simple Word document or by using a template. [3] The template approach can help to force brevity, as the template may be limited to a single page.

Example of an SBAR

Situation:

We have an ongoing project named Line #3, where we aim to build out a third aseptic filling line for Plant A. This new filling line is currently scoped to include a state-of-the-art Restricted Access Barrier (RABS) unit with full Vaporized Hydrogen Peroxide (VHP) sterilization capability in the filling section. The project includes change parts for six different vial sizes to enable this line to fill the full range of the company's existing products, as well as many of those under clinical development. However, the scope does not include the capability to fill potent compounds such as antibody-drug conjugates (ADC), which contain a linked cytotoxic drug. The company currently has several major programs to develop these types of products.

Background:

Why the Problem: The cost of the Line #3 project is estimated at $100 million, which is a rough order of magnitude. Construction is scheduled to be completed in 36 months. This project started before the company committed to pursuing ADC development last year.

Current Project Status: The detailed design is underway, and we are in the procurement process for all major equipment, including process equipment. The detailed design is scheduled to be completed within 90 days, after which we plan to bid out the construction.

When – The Timing Issue: Last year, the commitment to new programs for developing ADCs was based on the acquisition of Company X, which has expertise in this area. The project team was unaware that this acquisition was being pursued when the scope of this project for Plant A was being finalized. When we acquired Company X, their lead ADC product was about to begin a Phase 3 trial for commercial registration. They also have three additional products in the pipeline at earlier stages of development.

How the Problem Impacts the Business: We can revise the project scope to include the ability to aseptically fill potent products, which will impact both cost and schedule, or we can decide to rely on agreements with contract manufacturers who have this capability in place to fill these types of products as needed in the future.

Assessment:

Impact on the Line #3 Project: We estimate that adding the ability to aseptically fill potent compounds to the scope of this project will add $25 million to the project cost and impact the schedule by approximately six months. This includes all rework of the current facility design, as well as the estimated specialty equipment needed.

Use of Contract Manufacturers: Several contract manufacturers have this capability now, and we expect this number to grow over the next five years as pharmaceutical ADCs are a growth segment of the industry. However,

we estimate that significant competition for contract manufacturers' ADC capacity will be a problem. This will drive up production costs, and, more importantly, the ability to secure production slots could be a challenge and may require significant reservation payments years in advance of projected production.

The production cost for our future ADCs with a contract manufacturer is estimated to be at least twice the cost of producing these products internally. Internally, we have the advantage of spreading Plant A's overhead across the two existing fill lines and all packaging operations.

The company has made a long-term commitment to developing new products based on ADC technology, which was the basis for the acquisition of Company X. These products are expected to be a significant component of our company's future growth.

Recommendation:

Based on the company's long-term commitment to developing ADC products and the uncertainty surrounding the use of contract manufacturers for their production, the recommendation is to revise the scope of the Line #3 projects to include this capability.

The additional cost to the Line #3 projects is justified based on the expectation of successful commercialization of these products and their market potential.

This example SBAR is entirely made up. However, it does represent many similar real-life situations where the available data is limited, and important decisions must be made to ensure the viability of the future of the business. In the background section, I highlighted the Why, When, and How precursors to clearly demonstrate the structure and organization. This would generally be unnecessary in a real-life situation, but it may be helpful in the development of an SBAR and then deleted later.

The Art and Science of Storytelling

"Stories constitute the single most powerful weapon in a leader's arsenal."

Dr. Howard Gardner, Harvard Professor

Storytelling is an ancient art that has been practiced by peoples, tribes, and nations around the world for centuries. The ability to tell an exciting, riveting, engaging story is one of the most useful skills any leader can have. This is true if you are running a business or running for office.

While storytelling seems to come naturally to many people, it is still a skill we all can learn. There are specific elements to building a powerful story. There is also a structure that consistently works as well as different types of stories you should be prepared to share. If you want to be successful, become a great storyteller.

We are the sum total of what we have experienced in life to this point. I can say that some of the most profound and important lessons I have learned in my life came from very difficult times and painful experiences.

Personal Story: After graduating from high school, my buddy Tom and I decided to take a backpacking trip to the Pacific Northwest. One of our first treks was into the Three Sisters Wilderness in the Oregon Cascades. We hiked roughly ten miles and then set up our camp near a lake. We were successful in catching several trout for dinner. In the summer, the sun sets late at that latitude, and as we were finishing our trout dinner at dusk, I heard a snuffling shuffling sound to my left. I looked over my left shoulder and was shocked to see a huge black bear shambling down the path, straight toward us and the remains of our trout dinner. As I ran past Tom, I shouted, "Tom, there is a big bear!" and ran terrified down the trail and into the woods. Stupidly, I ran looking for a place to hide in the bushes. I succeeded in getting cuts and scrapes as well as tearing holes in my shirt and pants as I scrambled wildly through the underbrush. It was a

wonder I didn't give myself a concussion in the process! In a few moments, Tom came jogging down the path to where I was hiding. I was amazed at how calm he seemed.

The bear drove us out of our camp, then found and ate all of our food that was supposed to last us for 5 days. We slept that night on the hillside in light rain, as we were too frightened to go back to our camp in the dark. The next morning, as we were picking up the debris around our camp, the bear came back, drove us away, and started pulling the things out of our backpacks that we had just filled. Apparently, the bear was looking for more food. Tom and I formed a desperate plan as it seemed the bear would not leave us alone. Once the bear wandered off, we made a pile of rocks on either side of our camp and made clubs from tree branches. Tom was on one side of our camp, and I was on the other. Sure enough, the bear came back into the camp again, looking for more food. We started throwing rocks at him from two different directions at the same time, which confused the bear. Fortunately, he realized he was not welcome and left. As soon as he did, we picked up our things and trudged the ten miles back to our car.

Tom and I had agreed that if the bear charged one of us while we were throwing rocks at him, the other would run up and hit him with a club that we had ready. The whole plan was based on what we read about bears being easily confused if attacked from multiple directions at the same time. In desperation, we sort of hung our lives on that tidbit of information. I learned that mindless terror leads to bad outcomes, including tearing your clothes. Also, having courage means that you do what is necessary, despite being afraid.

The most powerful stories you can tell come out of your personal, authentic experiences or those of the people who are close to you. It is no surprise that the longer you live, the more stories you have to tell. Even if you are young, you have parents or grandparents, older neighbors, as well as access

to older colleagues at work. Take time to engage with them and hear their stories. You might be amazed at the profound lessons they have to share from their life experiences.

Become a Collector of Stories.

> **Personal Story Example:** I have worked for over 40 years in the biopharmaceutical industry. During my career, I worked for three different companies and had my own consulting company for seven years. I retired in April of 2023. It has been a tremendous privilege to be involved in making important medicines that have saved countless lives or restored the quality of life for millions of people around the world. When I had my consulting practice, my wife and I went on a missionary trip to South Africa and Mozambique. I came face-to-face with people who were dying in their mud huts because they didn't have a dollar's worth of medicine. I came back to the United States determined to do something about what we witnessed. We started a non-profit and now support nine medical clinics in seven African nations.

This is an example of an abbreviated "Who I Am" story, [4] which is one of the essential stories you need to craft and share with any audience you want to connect with and ultimately enroll in your mission. Letting them know who you are with transparency and even vulnerability is the first step to gaining their trust and confidence.

When adults meet for the first time, they unconsciously ask:

1. Can I trust this person? How do I know they are for me?
2. Can I respect this person? Is this person competent, and can I rely on them?

As I have mentioned before, humans are constantly concerned with safety and survival. For the most part, we do this on a subconscious level through the agency of our emotional mind. As a result, we are driven to make sense of what is happening around us. We are drawn toward clarity

and understanding and away from anything that confuses us. Confusion and uncertainty tend to create fear. So, the more clarity and detail you can provide about your leadership competence, style, and experience, the more confident your followers will become.

In addition to the Who Am I Story, you need the following stories in your tool bag:

- Why Am I Here (leading this organization)
- What is my commitment to the success of this organization
- What are the challenges we will face, and how will we overcome these challenges

The Power of Story

First, using a story puts things into an easily understood format. By comparison, it takes too much brain power to process and track a lot of facts and figures. Using a story, you can take a complicated idea and make it simple, meaningful, and memorable.

I have led many groups during my business career, large and small. As I mentioned, I considered it a great privilege to earn a living by making such a difference in people's lives. I wanted the people who worked for me to realize this as well.

For more than ten years, I was the General Manager of a pharmaceutical manufacturing plant that made a lifesaving product. I wanted everyone working in the plant to understand how important their job was, whether they were moving a box in the warehouse, maintaining a piece of equipment, or actively working in manufacturing. Everyone had a part to play, and every job contributed to saving lives. The product we were making is called AmBisome®. The following stories represent different ways to help the employees of the plant understand the significance of their work.

> **Story 1:** Here are the facts: The product we are making, AmBisome®, is a liposomal formulation of Amphotericin B that treats severe fungal infections. We market this product in 63

countries around the world and save at least 70,000 lives every year. Your job is important.

Story 2: Someone you love has been very sick and in the hospital for more than a week. The doctors have tried every antibiotic, but nothing seems to be working, and he is getting sicker by the day. The doctors make a diagnosis by default as a fungal infection and let you know that the patient may die within 48 hours. The doctors then decide to give AmBisome® a try, and the patient makes a dramatic recovery and goes home in four days. The work we do makes a difference and someday may save the life of someone you love.

Story 3: Our product saves 70,000 people's lives every year around the world. The next time you go to a professional baseball or football game, and there are 70,000 people in the stands, look around and see what that means. Your job impacts not only those 70,000 people but also hundreds of thousands of people who are their families and friends. Saving even one life changes the future of an entire family. Your job helps to ensure the future of hundreds of thousands of people around the world.

It is easy to see that when meaningful details are included that are as personally relevant as possible, a story has a much greater impact and is, therefore, memorable. You may be tempted to shortchange the details of a story to get to the main point, but that is usually not helpful. The details help to lock the story into the minds of your listeners. This does not mean that your story must be long-winded. Just make use of powerful imagery that will stick in the minds of your audience.

An example of how memorable a story can be is one I read more than 20 years ago in the first edition of *The Story Factor* by Annette Simmons [4]. This story was about Abraham Lincoln before becoming President of the United States. He worked as a practicing lawyer and faced conflicts with other lawyers on a regular basis. One day, an opposing lawyer was so upset at Lincoln that he challenged him to a duel, which was not uncommon

in the 1800s in America. As the one challenged, Lincoln had the right to pick the weapons and circumstances for the duel. He chose cow dung at ten paces! Ironically, Lincoln didn't think highly of using violence to settle a disagreement, though he was President during one of the most violent periods in American history, the Civil War.

The use of story is also powerful because it can get past the fears and defenses of people's automatic thinking. We are quick to reject anything that we do not understand, that is confusing, or that contradicts our view of the world. It is hard for us to see or understand the perspective of another, especially when it differs from our own.

Life is complicated, and we all come with predetermined ideas, history, fears, and biases. Most of this is emotionally based. Story connects with people on an emotional level and can help them see a different perspective they would otherwise not even entertain.

Jack Nicholson's famous line from the movie *A Few Good Men*, "You can't handle the truth!" is so iconic because it resonates with real life. Truth is sometimes brutal and hard to accept. A Jewish Teaching Story from the 11th Century sums this up nicely:

> *Truth was naked and cold and had been turned away from every door in the village. Her nakedness frightened the people. When Parable found her, she was huddled in a corner, shivering and hungry. Taking pity on her, Parable gathered her up and took her home. There, he dressed Truth in Story, warmed her, and sent her out again. Clothed in Story, Truth knocked again at the villagers' doors and was readily welcomed into the people's houses. They invited her to eat at their table and warm herself by their fire.*

As a storyteller, you borrow Story's power to connect people to what is important and help them make sense of their world. Whether you are trying to engage employees to see the value of their work beyond a paycheck, write the script for a successful movie, sell a useful product, influence an audience to see a new perspective on an old problem, or teach

your children to get along and play nice, storytelling can be a powerful tool in your arsenal.

Use Storytelling as a Team Building Strategy

I led a team that was functioning well for several years, but I felt we could be more collaborative if we got to know each other better. After re-reading *The Story Factor* by Annette Simmons, I developed a plan to help them better understand each other. Simmons encourages her readers to craft a "Who I Am?" story and a "Why Am I Here?" story to share with others to build relationships and camaraderie. [4] The team I was leading had 12 members, including myself, so I set up a schedule where one of the team members would take 30 to 45 minutes to share their stories once a month. Within a year, everyone would have a chance to tell their story and share their background and why they joined the company. I gave each team member a copy of the book so they would all have the same resource, and I shared my story first to lead by example. This program had a profound impact on the team, which was a very diverse group with members from many different parts of the world. Their stories were touching and meaningful. We also made time after each shared their story for the other team members to ask questions and respond to what they heard.

Finally, a story can be a powerful and effective way to diffuse a tense situation or even conflict. This can be very effective, but you must keep your wits about you. Remember that emotions are contagious. Anger is contagious, and so is courage. Proverbs 15:1 says, "A soft answer turns away wrath, but a harsh word stirs up anger."

I was once in a situation where two Vice Presidents at the company were apparently at war with each other. I reported to one of the vice presidents, who gave me the assignment to execute an important project. The other vice president's name was George (not his real name), and he was somehow going to be impacted by this project, or he didn't agree with the scope. I never really understood his logic or lack thereof. I only knew he disliked my boss.

One day, I was holding a project meeting with roughly a dozen people working on the project when George suddenly barged into the meeting with his entourage. I had barely welcomed him to the meeting when he shouted dramatically, "I am shutting this project down!" Of course, this startled everyone in the room, and it became deathly quiet. I let a few long moments pass while I collected my thoughts and then said quietly, "George, I am like a moth drawn to a flame." Then I just looked at him. He seemed confused by this, but all his bluster faded, and as he left the room, he warned quietly, "Don't let your wings get burned." We went on with the project meeting, and I never heard another word from him.

The Structure of Story

There is a reason that almost every blockbuster movie has at its core the fight between good and evil. This resonates with us on an emotional level. That is why people will sit in a theater for two or three hours and be totally engrossed, barely noticing the time that passes. It speaks to our hearts, and we want the hero to win, even when all seems lost.

Hollywood has the mechanics of a good story down, and it gets repeated in every great movie. [5]

- First, there is the hero, otherwise known as the protagonist. He is the main character of the story.
- Then there is the villain, otherwise known as the antagonist, who is out to thwart the hero.
- Third, there is the guide who plays a major role in every great story but is not always recognized for being the guide. Sometimes, people get confused and think the guide is the main character. He is not; he helps the hero, but he is not the hero. Today, the guide is referred to as the supporting actor.
- Lastly, there is the quest to be had, the problem to be solved, or the challenge to be met by the hero, and with the help of the guide, the hero overcomes the villain.

It is easy for people to get confused between the hero and the guide, so let's make this a little more real.

- First, Obi-Wan and then Yoda were the guides for Luke Skywalker in Star Wars.
- First, Gandalf and then Samwise were the guides for Frodo in The Lord of the Rings.
- Spock is the guide for Captain Kirk in the original Star Trek Series.

The hero often doubts he has what it takes to overcome the challenge and complete the quest. In fact, without the guide's encouragement and help in crafting a plan that leads to success and overcoming the villain, the hero would likely fail. This is where people get confused, but this is an important distinction.

If you are selling a product, the customer is the hero. The company selling the product is only the guide.

If you want your employees to be emotionally engaged with your business, you need to recognize they are the heroes, not the business or the company, and certainly not management. As the General Manager of the manufacturing plant, I was the guide, and the employees were the heroes because they got the work done. They are the ones who make medicines that save lives.

If you are speaking to an audience and you want to enroll them in your mission, they are the heroes; you are the guide. You provide the plan that will help them achieve what they need to make their lives safer, more secure, and happier. You may provide the vision, but they are the heroes who need to do the work to make it happen.

The Dos and Don'ts for Effective Storytelling:

- Craft your Stories with vivid imagery and specific, interesting details that make a clear point and connect with your audience's feelings.
- Focus on one main topic and keep it relatively simple. If you confuse your audience, you will lose them. After they are engaged, you can address other topics they may be interested in.

- Do not bore your audience with lots of facts and figures. They will lose interest and walk away (either mentally or physically).
- Be real. Speak from the heart about what you know deeply and what is relevant to their felt needs. If you try to fake it, you will fail.

In the mid-1990s, I was given the task of developing a 25-year master plan for the company I was working for. This involved planning a 2.5 million sq. ft. expansion of the current business campus. The problem was that the City Planning Commission and City Council had a staunchly "no growth" mindset. My small team of five people and I worked for 18 months and made hundreds of presentations to every group in the community that could pull six people together to listen to us. We refined our story, streamlined our slides, and could do all sorts of presentations, from a 15-minute overview to a full 60-minute detailed presentation. We demonstrated that the project recognized the concerns of the community and addressed them directly. This included widening streets, installing additional traffic lights, and restricting the heights of the buildings to preserve lines of sight to the local hills. We would also create high-quality jobs, provide new revenue for the city, and likely increase property values in the area.

In the end, the Planning Commission denied our plan based on a no-growth mindset, so we appealed to the City Council. We contacted everyone we shared our story with and let them know we needed their support at the upcoming Council meeting. Over 200 people attended that meeting, with standing room only. Only one person gave notice that they wanted to speak against the project, but when it was his turn to talk, he said he mistakenly indicated he was against the project when he was really for it!

After seven or eight speakers who supported the project, a woman came up who started out by saying, "I am just a mom, but I would really like my son to have the opportunity to get a good job after college in our own community and not have to move out of state." The City Council approved the project. Ultimately, we were successful because we won the hearts of the people in the community. That's the power of Story.

Success Factor Summary

Building a high-performing organization requires leaders to leverage critical tools such as effective hiring practices, structured communication methods like SBAR, and the art of storytelling. Ultimately, these tools are not just about enhancing productivity; they are about transforming the workplace into a collaborative, innovative, and engaging environment where everyone can thrive.

Review your current hiring practices and incorporate specific questions that assess emotional intelligence and team dynamics during the interview process. Additionally, implement the SBAR tool for clear communication in critical situations and practice storytelling to engage and inspire your team. Schedule a team meeting to discuss and share personal stories, fostering deeper connections and understanding among team members.

Key Takeaways from Chapter 17: Critical Skills Every Leader Needs

1. **Importance of Hiring Effectively**: The hiring process is critical to an organization's success. Beyond technical qualifications, leaders should assess candidates for emotional intelligence, social skills, and characteristics that promote a collaborative and growth-oriented culture. The right questions can help identify candidates who thrive in a team environment.

2. **Utilizing the SBAR Tool**: The SBAR (Situation, Background, Assessment, Recommendation) is a structured communication framework that enhances clarity and efficiency, particularly in high-stakes environments. This method ensures that important information is conveyed concisely, helping teams make informed decisions without misunderstandings.

3. **The Art of Storytelling**: Storytelling is a powerful leadership tool that can engage and inspire teams. Well-crafted stories resonate emotionally, facilitate understanding, and strengthen connections among team members, helping to clarify complex ideas and motivate action.

4. **Building Trust Through Communication**: Leaders must create an environment that encourages open communication and questioning. By asking good questions and using storytelling to build relationships, leaders can foster trust and collaboration, empowering employees to contribute ideas and voice their concerns.

PART FIVE

CASE STUDY OF THE PHARMACEUTICAL MANUFACTURING CHALLENGE

Today's biopharmaceutical industry is saddled with significant controversy from various perspectives. Many of these concerns are over the seemingly ever-increasing cost of new drugs, their ultimate benefit, and the impact of associated adverse effects. While there have been a number of legitimate ethical issues and headline-grabbing concerns, the development of the healthcare industry over the last century has had a monumentally positive effect on people's health worldwide. Today, we easily take for granted the benefits of effective pain medication, insulin to treat diabetes, and the availability of antibiotics and antiviral medicines. Polio and smallpox were virtually eradicated in many parts of the world during the 20th century. Biotechnology has delivered many novel and effective drugs over the last 45 years, including nearly miraculous relief for patients with rheumatoid arthritis, anemia, and various cancers.

Biopharmaceutical operations remain one of the most highly regulated industries for good reasons. The health and well-being of millions of people worldwide depend on the consistent production of safe and effective medicines.

CHAPTER 18

BACKGROUND OF PHARMACEUTICAL MANUFACTURING

"Penicillin has cured or prevented untold millions of deaths."

Alexander Fleming, Discoverer of Penicillin

The principles I have explored in the first four Parts of this book apply broadly across many industries. In Part Five, I will focus on the application of these principles in the context of a pharmaceutical manufacturing site and illustrate how they can make the difference between success and failure for a highly regulated industry.

While there are significant differences between a site that manufactures biologically based pharmaceuticals versus the more traditional chemically based medicines, I use the term pharmaceutical manufacturing to represent either or both. People are the focus of this book, not systems or processes, and people are the common element that can be the true strength or debilitating weakness of an organization.

I have often seen and experienced people who have significant expertise, talent, and experience come to work to do a good job only to have conflict, confusion, and turmoil develop by 10:00 am, resulting in wasted time and damaged relationships. While this happens within many organizations, it is especially challenging for highly regulated industries like pharmaceutical manufacturing.

A commercial pharmaceutical manufacturing plant has significant pressure to consistently produce quality products and avoid wasted time and resources. This pressure is dramatically higher if the facility produces products that save lives and has a constricted inventory. For over a decade, I was responsible for a manufacturing facility that produced a critically needed drug that had expanding market demand, but the plant had limited capacity. During this time, we implemented multiple capacity expansion projects. Some of these required regulatory approval, including qualifying several contract manufacturers who took on the non-proprietary portion of the manufacturing process. Ultimately, we built an entirely new manufacturing site with expanded capacity and additional capabilities.

How the Modern Pharmaceutical Industry Started

Modern pharmaceutical product discovery, development, and production started in the first half of the 20th century. The most significant development was the rapid expansion of penicillin production during World War II. This was a collaboration between the United States government and over 20 pharmaceutical companies, along with five academic organizations. As part of this "Penicillin Collaborative," the largest producers included Merck, Squibb, Pfizer, Eli Lilly, Abbott Laboratories, Upjohn, and Parke Davis, which all became major pharmaceutical companies as a result. [1]

A contemporary of this effort, a scientist at the Squibb Institute for Medical Research, remarked:

> Before 1942, the basic manufacturing processes in pharmaceutical manufacturing plants in the United States produced vaccines and antisera, recovered biological products from plant and animal sources, and synthesized them on a small scale. Except for the chemical techniques, which benefited from the experience of the chemical industry and by the attention of the chemical engineer, manufacturing processes were, for the most part, expanded laboratory techniques. [2]

By 1945, the production of penicillin using commercial-scale fermentation was reaching four million sterile units of the drug per month. Originally developed as an effort to support Allied troops during World War II, the demand for penicillin quickly became worldwide. During most wars in human history, the number of deaths from disease due to unsanitary conditions was as many or more than the deaths from the conflict itself. Penicillin changed that dynamic and firmly established the beginning of industrial-scale pharmaceutical manufacturing and even influenced the biotechnology revolution decades later.

Pharmaceutical Manufacturing – Managing the Day-to-Day Successfully

The day-in and day-out process of manufacturing pharmaceuticals, most often in batch mode, contains repetitive elements that can lull operators and management alike into a false sense of sameness. However, no matter how many hundreds of batches have been made in a plant, every day brings a new challenge. These can manifest as maintenance issues, equipment breakdowns, human errors, misunderstandings, mistakes, and missing elements. Inevitably, the unexpected will occur. There are several ways to develop resilience in your organization, such as anticipating problems, mitigating impacts, employing engineering solutions, and quickly addressing the unexpected when it occurs.

In the following chapters, we will explore various elements that can establish resilience, develop shared goals, build trust, solidify teamwork, and provide tools and methods for effectively managing the challenges that come up regularly. While the site leadership team and the working relationships among its members are the major focus, the most critical role is the leader of this senior team, usually the site General Manager. He or she sets the priorities for the operation and plays a key role in shaping the site's culture, values, and vision.

The following chapters focus on specific areas for elaboration, but each is interrelated with the others. For example, promoting teamwork requires

trust to be established. Trust cannot be built without a commitment to shared goals, accountability, and transparent dialogue. It is critical to understand the specifics of what it takes to build and maintain a trust-based culture where disagreements, misunderstandings, and mistakes can be effectively managed and resolved without damaging relationships between senior team members or their organizations.

It is assumed that quality systems are in place to provide the necessary framework for dealing with many of the challenges that come up daily. These include validation processes, change controls, deviation management, and training programs for Good Manufacturing Practices (GMP), to name a few. One element these quality systems barely address is the people involved in the manufacturing process, from the operators on the floor to the leadership team responsible for the entire operation. Training systems are required to qualify employees to perform their assigned responsibilities. However, any time people are involved, there is always the possibility that they will make mistakes.

Engineered solutions for repetitive processes and tasks are important to implement whenever possible and practical. This is vital because they reduce or even eliminate the potential for errors inherent in manual operations. In later chapters, I will explore several people-oriented methods of reducing risk and minimizing errors in a pharmaceutical manufacturing operation. However, the most influential "system" in the plant is the site leadership team and their ability to work effectively together and give the organization its direction, focus, and priorities. They set the tone of the operation; more importantly, they set the example for how to deal with challenges and the unexpected.

Success Factor Summary

As we move further into Part Five of this book, we will dive deeper into the practical application of the principles discussed thus far, specifically within the context of pharmaceutical manufacturing. While this industry has its unique challenges, the foundational principles of successful leadership, teamwork, and people management transcend industry boundaries. By

focusing on nurturing a strong, resilient team and fostering a culture of trust and accountability, organizations can not only survive but also thrive in the face of challenges.

Take time to evaluate the dynamics within your leadership team. Are trust and transparency prioritized? Are shared goals clearly defined and communicated? Consider implementing regular feedback sessions to strengthen relationships and enhance collaboration, ensuring that your team's focus aligns with the organization's broader objectives.

Key Takeaways from Chapter 18: Background of Pharmaceutical Manufacturing

1. **People-Centric Focus**: The success of any organization, particularly in highly regulated environments like pharmaceutical manufacturing, hinges on the capabilities and dynamics of its people. Conflicts and miscommunications can derail operations, highlighting the need for effective interpersonal relationships and teamwork.

2. **Resilience in Operations:** Pharmaceutical manufacturing is fraught with unpredictable challenges. Developing organizational resilience through proactive problem-solving, engineering solutions, and quick response to issues can mitigate risks and enhance operational efficiency.

3. **Interconnected Principles**: The principles of teamwork, trust, and accountability are interrelated. Establishing a culture that encourages open communication and shared objectives is essential for managing conflicts and misunderstandings effectively, ensuring that the organization can maintain productivity and morale.

CHAPTER 19

THE LEADERSHIP TEAM AND THE VISION STACK

"Leadership is the capacity to translate vision into reality."

– Warren Bennis

The leadership team in any organization is responsible for motivating, inspiring, and guiding everyone in it to achieve the organization's purpose and goals. The Vision Stack is the most effective model I have found to drive alignment across an entire organization and inspire commitment and dedication to face the daily challenges that inevitably come up. This structured approach is especially helpful in the context of the complexities of operating a pharmaceutical manufacturing site. The leadership team needs to take responsibility for developing the vision for the operation. As mentioned, this is not something that is typically accomplished in one meeting. The effort to define the future of the site requires thinking beyond its current state. This usually happens in a series of brainstorming sessions, which are meetings outside of the normal meeting cadence.

It may be helpful to organize this brainstorming effort as a series of off-site meetings that build on one another. Allowing some time in between meetings allows members of the leadership team to process what was discussed and be better prepared for the next meeting. Brainstorming sessions need to

be followed by meetings where the leadership team begins to deliberately dialogue through all the ideas that have been developed and start converging on a coherent vision. While the future vision of the site will be an expansion from the current state, it needs to be rooted in today's reality.

The example below shows how the Vision Stack can be used for a pharmaceutical manufacturing site that has aseptic filling as a key component of its current operation—primarily liquid filling with some products being lyophilized. The site has some expansion capability, but is currently only producing commercial pharmaceutical products.

Example Vision Statement:

[Our site] will be recognized as the Center of Excellence in [our company] for sterile processing and aseptic filling of all modalities, including potent compounds and powders for both lyophilized and liquid final formulations. We will have formulation research and development as a key technical capability, along with specialized packaging for all dosage forms. We will support both clinical development as well as commercial production of high-value, low-volume products and provide launch support for any new product in our company pipeline. The company's clinical development group will look to us to provide technical leadership and expertise for dosage form development and partner with us to ensure the efficient manufacturing of final products. We will consistently be at the forefront of technology development for final dosage manufacturing in the pharmaceutical industry. We will also be known for our innovative, creative, and collaborative skills in addressing and solving technical issues and challenges.

Notice that this vision statement remains open-ended and capability focused. It does not include closed-ended elements, such as how many buildings will be required or how many people will be needed. It also does not place a limit on the number of technologies that will be included or the

size of the operation. It does include implicit statements of recognition for and appreciation of the technical expertise and capability that is intended to be established and continuously expanded at the site. It also implies what will not be included, such as large volume and lower-value products. Notice the specific and relevant technical content that can only be provided by those who are intimate with the current operation, as well as with the associated industry. A consultant can facilitate the process of developing a vision statement, but only the technical leadership can provide the content.

Example Mission Statement

Remember that a Mission Statement needs to be memorable, inspiring, and concise. It should represent the fundamental purpose of the organization and why it exists. An example mission statement for a pharmaceutical manufacturing plant could be:

> *"Saving lives by making quality products and shipping on time."*

On the surface, this statement seems simple. However, it encompasses every aspect of a pharmaceutical manufacturing operation. The first focus is saving lives. While not every pharmaceutical drug saves lives, many do. Those that do not are likely critical to enhancing the quality or extending the duration of life for patients. Every leader in that organization should continually remind their people that the day's work may involve machine maintenance, completing documentation in a batch record, or executing an analytical test, but the real work they are doing is "saving lives."

At every "All Hands" meeting, I consistently reminded my employees that their work is all about saving lives. To make it more meaningful, I talked about the effect on a family when one of their loved ones was rescued from the brink of death because of their work. When a child's life is saved, it changes the future of the next generation. When a father's or a mother's life is saved, it changes the future of that entire family. They earn a living by doing life-saving work.

Making quality products is how lives are saved and involves every department and activity in the organization. Of course, the manufacturing

team is central to this activity. However, they cannot do their job if they do not have the proper raw materials, documentation, and equipment. Therefore, it is a highly integrated operation that requires every department to perform its function if the entire organization is to be effective. If one area fails, the entire operation can grind to a halt. Notice the interconnectedness of the responsibilities of each department of this operation:

Supply Chain: This group procures raw materials and components (vials, tubing, syringes, packaging materials) from approved or qualified vendors. It manages safety stock and the ultimate delivery of materials to the manufacturing floor. It also coordinates the shipment of the product to other sites for additional processing or to commercial customers.

Quality Control (QC): Tests all raw materials and components to document that they meet the required specifications for release and use by manufacturing. They test intermediate products and final products to ensure that they meet the required specifications for use or distribution.

Quality Assurance (QA): Maintains document control for all aspects of the operation, including manufacturing batch records and SOPs. Issues approved and current versions of all documents needed by manufacturing for the production of each batch of product. Collaborates with manufacturing during production to address any anomalies and helps to resolve unexpected conditions. QA reviews all batch records and associated documentation (test results, etc.) and investigates all deviations for resolution before releasing a product for distribution. The Quality Assurance organization typically has the following additional responsibilities:

- Oversight of the GMP training for all site personnel, which documents that each employee is qualified to perform their assigned duties.
- Management of the change control program to ensure that the validated state of the operations is maintained.
- Management of the Quality Systems used by the operations. This includes data management and reporting systems (LIMs, deviation management, etc.).

Maintenance, Engineering, and Validation: The maintenance organization ensures that the equipment used by manufacturing has been properly maintained and is functioning as expected. This is documented through the preventative maintenance program and work order system. Engineering troubleshoots equipment issues during production, while validation is responsible for ensuring the integrity of all equipment and instrumentation is maintained. This is documented through the requalification and calibration programs.

These organizations need the resources to get their work done—and they rely on the site's leadership team to fulfill this need. I took over one manufacturing site that had been suffering for some years under a misguided leadership team that was more focused on looking good to senior management by underspending their budget every year instead of ensuring the site's production capability. I quickly realized that we didn't have sufficient manpower on each shift, and I was astonished when I visited the spare parts storage, which looked like Mother Hubbard's Cupboard! My instruction to the maintenance manager was that every time he needed to order a spare part, he should order two instead.

There are, of course, several additional departments that indirectly support the goals of a manufacturing operation, such as Human Resources, Information Technology (IT), Environmental Health and Safety (EHS), and Finance. Human Resources plays a major role in the new hire process. The IT organization is heavily involved in the systems that manage data across the operation, from quality systems to enterprise systems. Another function that has become increasingly important is automation. This group is usually part of the engineering department and is responsible for the design and functionality of automated manufacturing systems.

As demonstrated, every group in the organization has a key role in the mission of "Saving lives by making quality products and shipping on time." It is not unusual for a manufacturing operation to have such highly integrated efforts by different departments. What sets a pharmaceutical manufacturing operation apart is the additional requirements for being a highly regulated industry, which requires complete documentation

of the operation from end to end. A common saying in the industry is, "If it was not documented, it didn't happen." This documentation is what inspectors from the FDA will spend most of their time and effort evaluating to determine if the operation is under control and is adhering to Current Good Manufacturing Practices (cGMPs). The corollary, not often recognized, is that if it is documented, it did happen. This raises the bar significantly regarding the quality and integrity of the documentation practices for the entire organization.

Reinforcing the Company Values

Company values are intended to be followed broadly as they define what behavior is acceptable or not. Therefore, every plant, division, and site is expected to adhere to these values and apply them to the specific activities of the local organization. Hopefully, some elements in the corporate values statement include trust, respect, accountability, and integrity. These values are key to any pharmaceutical manufacturing operation. It is critical that everyone involved can be trusted to perform their functions according to SOPs, batch records, and work instructions, as well as properly document all activities and results. Any breach of this trust should be taken very seriously and can have significant negative effects on the entire operation.

When any employee signs and dates a controlled document as part of their job function, it must be honest, true, and representative of what actually happened. In recent years, the U.S. Food and Drug Administration (FDA) has stressed the importance of data integrity. In line with that, they established a system called ALCOA in 2018, as guidance for manufacturers to properly document that their products were made safely and in accordance with cGMPs. The acronym ALCOA stands for Attributable, Legible, Contemporaneous, Original, and Accurate. This was later expanded to ALCOA+, which added the requirements of Complete, Consistent, Enduring, and Available. Data integrity maintenance is a mandatory expectation of the FDA for any pharmaceutical operation. Failure to implement these principles could lead to severe regulatory actions, including warning letters and product recalls. [1]

Site leadership should regularly emphasize the importance of the work being done at the site. The example Mission Statement includes a commitment to quality and recognizes the importance of the work that enhances or even saves the lives of patients who rely on the products produced. Another powerful way to emphasize the importance of the work being done at the site is to have patients who are taking the medicines being produced come and share their experiences and the difference these products have made in their lives.

Early in my career, while working at Amgen, I was inspired by a patient who was suffering from severe anemia. He started on Epogen®, which promotes the production of red blood cells. He commented that before starting on this new (at the time) drug, he could not walk across a room without pausing to sit and catch his breath. Since starting this new treatment, he said he is leading a normal life with his wife and kids, exercising, and enjoying life. He commented that "Epogen® gave him his life back." I have never forgotten his words and realized that not only did his quality of life change dramatically, but his family got him back as a functioning father and husband.

At one site, I instituted a program called the "Values at Work Award." This was based on the company's values and had the following requirements.

The award was given on a monthly basis to one employee who was selected by an Awards Committee that consisted of the following three members:

- One member from the site leadership team. This position was rotated every three months.
- One employee from one of the site departments (not a manager). This position was rotated between departments every other month.
- The previous month's holder of the Value at Work Award.

Criteria and Process for Receiving the Award:

- Any employee at the plant could recommend to the Awards Committee any other employee who consistently demonstrated

the company's values in the process of doing their work, with specific examples of how they did it.

- The Awards Committee evaluated all recommendations and decided on this month's recipient.

- The award could only be passed on from the current holder to the next recipient at the monthly all-hands meeting while sharing the specific examples of how the new recipient demonstrated the company values.

- The award was a large crystal trophy that the recipient had the honor of keeping in his or her workstation or desk for a month.

- Once the award was passed on, the past recipient received a small memento to keep permanently as a continual reminder of the importance of the company values.

There was no monetary value or compensation associated with this award. However, the recognition in front of the all-hands meeting and holding the award in their workplace for the month was significant. The employees enthusiastically embraced the program, and it turned the all-hands meetings into a joyful opportunity for people to share their commitment and innovative approach to implementing the company values.

Finally, it must be said that any deliberate breach of trust and integrity would be taken seriously. Deliberately hiding mistakes, falsifying records or data, backdating documents, or deliberately failing to follow SOPs and batch records can result in the employees involved being fired. Good quality systems will ultimately identify that something was not done properly. Then, an investigation will begin to uncover what really happened. If it was an honest mistake, there are systems in place to deal with that. However, deliberate actions will usually result in termination. I have seen many instances where people were afraid to admit they had made a mistake and tried to hide it. This is always eventually discovered and ends with their dismissal. It is vital that site leadership constantly reinforce the values of trust, honesty, and integrity. It is also critical that site leadership emphasize that no one will be fired for making an honest mistake, but trying to hide a mistake will endanger one's job.

The Manufacturing Site Strategy

As discussed in Part Four, the site strategy becomes a roadmap for moving the organization toward achieving its long-term vision. A useful approach for developing a strategy for site development first focuses on the main elements of the Vision Statement and what they imply regarding capabilities that will be needed in the future, but are not currently present.

Considering the example vision described above, several strategic implications can be identified as follows.

Vision Statement Element 1: *[Our site] will be recognized as the Center of Excellence in [our company] for sterile processing and aseptic filling of all modalities, including potent compounds and powders for both lyophilized and liquid final formulations.*

Strategic Implications include:

- Enhancing the organization's reputation within the company and the industry requires first building and refining technical competence and developing a thoughtful marketing plan.
- New technology will be required for product types that are not currently being produced. The strategy for implementing new technologies must also define the priority and timing for each.
- New skills will be required to match the technological additions, and new employees may need to be hired with relevant skills. Alternatively, current employees could be selected to receive specialized training on the expected new technology.
- This may imply the need to expand the operation physically and, in some cases, may require relocation to another (larger) site.

Vision Statement Element 2: *We will have formulation research and development as a key technical capability, along with specialized packaging for all dosage forms.*

Strategic Implications include:

- Adding a new functional area to the site will require agreement and support from company management. A convincing strategy, including a strong cost-benefit assessment, must be developed for how this will be implemented over time.
- Organizational changes may be required to add research and formulation capability, including the addition of new employees with the required expertise.
- New laboratory space may be required, along with additional packaging systems.

Vision Statement Element 3: *We will support both clinical development as well as commercial production of high-value, low-volume products and provide launch support for any new product in our company pipeline.*

Strategic Implications include:

- The organization will not focus on high-volume products or low-value products.
- A strategy that focuses on leveraging current and future resources to produce the most valuable products must also address and suggest effective approaches to producing lower-value products elsewhere.
- Supporting clinical development can take many forms and implies a strategic partnership with other company departments.

Vision Statement Element 4: *Our clinical development group will look to us to provide technical leadership and expertise for dosage form development, and partner with us to ensure the efficient manufacturing of final products.*

Strategic Implications include:

- New skills will likely need to be built to ensure technical leadership.
- Relationships with the Clinical Development group and the Commercial organization will need to be built, nurtured, and preserved.

- Work processes related to product development and planning may need to be adjusted.

Vision Statement Element 5: *We will consistently be at the forefront of technology development for final dosage manufacturing in the pharmaceutical industry. We will also be known for our innovative, creative, and collaborative skills in addressing and solving technical issues and challenges.*

Strategic Implications include:

- A strategy needs to be implemented to stay current with cutting-edge technology.
- People development must include building collaborative and leadership skills as well as establishing an environment that fosters innovation and creativity.
- Active involvement in forums, seminars, and conferences will need to be a focus for relevant technologies.

Analyzing the implications of the vision statement for needed future capabilities can result in many strategic initiatives or goals. Some of these may be addressable in the next 18 to 36 months, while others may not be possible in the near term. A useful framework for organizing these strategic initiatives is based on people, processes, and systems (or technology).

In the category of people, it is important to recognize the implications of future new technologies. Of course, new hires can be brought into the organization if they have the skills needed. However, strategically identifying promising talent within the organization that can be trained on the new technology has multiple benefits versus hiring new people. This gives a growth path for current employees, increases retention, and saves hiring costs. Also, it may be necessary to sunset some of the current technology in preparation for the new systems. This could allow retraining existing employees rather than having them laid off once the old technology is obsolete. In addition, there are strategic considerations for developing closer working relationships with other departments.

The site leadership needs to be sensitive to the career aspirations of their employees and be deliberate in creating opportunities for them to grow and develop their skills and abilities. Beyond promoting people into larger responsibilities, this can involve cross-training in other departments, special assignments, and project opportunities. This not only benefits the employees, but also it grows the total talent within the organization.

Developing and offering new services and support to other organizations within the company will require adjusting work processes. The addition of new technology may require adjustments to existing processes or even the complete rework of existing processes. An example of this is having a commercial pharmaceutical plant take on the production of clinical products. First, the scale of clinical manufacturing is usually much smaller than would be normal for commercial production. Also, the clinical production process may not be fully validated, and the documentation is usually less well-defined. This is especially true for new products that may not have been produced on a larger scale than in a laboratory. All of this would require significant adjustments to existing processes in order to effectively manufacture clinical products.

New technology implies new systems that need to be developed, implemented, and validated. These systems can be entirely new capabilities or expansions of existing operations. In either case, adjustments and changes will be necessary to the existing processes.

The hallmark of a well-developed strategy is the demonstration of a clear roadmap that identifies the important strategic goals needed, along with their priority, sequence, and timing, for at least the next 24 to 36 months. This flows directly into the goal-setting process for the next 12 to 18 months.

The Goal Cascade for the Site

As mentioned in Part Four, there are three categories of goals: long-term goals driven by the vision, strategic goals to guide activities over the next 18 to 36 months, and site operational goals for the coming year. You can see

how these goals in different timeframes feed into one another and support the overall vision and strategy for the facility. The most straightforward goals are operational, and they usually get the most focus and attention, as these become the basis for evaluating the site's annual performance. However, the long-term success of the site will depend on how well the leadership team develops and pursues the goals that are more visionary and strategic.

Having clear goals that are shared by the Leadership Team recognizes the interrelatedness of all departments within the organization. The production goals cannot be achieved by just the manufacturing organization working alone. For example, they cannot do their work if the equipment is broken because maintenance didn't do their job. Manufacturing cannot proceed without the correct batch records issued from document control. Also, the manufacturing schedule is developed by the production planning group based on inventory targets, available capacity, and product demand.

Success Factor Summary

The Vision Stack serves as a foundational framework for guiding organizations through the maze of today's business environment. By investing time and effort into crafting a compelling vision, mission, and set of values, leaders can create a shared sense of purpose that inspires and engages employees at all levels. When aligned with strategic planning and a commitment to fostering trust, organizations can navigate challenges more effectively and drive meaningful progress toward their goals. Ultimately, a well-executed Vision Stack not only enhances performance but also creates a culture where innovation flourishes and individuals feel empowered to contribute to a shared future.

Gather your leadership team to review and refine your organization's Vision Stack. Focus on developing a clear vision statement, a concise mission statement, and a set of core values that resonate with your organization's culture. Use this opportunity to outline strategic initiatives and operational goals that align with the vision, ensuring that all departments understand their role in achieving these objectives.

Key Takeaways from Chapter 19: The Leadership Team and the Vision Stack

1. **The Role of the Leadership Team**: The leadership team is responsible for developing and communicating the organization's vision. This process often requires multiple brainstorming sessions to ensure that the vision aligns with the organization's current state while also setting a clear direction for the future.

2. **The Vision Stack Framework**: The Vision Stack consists of the vision statement, mission statement, values, strategy, and goals. Each element builds upon the others, providing a comprehensive framework that aligns the organization's purpose and actions with its long-term aspirations.

3. **Importance of Mission and Values**: The mission statement articulates the organization's purpose and should inspire and unify team members. Values underpin the organizational culture and guide behavior, playing a crucial role in maintaining trust and accountability within the team.

4. **Interconnectedness of Goals**: The vision and strategy provide the basis of the organizational goals for all levels and departments. This common origin drives alignment and facilitates effective communication and collaboration across teams which is vital to ensuring overall organizational success.

CHAPTER 20

MANAGING THE FEAR FACTOR AND BUILDING TRUST

"Trust is the foundation of leadership."

John C. Maxwell

I t is hard to imagine the impact that one person can have on a pharmaceutical manufacturing plant when they fail to follow procedures and neglect to do their job properly. In one plant, a mechanic doing maintenance on a process mixer didn't complete the final step of ensuring the locking system on the mixer shaft was properly secured, even though he signed off that all steps were completed. When put to use, the shaft slipped down, exposing the lubrication systems to the product being mixed and contaminating the entire batch. The loss in raw materials was over $500,000, not to mention the disruption to the production schedule and lost time related to the investigation.

The General Manager sets the tone of trust for the leadership team and the manufacturing plant overall. This is an especially important issue in a pharmaceutical manufacturing plant where complete honesty and transparency are an absolute must. Manufacturing life-impacting drugs is highly regulated and falls under federal law as identified in the Code of Federal Regulations (CFR). [1,2]

In Part Four, I reviewed a number of techniques for building trust in an organization, including demonstrating you genuinely care about your employees, asking them good questions, and recognizing the importance of their work. Unfortunately, a fear-based environment can be created by accident if you are not aware or vigilant about how the behavior of the site leadership is affecting employees.

This is especially problematic for a pharmaceutical manufacturing plant, as it can cause people to become very creative at hiding their mistakes. Making mistakes while manufacturing pharmaceuticals happens now and then, but if they are hidden once made, it can be very expensive for the business. For the front-line workers, this can be very frightening, causing them to behave irrationally. However, if trust has been established, they will feel bad about making a mistake but also realize they must be honest about it. There are a number of ways to help operators and technicians minimize mistakes. These will be reviewed in the last chapter.

Over time, opportunities will come up for you to clearly demonstrate that you care about your employees as people, not just as workers in the plant. This requires vigilance to recognize these opportunities and take advantage of them when they appear. The following is a personal example where I had the opportunity to demonstrate my concern for the employees in the plant I managed.

At one point in my career, I was the General Manager of a manufacturing operation in Puerto Rico. This island sits in the potential path of hurricanes and experiences disruptions almost every year. These disruptions included the power going out across the island anytime a hurricane came within a day or two of landfall. Often, hurricanes would pass close to the island but not directly strike it. Hurricanes are unpredictable, so the electric company's protocol was to shut down power generation for the entire island anytime a hurricane was close. For this reason, the plant had emergency generators to keep the operation going as long as possible. Of course, if a hurricane was going to hit the island, we would shut down the plant and let the workers go home to care for their families.

One year, the maintenance technicians proposed using the company's purchasing power to procure emergency generators for employees' homes at wholesale prices. These generators would be able to power an employee's

entire house, and the proposal was for the company to pay for the generators upfront, with the employees reimbursing the company. When the power goes out, it is often days before it is restored, and life without electric power on a Caribbean Island is not fun without air conditioning.

This proposal was presented to the leadership team, and it was discussed at length. In the end, the leadership team was evenly split, with half of the team supporting the proposal and half against it. Those against the idea were chiefly concerned about the potential of employees not reimbursing the company and setting up unnecessary conflicts. Those in favor of the proposal saw it as an opportunity to demonstrate care and concern for the employees. As both viewpoints were valid and the leadership team was strongly in disagreement, I halted the discussion after an hour when it was clear there would be no consensus. I indicated that I would decide after I thought about it for a time.

As fate would have it, a hurricane approached the island within two weeks. The power on the island was shut down, and the plant was closed as the hurricane came near. As I lay sweating in the dark at home, I thought about the maintenance technician's proposal and developed a plan that ultimately satisfied everyone. The company would purchase the generators for any employee who wanted one. Each employee signed an agreement to reimburse the company, and if, at the end of the year, they had not completed the reimbursement, the remainder of the generator cost would be deducted from their year-end bonus. This satisfied the entire leadership team and went a long way toward establishing trust and rapport with the employees of the plant.

This was a rare opportunity to show all the employees in the plant that the leadership team cared about them in a way that was meaningful to them. More often, there will be opportunities to show care and concern for individuals or even working groups within the plant.

In another facility, we were manufacturing a life-saving drug that was constantly in short supply. The required year-end shutdown for maintenance activities was typically scheduled in the middle of December and would conclude in early to mid-January. There are always a lot of maintenance

activities and projects that must be completed in this relatively short window while the plant is shut down. This required the maintenance and engineering groups to work during the week between Christmas and New Year's Day when everyone else in the plant had that time off to be home with their families. This shortened the overall shutdown time by one week and allowed the production of at least two additional lots of this product in the coming year. One year, we had a very good success rate, and I felt that we could manage the inventory in the coming year well enough to allow the maintenance and engineering groups to have that holiday week off and be home with their families. These groups worked during this holiday week for years due to product inventory constraints. I knew they would appreciate having the time off, but I was surprised at the outpouring of appreciation that was shown, not just by the employees but also by their spouses.

Sometimes, you can turn an unexpected failure in the plant into an opportunity to build trust, depending on how you handle it. The following is an incident that occurred in a plant I was managing some years ago.

The Set Up: Many processes used in manufacturing pharmaceuticals are highly dependent on the utilities that support them. During a production lot, three of our top maintenance mechanics were gathered around one of the key utility systems for the operation that was underway. It is unclear what caused them to come together at that moment, but at one point, one of the mechanics reached out and turned a valve, which initiated a cascade shutdown of that entire utility system. Unfortunately, on the process side, we were in the middle of a very sensitive production step. The process was halted in an unstable condition, and that product lot was a total loss. To make matters worse, we were in a tight inventory situation, and every lot counted. The financial impact on our scrap account was several hundred thousand dollars.

The Follow-Through: The investigation took a few days to sort out exactly what had happened and who was involved. A couple of days later, I called a meeting with the head of the maintenance department and the three mechanics who were involved. My purpose was to personally hear their story about why they were gathered there and what they were

thinking. Of course, it was a tense meeting, and the three mechanics were likely expecting to be fired. I reminded them that we were in a tight inventory position with this lifesaving drug and that losing this lot was not just a financial impact on the plant, but also that people's lives were at stake. They all felt terrible about what happened and made profuse apologies in a very hang-dog manner. I let them talk for a while, but for the most part, they could not explain why it happened or what they were thinking. Finally, one of them asked the question that was the elephant in the room, "Are we going to be fired?"

The Lesson to Learn: My response was, "Of course not! I just invested $100,000 in each of you to learn an important lesson!" I went on to emphasize that our job is saving lives by what we do. There is no room for grab-ass behavior or joking around when in the plant. Furthermore, we all must be mindful of what we are doing as part of the plant operations and think before acting. Of course, mistakes will happen, but stupid mistakes are another matter altogether. We spent some time talking about what they had learned and how they would never make such a mistake again. I told them that I appreciated their commitment and that if they ever made such a mistake again, they would be fired.

Some Afterthoughts: Indeed, mistakes do happen, and they can be costly. In this case, I believe the mechanics were messing around and certainly didn't intend to trash a production lot. Also, these were three of our most highly trained mechanics who provided huge value in keeping the operation running smoothly. They would be difficult to replace. Finally, they didn't try to hide what happened, nor did they try to blame each other. They each went on to provide years of dedicated service following this incident. I think they were astonished by my response when they asked about being fired. The important thing to understand about such a situation is they most likely went back to their work area and shared the story of my response. That entire department and perhaps most of the plant personnel learned that I valued them and that I would not make arbitrary decisions, but ones that would be fair. I think this went a long way in reinforcing a trust-based environment in the plant.

While mistakes are opportunities for learning, dishonesty is a breach of trust that leadership cannot afford to overlook. During my career, I have also had to deal with a number of individuals who were experienced and may have been properly trained, but demonstrated they could not be trusted to always tell the truth, especially when it might make them look bad. Hiding mistakes, falsifying documentation, and lying about what happened is a quick way to be asked to leave the company. On more than one occasion, in the process of terminating an employee for not telling the truth, I was questioned by the Human Resources department if my decision was really fair and necessary. My response was that we are making drugs that are injected into the bodies of patients who are desperately ill. I then asked, "If one of your children needed this drug to save their life, wouldn't you want it made by someone you could trust?"

The Manufacturing and Quality Assurance Partnership

One of the biggest challenges to maintaining an environment of trust is the relationship between the manufacturing and quality assurance organizations. These two different organizations are often the largest groups at the site and are responsible for multiple operations with many mutual contact points. How well they are able to effectively collaborate and trust each other will determine the success of the overall operation.

Unfortunately, I have seen many cases where an adversarial relationship develops between these groups, hindering efficiency, denigrating trust, and wasting time and resources. The origin of this breakdown and its solution lies with the leadership of each organization. They set the expectations for their respective organizations and the climate of collaboration. The simplest way to think about this situation is to consider each organization as a team with its own goals and responsibilities.

For the manufacturing team, this is achieving the site's production goals. The manufacturing processes are typically complex, with numerous stages. A failure at any point along the way may result in a product lot being scrapped. There is significant pressure to not only make a good product that meets specifications but also to address and solve unexpected issues

that come up as efficiently as possible. The regulatory requirements include complete documentation for every step of the manufacturing process.

The quality assurance team is responsible for providing oversight to all aspects of the site operations, ensuring that Current Good Manufacturing Practices (cGMP) are consistently followed. They are responsible for all quality management systems and, ultimately, the verification that products produced at the site meet all specifications and requirements for release.

Each team has its specific areas of responsibility as well as important goals for everyone in their respective teams. What is needed for the success of the overall site and for both teams to achieve their goals is a high degree of collaboration and trust at every level. Teamwork within each organization occurs when everyone on the team does their part to achieve the team's goals. In this case, collaboration between the two teams is distinct from teamwork, as it requires a sense of partnership where all involved support achieving the goals of both teams. Neither team "wins" at the expense of the other. This is where the Mission Statement of the site becomes very important, as it links and aligns the efforts of everyone at the site.

Too often, both manufacturing and Quality Assurance (QA or quality) focus only on their own areas, issues, and priorities instead of the big picture. In the intensity of the daily grind, they can quickly and easily lose sight of each other's concerns. As mentioned, in the worst case, an adversarial relationship develops that can put the entire operation in jeopardy because trust is broken.

One example is a situation that occurred at a company I was consulting with, where a manufacturing operator was performing a task that needed a verifier per the SOP. She was working in a room by herself, likely only focused on trying to get the job done. However, the batch record made it very clear that a second person acting as a verifier for critical steps was required. The worst case would be if she purposely ignored the verifier requirement and willfully violated the SOP and batch record. This was definitely a problem that needed to be addressed. A member of the Quality Assurance group came by, looked through the window of the room, and saw the operator working alone and knew that a verifier was needed for

that operation. However, instead of trusting the operator and asking if she needed help finding a verifier, the QA representative went back to his office to write up a deviation as if to "score one" for his team.

This was a clear demonstration of a police mentality that is unhelpful and counterproductive. QA on the manufacturing floor has the responsibility to assist manufacturing in their effort to work in a compliant manner. The QA representative could have stopped the operator and offered to help find a verifier, possibly avoiding the need to write up a deviation. Deviations require an investigation, the development of corrective measures, and preventive measures and are the focus of regulatory agencies when they come to do an inspection of the site.

Likewise, manufacturing personnel cannot act like cowboys doing whatever they want. They must be committed to the compliance mandate to work in this industry. They must be trained and committed to following all relevant SOPs, batch records, and good documentation practices.

What is needed is a true partnership where both organizations trust each other and work together to ensure the entire operation is successful. First, there must be agreement on what success looks like. Neither group can be successful at the expense of the other. This goes back to the importance of establishing the Mission Statement for the facility, as previously discussed. Clarity and agreement on the overriding purpose for the mission of the facility is essential. It is the starting point for the alignment of activities and the foundation for a trusting partnership between manufacturing and QA. Every member of the manufacturing organization must know what to do to ensure quality compliance. Every member of QA must be aware of the challenges that manufacturing faces on a daily basis. Our example Mission Statement for the facility is:

"Saving lives by making quality products and shipping on time."

This clarifies that manufacturing gets no credit for their work if they make a product in a way that is contrary to procedures or that does not meet the required quality specifications. If they do, they are just wasting their time

and resources. Sometimes, manufacturing operators may be tempted to cut corners or make unauthorized changes to procedures because they think it will be more efficient and save time. This can result in hidden problems that could have potentially extreme consequences.

This mission statement also notifies the quality organization that they cannot arbitrarily hinder manufacturing because they do not understand the operation. The quality organization must support the manufacturing function by providing approved documentation and on-floor support to address the unexpected in order to keep production moving. Stopping production or writing up deviations as a result of being confused or misunderstanding what is happening creates significant inefficiencies and hinders the effort to achieve the mission.

It is no surprise that the best Quality Assurance professional is one who has spent time in a manufacturing role and has gained an insight into the daily challenges they face. Likewise, it is very valuable for key decision-makers in the manufacturing organization to take a rotation in the quality organization. As these opportunities have logistical challenges, they must be planned strategically. Middle management within manufacturing will benefit the most from a rotation assignment in the quality organization. They usually deal with the most anomalies in manufacturing and must be able to work effectively with quality to address problems as they arise. In a similar manner, the middle management and floor personnel within the quality organization likely have the most frequent interaction with manufacturing and would benefit the most from a rotation in manufacturing.

These are valuable experiences for all involved as they help individuals to see things from the other person's perspective or point of view. In any problem-solving situation, it is critical to first ensure there is agreement on the problem. Understandably, a manufacturing manager may have a very different view of the issue at hand than a quality manager. Before trying to work together to find a solution and define the path forward, there must be agreement on the problem. It may take a fair bit of dialogue to uncover the assumptions that each is making before they can reach alignment. The

temptation is to shortchange this process and move directly into problem-solving and action planning. This will be an exercise in frustration if there is no initial agreement or common understanding of what the problem is. In the worst case, relationships can be damaged, and trust broken. Each department has a specific role in the mission of the overall organization and must be committed to being successful together as a partnership.

Success Factor Summary

Building a trust-based organization is a vital endeavor that requires intentional effort from leadership at all levels. By fostering an environment of trust, where employees feel safe to share their thoughts and where mistakes are viewed as learning opportunities, organizations can enhance collaboration, creativity, and overall productivity. Trust not only strengthens relationships but also empowers employees to engage fully in their work, driving the organization toward its goals. As leaders prioritize trust-building practices and encourage open communication, they lay the groundwork for a resilient and innovative culture that thrives despite its challenges. For a highly regulated industry, nurturing trust is not a nice-to-have; it is a strategic imperative that positions organizations for long-term success and excellence.

Evaluate the current climate of trust and collaboration between manufacturing and quality assurance by seeking feedback from their employees about their comfort level in voicing concerns and asking questions. Implement practices such as regular dialogue sessions to foster open communication between these two departments. Develop actionable initiatives that encourage collaboration between manufacturing and quality assurance teams.

Key Takeaways from Chapter 20: Managing the Fear Factor and Building Trust

1. **Establishing Trust is Critical**: Trust is essential for a high-functioning organization, especially in highly regulated environments like pharmaceutical manufacturing. The site leadership is responsible for establishing a trust-based culture that encourages transparency, collaboration, and honesty.

2. **Impact of a Fear-Based Environment**: A fear-based culture can lead to negative behaviors, such as hiding mistakes and avoiding accountability, which creates huge risks for a highly regulated operation. Leaders must be vigilant in their actions to avoid unintentionally fostering such an environment.

3. **Asking Good Questions**: Effective communication in a trust-based organization hinges on asking thoughtful, open-ended questions that promote dialogue and understanding. This approach encourages employees to express their ideas and concerns, strengthening relationships and collaboration.

4. **Collaboration Between Departments**: A successful partnership between manufacturing and quality assurance teams is critical for achieving operational goals. Leaders should diligently promote understanding, collaboration, and trust between these departments to ensure that both teams work toward shared objectives.

CHAPTER 21

MANAGING RISK FACTORS AND AVOIDING MISTAKES

"All men make mistakes, but only wise men learn from their mistakes."

Winston Churchill

As mentioned, one of the most important responsibilities of the site leadership team is to manage the risk factors involved in the operation. While this may seem obvious on the surface, the details of what is involved are rarely obvious. Often, consequential decisions need to be made without all the information that we would like. This is where experience and wisdom play a key role. Occasionally, a gut sense will develop where you know that something is not right and you should not proceed. I remember two occasions when I had this experience.

Example 1: I previously talked about the plant I managed in Puerto Rico. During one fall season, a hurricane was coming close to the island, but it looked like it was going to miss us. So, I kept the plant running as we carefully tracked the projected path of this hurricane. Then, when it was directly South of the island by about 50 miles, it stopped dead in its tracks for 24 hours. At that point, I closed the plant and sent everyone home. I sensed that the tracking no longer meant anything as the hurricane could go in any direction, and since it was too close to Puerto Rico, the risk was

too high to keep operating. In this shutdown, we put all inventory in a safe condition and had the plant prepared as best we could. Within 12 hours, the hurricane started traveling due North and went right over the island.

Example 2: In another plant I managed, we renovated and modernized an existing aseptic filling plant. This involved adding a second filling line and reconfiguring several adjoining spaces. This was a challenging project as we needed to continue operating the existing line while adding the second line. However, with lots of environmental monitoring and careful planning, this project was successful.

The last part of the project was requalifying the adjoining spaces and hallways from an environmental control standpoint. This required three consecutive days during which environmental monitoring must meet the acceptance criteria. For a number of weeks, we had intermittent failures to meet these criteria, where one of the three days failed, but the other two didn't. Also, there was no pattern to the failures and no obvious root cause. After each failure, a double cleaning of all the areas was required, which took a day or so to complete. Everyone was getting frustrated as we were now running behind schedule, and the year-end was coming up. People do not do their best work when they are frustrated and possibly anxious about a series of failures.

In this situation, there are many small things that could be contributing factors to the problem, but nothing was obvious. I realized we could not continue to document failure after failure and that all those who were working so hard to complete this effort were tired and frustrated. I decided that everyone needed a rest. I halted the requalification effort and indicated we would resume when everyone was back from the year-end break. In January, we restarted this effort and were immediately successful.

This last example highlights one of the major concerns that pharmaceutical manufacturing leadership teams face, which is balancing the needs of the business with the needs of the employees. Understandably, the business needs the production plan to succeed, which ensures that the inventory targets are met to support product sales. The employees need clarity on their goals, sufficient resources to do their job, and support from

management when they face challenges. However, it is not uncommon for these needs to get out of balance, causing risk factors to escalate.

Most manufacturing plants run either 24/7 or 24/5 in terms of the hours and days of operation. While the major production activities could be concentrated on weekdays, there are a lot of preparation steps and maintenance activities that typically happen on alternate shifts. As an obvious consequence, each of these shifts needs to be staffed with enough employees to get the work done. This is not as straightforward as it seems due to the impact of vacations, sick time, and training requirements. Additionally, if the senior leadership of the company has primarily an administrative mindset and is not familiar with how shift structures work, it can be very difficult to justify the needed headcount. As a result, employees may feel pressured by the amount of work they are responsible for completing when they lack one or two people on their shift. This leads to excessive overtime, rushing to complete tasks, increased levels of mistakes, and, in the worst case, "cutting corners." All of this increases risk factors significantly.

It takes tenacity and courage for the leadership team to reaffirm its commitment to operating compliantly in the face of insufficient resources. The only recourse in such a situation is to evaluate what level of production is possible to achieve with the resources provided and adjust the production plan accordingly. If this impacts inventory targets, it will raise the level of awareness and help resolve the issue. However, a very thorough analysis of the real needs for headcount on each shift in the operation is required. Also, this is not just a manufacturing personnel issue because many groups need sufficient staff on multiple shifts to properly support manufacturing activities.

The Risk Matrix shown below is a simplified illustration of the complex interrelationship that exists for any pharmaceutical manufacturing organization. In the end, the primary responsibility of the leadership team is managing the risks inherent in the operation, satisfying regulatory inspectors, and consistently supplying the market with quality products.

As mentioned, making a product that does not meet the required specifications is not only a waste of time and resources but can also have other

significant negative implications. Rejected lots can jeopardize production plans and inventory targets for the business as well as call into question whether the operation is truly in a state of control. Every rejected lot needs to be documented, and an investigation carried out to document what caused the lot to fail its specifications. This is another area that regulatory agents will focus on during their inspection.

The Risk Matrix

Product Quality Risk	Compliance Risk	Business Risk
• Meeting Required Specifications • Use Only Released Raw Materials • Use Only Approved & Validated Processes • Use Only Approved and Current Documentation • Tested by Quality Control Unit • Released by Quality Assurance	• Documentation Practices • Management of Unexpected Conditions • Deviations from SOPs and Batch Records • Data Review and Audit Practices (Integrity) • Investigation Completeness	• Investment in Labor and Raw Materials • Staffing Plans (Shifts) • Production Plans • Inventory of Raw Materials and Product • Capital Investments • Production Capacity • Production Redundancy

	Product Quality Risk	Compliance Risk	Business Risk
Key Question	Is it Good Product?	What will Regulators think?	Can we Stay in Business?
Primary Objective	Avoid Recalls	Pass Inspections	Ability to Supply the Market

I found the Risk Matrix above helpful in clarifying the decision rights of all involved and the necessity of an active partnership between manufacturing and quality if the operation is to be successful.

Product Quality Risk is a fundamental concern for any pharmaceutical production operation. There can be no tolerance for anything that might compromise the quality of the product that is released to the marketplace. As a result, there should be many quality systems in place to ensure products are made in the approved and validated manner using only qualified materials. It is then tested to ensure the final product meets all release specifications. Finally, all documentation is reviewed again by Quality Assurance to verify there are no open deviations, errors, or gaps in the documentation before being released for distribution. The Quality Assurance organization has the ultimate responsibility and, therefore, the decision rights regarding any and all potential product quality risks.

An important principle is that the quality of any pharmaceutical product is defined by its specifications. People like to talk about making "high-quality" products, often with an unconscious belief that it means a product that exceeds its specifications. Specifications are originally set based on many factors, including regulatory expectations, clinical production results, clinical trial results, and industry standards. It is true that any specific lot of product may exceed its specifications, which is perfectly fine. However, any product lot that "just" meets its specifications is also good and can be released to the marketplace. Of course, there is often variability in the production of pharmaceutical products, which means that a particular lot may fail to meet its specifications and will be rejected as a result. It is also true that wide swings in specification results from lot to lot could signal that the production process may not be as controlled as it needs to be. Such a situation would normally require an investigation into the root cause of this variation.

Business Risk is primarily the need to commit resources at every stage of the production effort without any guarantee that it will result in a "good product" that can be sold in the marketplace. While this is a common issue for all types of manufacturing, the stakes in manufacturing a pharmaceutical product are generally much higher due to the stringent requirements related to being a highly regulated industry. The commitment of labor, raw materials, components, and plant capacity are the obvious inputs to the production effort. What is not as obvious are the risks associated with the production plan, managing inventory targets, and meeting market demand.

Making too much product ties up working capital and could result in product expiring on the shelf. While this has a potentially significant financial impact, the alternate scenario where not enough product is manufactured runs the risk of depleting inventory and failing to meet the market demand, which could be disastrous on several levels. First and most importantly, if this is a life-saving product with no equal alternative, people's health could be seriously impacted, even resulting in deaths. If alternative treatments are available, the company could lose market share permanently. Finally, there is significant value in having a reputation for

consistently and reliably supplying patients with important medications. This can be lost quickly when a drug shortage occurs and can even involve regulatory actions by the FDA. [1]

Compliance Risk is that challenging area where a good partnership between manufacturing and quality can make the difference between achieving only mediocre performance versus superior performance. Compliance risk centers around how regulatory agencies will view the site in terms of handling anomalies, deviations, non-conformances, and unexpected issues when they occur. For example, the FDA will scrutinize deviation reports to determine if the associated investigations were sufficient or not. Also, they will review the Corrective Actions and Preventive Actions (CAPA) to see if they were completed on time and have been effective.

The hard part of dealing with compliance issues is thinking through how regulatory agencies may interpret what happened and what was done as a result. Usually, a deviation that is properly investigated will generate corrective actions and preventative actions that will ultimately improve the reliability of the operation. However, there are situations where the potential impact on the product quality may be unclear. In such cases, based on the specific circumstances, the manufacturing group's perspective may be very different from that of quality. It is very important to work through the risk factors logically and determine together what level of risk is acceptable to all. These are cases where a detailed explanation of the group's conclusions needs to be prepared for sharing with regulatory agencies when they come to inspect. It is always a team effort to interact with the FDA during an inspection and explain the logic and rationale for how any of these situations were handled. This requires that everyone agree with one explanation, including manufacturing, quality, validation, and technical services.

Compliance risk is a continuum from a very conservative (low risk) standpoint to a liberal view (high risk) regarding how the FDA will interpret what was done. Neither a high-risk nor a low-risk approach is helpful. It is obvious that taking the high-risk approach with compliance issues puts

the entire operation at risk if inspectors conclude the operation is not "in control." Also, the low-risk approach may be overly conservative and reject product lots based on the quality organization not "feeling good" about how to explain the situation to an inspector. A more appropriate middle ground approach that accepts some risks also requires sound explanations based on logic and the science involved. Compliance issues need to be resolved in the context of partnership and consensus decision-making. This takes emotional maturity on everyone's part and a willingness to listen to and seriously consider the input of all involved.

I have seen cases where the quality organization argues to categorize a compliance issue as a product quality issue. I have also seen the manufacturing organization try to define a compliance issue as a business issue. These situations often develop because there has not been enough dialogue to properly define the real problem. It is important to resist the temptation to move to start solving a problem that has not been thoroughly defined, or one where there is no agreement on its nature. These situations can quickly degrade into a debate, resulting in damage to relationships and, worse, ending with a poorly thought-out solution or one that may be inappropriate.

Using Dialogue and the Power of Curiosity

In a complex, high-pressure environment, there is nothing more important than a healthy curiosity for each other's point of view. The value of a team working together and sharing their experience, expertise, and insights is especially important when there is disagreement, misunderstanding, or a difference in opinion on a significant issue. Asking a curious question has the immediate effect of opening dialogue, which facilitates understanding, as previously discussed.

It is important to note that a desire to understand does not mean agreement with another person's point of view. To do this properly, you must suspend your own point of view temporarily. It is also vital to suspend any sense that your opinion is being threatened by another's opinion that may be very different from yours. Resist any temptation to defend your view, even mentally.

True curiosity is an open exploration of what might be useful or true. It is a willingness to be open to new ideas and perspectives. We form opinions and beliefs based on the experiences we accumulate throughout life. More importantly, we shape these beliefs based on our interpretation of those experiences. For example, two people can share the exact same experience yet come away with very different beliefs based on how they interpret what happened. It is natural to see an issue or problem from one's own point of view that has been shaped by previous experience. Along with this often comes an unstated set of assumptions and biases that the person may be completely unaware of. Asking curious (or good) questions often helps illuminate the hidden assumptions that may be at work and cause unnecessary disagreement.

The following example illustrates a situation where I needed to find the balance between the business needs of the plant, the importance of maintaining a compliant operation and ensuring the quality of the product we produced.

The Set Up: Coming out of a shutdown is often problematic, but especially so for an aseptic filling operation. The production plan called for the first lot to be formulated and ready to be filled by a certain date. Unfortunately, the startup schedule was delayed unexpectedly, and the fill date was pushed out by one day past the validated hold time for the already formulated lot. Based on the validation criteria, we would have to scrap the lot if it was not filled within the validated hold time.

Analysis and Proposal: A review of the startup schedule required a 3-day hold period post media fill to allow for the first reading of the media fill vials. Note: "Media Fills" are a requirement to return an aseptic filling operation back to production after a shutdown. Per the SOP, this gated the return to production. The site had a consistent history of successful media fills, so I, as the plant manager, proposed to the head of quality that we make an exception and fill this lot on day two after the media fill to avoid having to throw the already formulated lot away (business risk).

Reaction and Dialogue: The head of quality immediately rejected this proposal, expressing concerns related to both compliance and quality.

Obviously, this was a deviation from our SOP, which stipulated a minimum 3-day holding period to enable the media fill reading. All agreed that this is the normal way to return to production. However, I wanted to explore if, in this case, an exception could be made. The dialogue that ensued recognized that, based on the plant history, the risk of failing the media fill (product quality risk) was very small. Then, it was countered that from a quality standpoint, the risk may be small but not zero, and therefore, we should not proceed. We finally agreed that the compliance risk could be addressed based on the plant history and the business imperative of filling the lot before it expired, which would have resulted in discarding it anyway. That left the concerns related to quality as an obstacle to agreement.

The Curious Question: It was not until I asked specifically how we would handle the situation if the media fill was a failure that an unstated assumption became clear. The head of quality was subconsciously concerned (emotional mind at work) that if we went ahead and filled this lot (invested in more business resources), there would be resistance to rejecting it, even if the media fill was a failure. I describe it as a subconscious concern because once we dialogued on what we would do if the media fill failed in any way, we would reject the lot. This was a commitment that I was happy to make, as the lot would have been discarded anyway if we had not filled it.

The important point is that sometimes we have unstated, subconscious thoughts and concerns that may or may not be quite rational. This is the emotional mind taking charge when something just feels wrong. We are tapping into a powerful built-in survival mechanism that cannot be ignored. Most likely, the head of quality had been in a previous situation where he was under pressure to do something that didn't feel "right."

In this case, I agreed that, if the media fill was not a complete success, we would have to reject this lot. Of course, this also required a carefully crafted explanation for presentation to regulatory inspectors when they came to the plant.

Asking curious questions is a powerful approach to gaining an understanding of how others have come to their opinions and beliefs. When someone says

something that you disagree with, you can ask curious questions to gain an understanding of their thinking process. A curious question, properly worded, is non-threatening and opens the door for a useful dialogue to begin. An example of a curious question that would work in most situations is, "I find what you said interesting. Can you help me understand why you think that?"

Importance of Mindfulness in Pharmaceutical Manufacturing

Mindfulness in the workplace is the ability to stay present and aware of what is happening around you, and to stay focused on what you are doing. This is not to be confused with the genre of mindfulness meditation that is prevalent on the internet. The practical value of being task-focused and effectively managing both your mental and emotional state while at work has been broadly recognized in recent years.

Google was one of the early adopters of mindfulness training, recognizing the benefits of employee retention, improved performance, and greater creativity that can result from practicing mindfulness on the job. [2] Today, it is estimated that between 40 and 50 percent of large corporations include some form of mindfulness training for their key employees.

Characteristics of Mindfulness:

The characteristics of mindfulness can be especially important in challenging circumstances as they foster a more balanced state of mind. The following is a listing of some of the recognized characteristics and benefits of promoting mindfulness in the workplace.

- **Staying Focused and Minimizing Distractions**
  - Staying present in the moment and aware of what you are doing.
  - Stay focused on a single task, especially if it is complicated.
  - Minimizing Distractions and not allowing mind-wandering.

- **"Go Slow to Go Fast"**
  - Take time to assess the situation before acting.
  - Avoid rushing or just reacting to the situation.

- **Accept the Situation for What It Is**
  - Avoid reacting emotionally.
  - Make reasonable choices on how to deal with the situation.
  - Be solution-oriented instead of problem-oriented.

- **Capturing True Productivity**
  - Fewer mistakes and errors.
  - Higher quality outcomes.
  - Demonstrates a growth mindset.

The benefits of employees being mindful while manufacturing pharmaceutical products are obvious. In fact, the characteristics of mindfulness mirror many of the benefits of the success factors discussed throughout this book.

Staying Focused and Minimizing Distractions: The cornerstone of mindfulness is an extreme focus on the task at hand, which requires a lot of brain energy. Therefore, it is important to take mini breaks periodically. Even five minutes away from the current task can refresh your focus. This is very similar to being in the flow state, which is characterized by intense focus that utilizes a lot of brain energy as previously described, and can only be held for 90 to 120 minutes before recovery is necessary.

By contrast, a study by Harvard University scientists has shown that 47 percent of the time, people tend to "mind wander"—an unfocused state where they are not thinking about what they are doing. [3] A typical example is when you start your morning drive to work and are surprised that you arrived so quickly. You were thinking about something else on the way and didn't even notice the passage of time, much less the drive from home to work. This is being on autopilot and not fully awake to what is happening at the moment. It is a natural way that our brains work, as when in a mind-wandering or daydreaming state, the brain uses less energy. The subconscious mind takes over when we are in autopilot mode.

Mindfulness is key to avoiding mistakes, especially when performing critical operations in a pharmaceutical manufacturing process. One of the biggest challenges to mindfulness is avoiding or minimizing distractions, both internal (mind wandering) and external. Sometimes there is a disproportionate impact of a distraction while performing a critical activity, which can be very costly.

One example is an incident that occurred on a packaging line that required the operator to pick up a partially labeled package and move it to another conveyor for completion. In the process of moving this package, the operator was stopped by her supervisor to answer a question. Because she was distracted in the middle of this task, without realizing it, she placed the unverified package on the wrong side of the finishing equipment and beyond the lot number verification station.

There should have been an engineered solution to make this mistake impossible, but the line was new and included some level of manual handling. Fortunately, in this case, the package without a completed lot number was picked up in an AQL and didn't get into commerce. As part of the investigation into how this occurred, the production line was shut down for several weeks while the incident was investigated. All previous lots were 100 percent inspected to make sure none were missing lot numbers. Procedures were rewritten by adding a verification step to prevent a recurrence until the line could be reworked with an appropriate engineered solution.

There are many other areas and operations in a pharmaceutical manufacturing plant where operators and technicians must remain focused and mindful of the details related to their tasks. Examples of critical activities include the formulation process, in which the right quantity and order of addition must be made exactly. Less obvious is the example of the mechanic doing preventative maintenance on a batch mixer and forgetting to tighten the locking bolt on the mixer shaft, resulting in a failure that contaminates the next product lot.

Go Slow to Go Fast: Making time to assess a situation before jumping into action seems like the only logical approach to dealing with an unexpected

event. However, all too often, the emotional mind starts to take over in such situations due to fear or anxiety. This leads to rushing into action without first considering all of the available information, resulting in mistakes and wasted resources. [4] This is especially problematic in manufacturing pharmaceuticals, where every action needs to be documented, reviewed internally by the quality organization, and may be externally reviewed by regulatory agencies. Rushing into action instead of thoughtfully responding will often result in mistakes that tend to compound the problem you are trying to address in the first place.

Accept the Situation for What It Is: Once you have paused to think before acting, you can rationally evaluate the situation for what it is as well as what it is not. This takes emotional intelligence, where you may sense an urgency to act, which is being driven emotionally, but you have the presence of your rational mind to evaluate your next steps.

The emotional mind may want to catastrophize what happened, but this is seldom helpful or appropriate. Instead, it is far better to evaluate the options for what to do next and make a logical choice. Often, the best approach is to stop and get input from others or one's supervisor. This results in better decision-making and demonstrates being solution-oriented instead of being swept away by the problem at hand. Even in stressful situations, taking a calm and thoughtful approach to what to do next will tend to reduce stress for you as well as those around you. By contrast, an emotional reaction tends to be contagious, causing more problems than solutions.

Capturing True Productivity: Rushing around with lots of energy and emotion may look to some like you are being productive. However, the real measure of productivity is the value of the results achieved, not just the energy spent. The ability to deal effectively with any situation that may occur without making mistakes, wasting resources, or damaging relationships produces significant value for any organization. The ability to achieve higher quality outcomes, even in stressful situations in a pharmaceutical manufacturing environment, is vital. This also demonstrates a growth mindset where unexpected situations are addressed with creative and innovative solutions.

Finally, there is a strong relationship between maintaining a quality mindset and a safety mindset. A significant amount of literature on the value of mindfulness in the workplace is centered around the benefits to job safety, especially in high-risk environments such as offshore oil well operations, high-rise construction, and the military. [5]

Risk Factors Associated with Human Errors

Human errors in pharmaceutical manufacturing are a significant issue that affects every aspect of the production process, from qualifying raw materials to releasing the final product. It is a fact that as long as human beings are involved in the manufacturing process, errors will sometimes occur. However, it is most likely that a variety of factors may be at work that represent the real root cause. In a study facilitated by the BioPhorum Operations Group, two large Biopharma companies collaborated on how to shift the focus from human error to the factors that support or detract from human performance. One of the important conclusions was that "human error is the consequence, but rarely the cause of mistakes and should be the starting point of an investigation, not its conclusion." [6]

Superficially, it is easy to assign the root cause of a deviation to human error and then prescribe training as the fix. However, when the same error continues to occur, this does not seem to be an effective solution. This is why regulatory agencies have become frustrated with the notion that human error is the root cause of a deviation and that more training is the appropriate corrective and preventative action (CAPA).

The truly important question is, "What are the factors that contribute to people making mistakes?" This question takes on true significance when the answers point to deficiencies in documentation, equipment design, process design, and site leadership. Admittedly, these can be complicated and expensive to address, but eliminating fundamental factors that contribute to human error provides durable benefits.
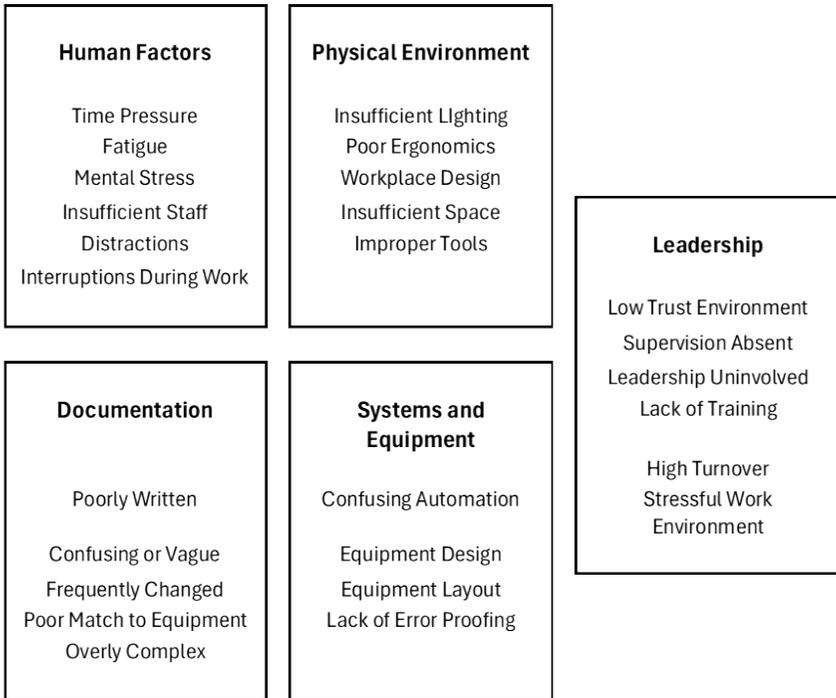
The financial impact of human errors was estimated by one pharmaceutical company to be in excess of $100 million on an annual basis. [7] While

this may seem excessive, it is not hard to understand in the context of rejected product lots, lengthy investigations, and weeks of production lines being shut down during investigations. Additionally, there may be costs associated with implementing and validating engineered or automated solutions.

One consultant was tasked by the CEO of a major biopharmaceutical company to identify the true cause of the significant increase in the number of deviations in one of his manufacturing facilities, with a focus on why so many deviations were due to human error. He was given almost 90 deviations to analyze, which were attributed to human error. In looking beyond the errors made by the employees to identify the contributing factors, he interviewed both manufacturing and QA staff and reviewed all the documentation associated with the deviation investigations. He identified that the fundamental contributing factors to all but two of these deviations were not human error, but a combination of poor equipment design, poorly written or unclear documentation, understaffing, and lack of management planning. [8]

The Chart below summarizes some of the obvious and not-so-obvious factors that can influence human error, but it is by no means definitive. Every operation and site is unique and needs a specific evaluation of the factors that are present. Also, the true experts on what is making their job more difficult are the operators and technicians who work with the systems, equipment, and documentation daily. If an environment of trust has been established by the site leadership, they may feel free to point out the deficiencies that could be addressed. A high-trust environment is also a learning environment. This makes it okay to admit a mistake and learn from it.

Factors Which Can Influence Human Errors

Human Factors	Physical Environment
Time Pressure	Insufficient LIghting
Fatigue	Poor Ergonomics
Mental Stress	Workplace Design
Insufficient Staff	Insufficient Space
Distractions	Improper Tools
Interruptions During Work	

Leadership

Low Trust Environment
Supervision Absent
Leadership Uninvolved
Lack of Training

High Turnover
Stressful Work Environment

Documentation	Systems and Equipment
Poorly Written	Confusing Automation
Confusing or Vague	Equipment Design
Frequently Changed	Equipment Layout
Poor Match to Equipment	Lack of Error Proofing
Overly Complex	

Human Factors: Collectively, the highly trained and experienced employees within every pharmaceutical manufacturing facility are its most important asset. Unfortunately, the site leadership sometimes takes this most important asset for granted in the midst of the day-to-day challenges they face. One of the most critical issues for management is making sure that sufficient staff are present on every manufacturing shift throughout the workweek. This can be a very complex evaluation due to changes in the production schedule, the need to make time for regular training, the reality of vacation planning, and sick time. Production Planning and Manufacturing Management need to collaborate on a daily basis to evaluate the impact of changes in the production plan, staffing levels, and other activities such as maintenance, engineering, and validation.

Management needs to stay in close contact with the floor operators. This is just as important for every department in the plant as it is for

the manufacturing organization. People come to work with their own personal stress factors and challenges. Most of the time, employees are fit and ready to do their best work when they arrive. Sometimes they may not be, and should be honest with their direct supervisor, especially if they are responsible for critical activities in the plant. Front-line supervisors must also be sensitive to ensuring that distractions and interruptions are minimized while operators are executing important or complex activities.

Documentation: The effective and efficient manufacturing of pharmaceuticals is highly dependent on good documentation that is clear, easy to understand, and follow. The Quality Assurance (QA) organization is responsible for document control and issuance of all controlled documents to manufacturing. One of the challenges associated with their duties is the frequency of changes, additions, and corrections to existing manufacturing documentation, including Standard Operating Procedures (SOPs) and batch records, which record every action taken in the manufacturing process. These changes are often made in response to previous deviations that identified deficiencies in the documents or due to changes in equipment or processes.

As a result of the accumulated changes, these documents can become very lengthy, complicated, and even internally inconsistent, which causes confusion on the manufacturing floor. In my experience, I recall some documents were on their 127th revision! For complicated manufacturing operations, the volume of documents that constitute one production lot can be measured as a stack of paper 15 inches high with nearly 10,000 data entries. This illustrates the difficulty of working to streamline and clarify such a set of documents. I have been involved in several such efforts, which took a dedicated team many months to accomplish the task. The most successful efforts have a high involvement of floor operators who know where the key issues are that need to be addressed.

Physical Environment: Every manufacturing operation is designed and built according to a predetermined plan. Over time, it is inevitable that changes will occur. New equipment will be installed, new processes or products may be implemented, and things will change. It is essential that

periodic evaluation of the manufacturing work areas be carried out to assess the impact of any changes that have accumulated. Also, in an environment of trust, the operators should be expected to voice any challenges they face in executing their duties. Unfortunately, under the pressure of meeting production schedules and not wanting to be perceived as complaining, many operators just make do with what is in place and do their best.

However, the engineering group and the environmental, health, and safety team (EH&S) should be doing regular evaluations of the workspaces and operations for sufficient lighting and ergonomics. This must be a part of the regular shutdowns that every plant has scheduled on an annual or semi-annual basis.

Systems and Equipment: There is an increasing use of automation in the manufacturing of pharmaceuticals. This is an opportunity to reduce human error by implementing engineered solutions that automate repetitive operations. Unfortunately, it also brings new challenges when the automation becomes confusing to the operators or limits their ability to successfully manage unexpected conditions. Even though operations may be automated, there is often the need for operators to input data or initiate sequential steps in the process.

If the human-machine interface (HMI) has not been designed for easy use by operators with limited technical expertise, they could get confused. I have known automation systems that would shut down unexpectedly or lock up and fail to progress to the next step in the process if an operator inadvertently made a wrong input or hit the wrong button in the required sequence. This situation resulted in a failed lot along with lost production time while the problem was investigated and resolved.

Leadership: In this category, I focused on the unique impact that site leadership can have on the work environment. For example, high turnover can result from a low-trust or toxic environment where people leave the operation voluntarily. Also, it could be that the highly trained staff have been promoted out of their key technical positions without ensuring the capability of their replacements. Other topics listed under the Leadership

box include the lack of training. These may seem slightly out of place, but these are key responsibilities of leadership to ensure there are sufficiently trained staff to carry out the planned production. The site leadership is responsible for all aspects of the operation and every deficiency that may exist, including all items under Physical Environment, Documentation, and Systems and Equipment in the chart above.

Human error reduction in the pharmaceutical industry is key to building a robust, reliable, and productive operation. As mentioned, the literature on human error overlaps heavily between quality and safety. Also, many lessons can be adapted from other highly regulated industries, such as the airline operations and the nuclear power industries.

Success Factor Summary

In the complex world of pharmaceutical manufacturing, effective risk management requires a deliberate balance between operational efficiency and employee well-being. The insights presented in this chapter emphasize the importance of a mindful approach to decision-making, acknowledging that human error often originates from systemic issues rather than individual failures. Fostering a supportive, high-trust environment is key to achieving quality outcomes and maintaining compliance. By prioritizing open dialogue and addressing the root causes of errors, organizations can enhance their resilience and consistently deliver safe, high-quality products to the marketplace.

Conduct a Risk Assessment Workshop: Organize a workshop with your site leadership team to assess the state of risk management within your operation. Utilize the Risk Matrix discussed in this chapter to identify and categorize risks. Encourage open dialogue among team members to explore underlying factors contributing to human errors and develop actionable strategies for improvement.

Key Takeaways from Chapter 21: Managing Risk Factors and Avoiding Mistakes

1. **Risk Management is Multifaceted:** Effective risk management in pharmaceutical manufacturing involves understanding and balancing product quality risk, business risk, and compliance risk. Leaders must be able to navigate these complexities, often making decisions with incomplete information, relying on experience and intuition.

2. **The Importance of Leadership Decisions:** The examples shared illustrate how leadership decisions can have a profound impact on operational outcomes. For example, pausing the requalification program due to a series of environmental failures not only alleviated employee stress but also allowed them to rest and regroup, which led to immediate success upon resuming the program. This demonstrates the need for leaders to prioritize employee well-being alongside operational goals.

3. **Understanding Human Error**: Human error is often a symptom of deeper systemic issues rather than the root cause. Identifying and addressing factors such as equipment design, documentation clarity, and staffing levels are essential for reducing errors and improving operational efficiency.

4. **The Role of Mindfulness in Reducing Errors:** Mindfulness in the workplace enhances focus and reduces distraction. By promoting a culture of mindfulness, organizations can minimize human errors and improve overall productivity, which is especially crucial in high-stakes environments like pharmaceutical manufacturing.

5. **Leadership's Role in Creating a Supportive Environment**: Leadership significantly impacts the work environment and employee morale. A high-trust culture encourages staff to voice concerns and suggest improvements, leading to a more efficient and compliant operation. Leaders must ensure sufficient staffing and resources while recognizing the challenges employees face.

TAKE THE NEXT STEP

The principles outlined in this book are not just theoretical; they are designed for practical applications that can lead to transformative organizational changes. As you reflect on the ideas presented throughout the book, consider how to implement these principles in your daily work and interactions. Thank you for engaging with *The Success Guide: How to Thrive in the Corporate Environment.*

If you want to explore how to implement these principles effectively within your organization, please reach out for consulting services. Let's work together to create an environment where individuals, teams, and leaders in your organization can thrive.

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I hope this book serves its readers well in their own journey toward meaningful success.

ABOUT THE AUTHOR

Ed Bjurstrom brings four decades of biopharmaceutical leadership experience to *The Success Guide*, having built his career on business excellence in the service of producing life-saving medicine. After earning his degree in Chemical Engineering, he worked for a major engineering firm, where he was introduced to the emerging field of biotechnology. Recognizing the transformative potential of this new technology, he joined Amgen, where he spent 18 years growing with the company as it evolved from a startup to a major pharmaceutical enterprise.

Ed started at Amgen by leading its engineering department in the design and construction of over a million square feet of new facilities, including offices, laboratories, and manufacturing plants. His global perspective was shaped during a two-year assignment leading Amgen's manufacturing operations in Puerto Rico, where he and his family experienced firsthand the challenges and rewards of living and working in a different culture while learning Spanish and adapting to an entirely new way of life.

Ed's commitment to making a difference extends far beyond the corporate world. After traveling to rural Africa in 2002, he witnessed firsthand the impact of limited access to basic healthcare. He and his wife, Wendy, subsequently established a nonprofit organization, CompassioNow, which has supported medical clinics in seven African nations for the past 19 years. Through their work, these clinics have provided healthcare to well over a million people in rural areas where government resources are scarce,

treating 70,000 to 100,000 patients annually who would otherwise have little access to medical care.

Following his tenure at Amgen, Ed founded his own consulting company, serving small biotech companies and startups with promising products but little experience navigating the FDA commercialization processes. His expertise proved invaluable when consulting with Gilead Sciences and assisting one of their facilities facing a significant regulatory challenge. This assignment led to his eventual role as a permanent employee, where he continued to tackle complex manufacturing and compliance issues.

In 2023, Ed retired from Gilead and established a new consulting firm to focus on supporting individuals, teams, and leaders working in highly regulated industries where a significant regulatory burden accentuates the everyday pressures of leadership and business. His experience over the last 40 years has forged a deep understanding of the challenges faced by leadership in these industries, as well as the dynamics that determine the success of the teams they lead.