

Harmonics Way

Promote Peace of Mind for Me, We, and They

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Preface

TBD

Acknowledgements

As you'll soon discover, one principle within the Harmonics Way is that things go better when done with others, which is especially true when writing a book. Thanks to Nadav, Carrie, and Paul for their comments, insights, and edits.



Foundations

Foundations

Mahatma Gandhi once said, "A man cannot do right in one department of life whilst he is occupied in doing wrong in any other department. Life is one indivisible whole."

Unfortunately, we live rather fragmented lives.

The problem, of course, is that life is one indivisible whole, and so problems in one area of life easily bleed into other aspects. For example, you have an argument with your life partner on the phone over lunch, and then find it difficult to focus on your work the rest of the day. A client mentions during an onsite meeting that budgets may be tight next year, and you are anxious all weekend.

We work incredibly hard to arrange a harmonious life and yet it seems we are surrounded by discord.

While life is one indivisible whole, it is made up of many facets. One facet of life could be considered *Me*. It is very personal. *Me*, in this

context, is when you are absorbed in a task or thought and not interacting or concerned with others. *Me* can sit in a coffee shop with my headphones on and type out this paragraph, completely tuned out to the people around me.

Another facet of life can be called *We*. This is the area of life where you are a member of a team or a family. It isn't as personal as *Me*, but you are likely committed to the success of *We*. At work *We* need to complete a project by the end of the day on Friday. At home, *We* need to be at a surprise birthday party at 6:00 p.m. on Saturday. With our closer friends, *We* may have a volleyball game this weekend.

A third facet for consideration here is *They*. In this context, *They* may be our client or customer or business sponsor. *They* may be the in-laws or friends across town. *They* have expectations of *Me* and *We*, but are not necessarily directly contributing to *Me* and *We*'s success.

With all of the discord that spins around you, how would your life be different if you found harmony within these three facets of life?

Let's begin with *Me*. While we would like to think that we can control *We* and *They*, the fact is that each of us only controls *Me*. *Me* may have influence over *We* and *They*, but we do not control them. Once you understand a few simple concepts that contribute to your peace of mind, these will serve as building blocks to support new concepts for interacting with *We* and *They*.

The psychologist Mihaly Csikszentmihalyi spent many years studying what brings harmony to *Me*. In his book *Flow* [REF], Csikszentmihalyi outlines the components of an experience that facilitates *flow*: "the state in which people are so involved in an activity that nothing else seems to matter; the experience itself is so enjoyable that people will do it even at great cost, for the sheer sake of doing it."

People who are in flow report the feeling that time stands still. For a rock climber who is in flow, cracks and crevices are a stair case. To a pianist, the piano keys are an extension of the hand.

Csikszentmihalyi goes on: “The best moments usually occur when a person’s body or mind is stretched to its limits in a voluntary effort to accomplish something difficult or worthwhile. Optimal experience is thus something we *make* happen.”

These experiences are some of the happiest moments of our lives. Think about it. Remember a time that you were so engaged in an activity that time stood still and you felt like you truly enjoyed what you were doing? Wouldn’t it be awesome to have as many of those experiences as possible?

The Harmonics Way is a guide to structuring your life, and your interactions with others, to do just that - to maximize the number of flow experiences in life. The Harmonics Way is a set of principles and practices collected by a fellow traveler over 20 years of working with *Me, We, and They*. Think of these principles as breadcrumbs left along the path by someone who is trying to discover how to increase the number of optimal experiences in life.

Before we get deeper into the Harmonics Way though, we need more background on the psychology of optimal experience - flow.

Csikszentmihalyi discovered that there are three basic components of an optimal experience: goals, feedback, and a balance between challenges and skills.

To be absorbed in an activity, we must clearly understand the goal of the activity. This goal is very personal and may be dictated by the event itself, or by the individual. For example, Phil is new to mountain biking, so he should set a simple goal such as staying on the bike. Rachel, on the other hand, is a seasoned biker, and needs to set a goal of completing a course in less time than the previous try. The goal does not need to be intensely ambitious. The fact that a person has a unique, personal goal is what is important.

The second important component of a genuine flow experience is clear and immediate feedback. Phil will have immediate feedback as each moment passes and he has not fallen off his bike. Rachel will

also receive moment by moment feedback, but will interpret the feedback differently based on her overall progress through the course.

The final component of an optimal experience is a balance between challenges and skills. The diagram in figure X below will help explain the general concept. The two dimensions of an experience, challenges and skills, are represented on the two axes of the diagram.

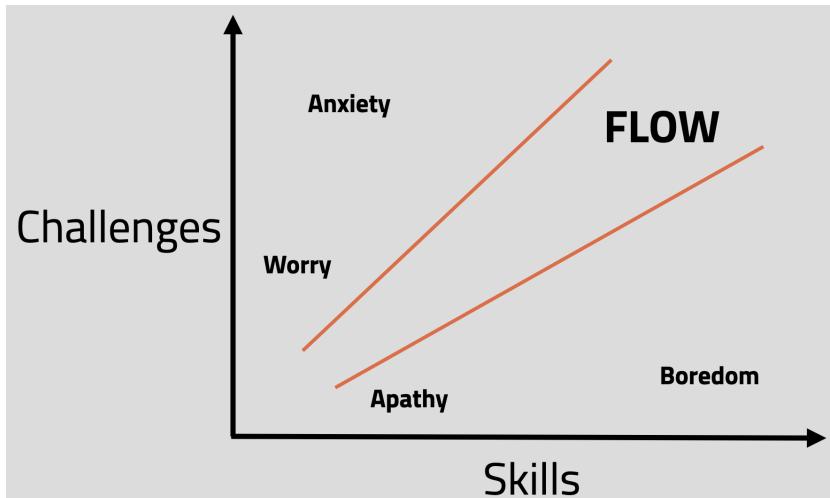


Figure X: Balance between challenges and skills

Imagine that Phil sets an aggressive goal and attempts to beat Rachel's personal best. This challenge is high for him and his skills are low, so he is likely to be anxious. Rachel, on the other hand, will be bored if she sets a goal of simply staying on the bike because her skills are high and this challenge would be very low for her. The optimal experience for each of them will only happen when they set a challenging yet attainable goal.

Consider how these three components of an optimal experience - goals, feedback, and a balance between challenges and skills - play out in your life. When was the last time you had an optimal experience? If it has been a while, it may be time to find a way to have one. Remember these are some of the happiest moments of your life.

Now that you know what it takes to be in harmony and have an optimal experience with *Me*, let's consider *We*. What does an optimal experience with *We* look like?

To create an environment for *We* to flow, there must be a goal for its existence. A family goal may be general and long-term such as planning a family vacation or supporting the education of your children. For a team at work this is typically a project deliverable or mission to accomplish within a certain timeframe. Regardless, all of the *Mes* in *We* must share a common goal, and the common goals should reflect the goals of the individual members as much as possible. These goals serve to unify *We* and establish expectations for the *Mes* to evaluate both individual and team success.

As with the personal experience of flow, for *We* to have an optimal experience there needs to be clear feedback. This feedback will not be as immediate as it is in the personal flow experience, but regular feedback is vital to determine whether the goals are being achieved. People want to know how things are going.

The balance of challenges and skills is the final necessary factor in developing optimal experiences for *We*. At home, this may be as simple as changing routines in eating or family activities. At work, you may have the team members change the location of their workstations or who leads a meeting. Ideally, your team successfully delivers projects and is given ever increasingly difficult projects to complete.

And finally, we need to consider *They*. There is always *They*.

While we can have flow experiences with friends or extended family, these experiences will be infrequent and short lived. These moments will be cherished and will look a lot like those experienced with *We*, as the group will participate in an activity with a goal, clear feedback, and a balance of challenge and skill.

For all of the other *Theys* in your life, the customers, clients, patrons, managers, and business sponsors, it is doubtful that you will

experience flow. These people are often caught up the swirl of life and work, too distracted to experience flow.

Often they need to be reminded of your goals and how your goals align with their expectations. The feedback you provide will only be pertinent in the context of your goal, and your goal is only relevant to them when it aligns with their expectations.

The Harmonics Way can serve as a guide for establishing expectations, providing relevant feedback, and communicating the challenges to the completion of a project and any gaps in the team's skills or resources required to meet the organization's goals.

The Harmonics Way is based on the philosophy summarized in the Gandhi quote at the beginning of this chapter:

A man cannot do right in one department of life whilst he is occupied in doing wrong in any other department. Life is one indivisible whole.

When we approach life as one indivisible whole, we are more likely to structure our lives such that we can have as many optimal experiences as possible.

The Harmonics Way is grounded in the psychology of optimal experience. It is an outgrowth of the desire to maximize those occasions when we are in flow, and experience a deep sense of enjoyment that we cherish. These moments become the standard for what we want life to be like.

The Harmonics Way is a set of seven principles that strive to make this philosophy and psychology as pragmatic as possible. Principles are not rules or processes. These principles will guide you in the discovery of the optimal process for *Me* and *We* given your context. Ideally, you will regularly evaluate your processes in light of these principles, and adjust as needed. The 'projects' of life are dynamic and change over time. A supportive process will adapt. The Harmonics Way can serve as a guide to keeping your processes relevant throughout the life of a project.

The seven principles of the Harmonics Way are not hierarchical. They are independent and interdependent at the same time. Following one principle is better than not following any, but together they form a strong structure to support harmony and promote peace of mind for *Me*, *We*, and *They*.

The principles are:

- Things Should Work as Expected
- Always Know How Things are Going
- Quality is Baked In
- Always Know How the Parts Relate to the Whole
- Interaction should be Distraction Free
- Things Go Better when Done with Others
- Embrace Your Complexity and No One Else's

The following chapters provide a brief introduction to each principle. Since no principle is more important than the others, you can read this book in any order you like. At the end of each chapter will be a list of the other principles to use as a guide in what you might want to read next.



Things Should Work as Expected

Recently a friend made a tuition payment for her son who was headed into his freshman year of college. When she checked to verify that the payment had gone through, the payment had not registered. Frustrated, she called a mutual friend wondering what to do. He assured her that the payment had likely gone through. “These things take time,” he said. “If it hasn’t posted in a few days, you should probably call them.” Sure enough, when she checked three days later everything was correct.

Our mutual friend explained later. “It is likely that there are at least two systems at play here - one for accepting her payment and one for posting payments to the accounting system. Often in these situations, there is a process that runs at night that updates the accounting system with all of the payments accepted during the day. It is clunky for sure and causes you to wonder about the stability of a lot of systems we interact with.”

Unfortunately, this is not an uncommon experience. In the 21st century, it seems to be a reasonable expectation that two systems within the same institution communicate instantly. In fact, from my friend's perspective there was only one system and it didn't work. Unfortunately, the systems of daily life often don't meet our expectations.

This story is a real-life example of an organization not keeping my friend in mind when the payment system was designed. From the university's perspective, my friend is a part of *They*. She is a parent, a paying customer. She had a personal goal of paying the tuition. An expectation that she brought to this interaction is that she wanted to see a confirmation that her payment processed correctly. This assurance would give her peace of mind and promote harmony in pursuit of her goal. Unfortunately, in this experience, things did not go as expected.

People often bring expectations to interactions only to be disappointed. The phrase "Expectations are premeditated disappointments" quite nicely summarizes too many experiences.

Expectations are often based on an implicit social understanding. Without verbalizing the expectation, the actors in the interaction tell themselves a story that legitimizes their expectations. It is as if there is a "deal" in which the specifics are never discussed.

It is important to realize that unspoken expectations are at a great risk of going unmet. It is hard for someone to live up to an expectation that has not been discussed or agreed upon.

For example, Eric is a friend who has been a consultant for many years. He shared a story in which his team worked hard to deliver the first version of a custom software system, which he refers to as a Minimum Viable Product, or MVP, with his clients. The first time he demonstrated the result of his team's work to his client, *They* were disappointed and underwhelmed.

As the meeting ended, the client manager looked up and said, "Eric can you come over here for a minute?" Eric walked to the window

with his client. *They* looked out over the employee parking lot. The client asked, “Eric what kind of cars do you see out there?” My friend saw mostly logos of BMW, Mercedes, Lexus, and Porche. Eric nodded and said, “Nice, expensive cars.”

Then the manager made his point: “We are a Lexus driving company. We don’t drive Chevrolet. When you say ‘Minimum Viable Product’ I think you have a Chevrolet in mind, but we hear Lexus.”

For Eric’s team, the demo had met *We*’s expectations, but it did not work as *They* expected. In this case Eric’s team may have avoided this disappointment through one of two approaches. Either *We* could have noticed the luxury car mannerisms of the client and delivered a Lexus-like MVP, or *We* could have worked hard to set lower expectations. Regardless, the failure to clearly communicate expectations led to disappointment.

While we readily identify with unmet social contracts between people, we should consider the expectations that *They* bring to interactions with our product or service as a social contract as well. For example, *They* bring expectations to interactions with technology. If the technology doesn’t verbalize the social contract it is operating under, *They* (the users) will fill in the gap with a contract that legitimizes the expectation *They* have of the system.

This can manifest even in the smallest of details of a user’s interaction with technology. For example, researchers discovered many years ago [2]:

- an application should respond within one second to avoid interrupting a user’s stream of thought
- users will become distracted and begin to perform other tasks if an application’s response time exceeds ten seconds
- users expect to complete sub-tasks in less than a minute
- users expect to complete an entire task in less than ten minutes.

Because you are human, these are expectations that you bring to any mobile app or website. You aren’t even aware of these expectations until you try to pay your bills online and the bank’s website is slow.

You get frustrated and find it difficult to verbalize why. The frustration stems from the violation of your unspoken expectations of interacting with technology.

Since meeting expectations is vital to promoting harmony, how do we set expectations with the *We*'s and *They*'s of the world? Our team members, our customers, our users, and our stakeholders all have expectations of *Me* and *We*. Here are three suggestions to guide you in managing expectations:

Research and discover unspoken expectations. Unknown expectations often go unmet. As a member of a team (*Me*), talk with your teammates (*We*) to establish a working agreement that ensures a common set of expectations and processes. A simple conversation can unify and focus the team on the goal at hand.

As *We*, research and discover the expectations *They* have of you. Interview customers and potential users of your product or service. Find out what is important to them. Schedule regular conversations with your managers and business sponsors to know what expectations *They* have of *Me* and *We*.

To arrange for things to work as expected, it is important to uncover the unknown expectations *We* and *They* have of you.

Align expectations with use. A processed food company once canned a beef stew that didn't sell very well. Customers were disappointed and thought it contained too much broth. *They* expected to eat stew with a fork. So, rather than change the contents, the company reset the customer's expectation by changing the label on the can from "Beef Stew" to "Hearty Beef Soup". The consumers loved it. The soup flew off the shelves because it worked as expected, where the stew did not work as expected and couldn't be given away. Clearly communicate expectations, and strive to make your product or service work as expected. [3]

Understand that perception is reality. A cheese producer once packaged cheese from the exact same cheese roll in two different ways. One was a block of cheese that had a big brand label on the

package, and the other was packaged in random sizes as though it had been freshly sliced in the deli. The company conducted a taste test and found that consumers overwhelmingly chose what was perceived to be the deli cheese over the block, big brand cheese.

Whether social interactions, product interactions, or service interactions, it is important to keep in mind that *They* have expectations. *Me* and *We* do ourselves a favor when we work to ensure that things work as expected.

Remember: unknown expectations are guaranteed to go unmet. *Me* and *We*'s job then is to understand the expectations of customers, users, and teammates; then set, and clearly communicate reasonable expectations that can be met.



Always Know How Things are Going

The Boston Marathon is the oldest annual marathon in the world and, for everyday runners, the most prestigious. In the 100th year of the Boston Marathon, 1996, over 38,000 people signed up to run. In 2020, registration was limited to 31,500. [REF] For many runners, simply completing the Boston Marathon is a highlight of their life.

In the context of creating an optimal experience for themselves, distance runners set goals for the race. Genuine competitors may set a goal of beating their personal record for a marathon, or even winning the race. For others, the goal is simply to complete the race. The runners have likely trained and have developed the skill to meet the challenge of whatever goal has been set.

As a runner moves through the course, there are many opportunities for clear and immediate feedback. Three tools in particular can provide proper feedback, reassure progress, and help them know if they need to adjust. These tools are the stopwatch, the mile markers, and the finish line.

A runner's stopwatch is the most **tactical** tool in that it provides moment by moment feedback on the time into the race. Runners make mental notes of their time at certain distances and set expectations for the future based on their progress.

While mile markers provide nice short term goals on which a runner can focus, they also serve as a **pivotal** tool. The markers provide a point of comparison for runners to have insight into their progress, and alter their pace at moments when these changes can have the most impact.

For example, someone may run a little too fast early in a race. If the goal is to keep an 8 minute per mile pace and the first mile is finished in 7 minutes and 30 seconds, the runner knows to slow down a bit to conserve energy for future miles. Similarly, when it takes 8.5 minutes to run mile 16, the runner knows that future miles will need to be run a bit faster.

Mile markers serve as great short term goals, but the finish line is the ultimate goal of any race. The finish line is the **strategic** tool runners use to compare their progress with the ultimate goal. As the miles pass, the runners know how much further they have to go, and can estimate how long it will take them to finish based on their current pace.

All three of these data points - current time, past mile markers, and the finish line - are critical in supporting a runner's focus and energy level throughout a race. When all of this aligns, many runners experience what is called a "runner's high," also known as flow.

This understanding of one's progress toward a goal is vital for maintaining energy in any endeavor. Productivity researcher Bettina Wise summarized the current understanding by stating "... empirical research has repeatedly shown that striving toward self-concordant goals strengthens the link between goal progress and well-being." [1]

This principle applies to teams and project execution as much as to the achievement of personal goals. If we don't know the current progress of our project, we may be too optimistic and tell ourselves that

everything is going fine, when in fact it isn't. Or we may be too pessimistic and believe that the whole team will likely be fired, when in fact things are great.

Simply understanding progress, regardless of the status, provides the clarity and situational awareness that is important for decision making and ongoing personal well-being. Understanding our progress prevents us from creating stories to fill in the gaps.

Admittedly, quite often *Me* doesn't realize that *Me* doesn't know how things are going. *Me* doesn't know what *Me* doesn't know. *Me* may have become distracted by other activities or simply become complacent in a vacuum of information. You know that *Me* is suffering from a lack of situation awareness if *Me*:

- wakes up in the middle of the night and fires off a message asking about the status of a situation;
- is anxious about a situation due to a lack of information;
- is frequently asked about a situation and does not know why *We* or *They* keep asking.

When you find yourself without the awareness you'd like, take a minute to understand the tactical, pivotal, and strategic tools of progress. Then figure out a way to regularly gather information that helps you know how things are going.

For example, consider a child making her way through school. The tactical, pivotal, and strategic tools may look something like this:

- Tactical: Daily homework, test and quiz scores, teacher remarks
- Pivotal: Periodic grade cards (every 6 or 9 weeks)
- Strategic: Grade level completion; and, ultimately, graduation

There are times when *We* doesn't know how things are going either, but this is likely due to a different issue. Individual members of *We* may become dubious of *We*'s current situation, but have a hard time verbalizing what their instincts are telling them. Uncertainty abounds

within organizations that have not adapted to the ever-changing world around them.

To respond to the dynamic external world, organizations often look inward and apply familiar tactics that have worked in the past to try to solve new problems. When these old methods don't work, *We* attempts to force them to work by adding more vigor.

Business consultant Charlie Munger calls this tendency to use the familiar even in the face of a changing reality the "man with a hammer syndrome." He is referring to the famous psychologist Abraham Maslow's quote: "I suppose it is tempting, if the only tool you have is a hammer, to treat everything as if it were a nail." Too often *We* keep hammering away, confused and disillusioned that this work doesn't produce any results.

A project team that operates utilizing a Lean or Agile approach has a built in set of tools to know how things are going:

- Tactical: Daily standup meetings and visible work in progress
- Pivotal: Cycle reviews provide insight into progress toward goals
- Strategic: Frequency of product releases, backlog growth

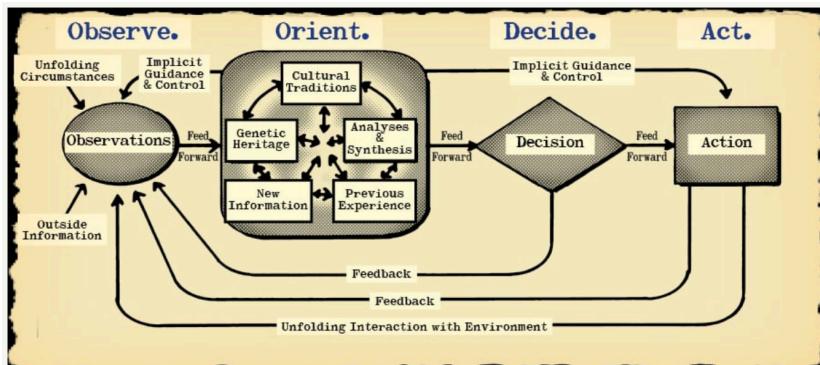


Figure X: John Boyd's OODA Loop [New Image Coming]

A broader view of this set of tools is summarized by what is called the OODA loop - Observe, Orient, Decide, Act. This model, developed by

military strategist John Boyd, is a method for dealing with uncertainty. It is an explicit representation of a process that people, teams, and organizations can use to learn, grow, and thrive in a dynamic environment. [b]

Observe. Through observation and collection of new information about the changing environment, *We* becomes open to the possibility that the world has changed. *We* is then able to gain the knowledge and understanding crucial for accurate situational awareness. Openness to the dynamic world positions *We* to overcome confusion-inducing repetition.

Orient. According to Boyd, this is the most important step in the OODA Loop. Orientation is vital to *We*'s success because it is the point at which *We* compares existing views of the world with the new observations and identifies discrepancies. To reestablish harmony, *We* must adjust its view of the world to the new reality revealed through observation.

Decide. While Boyd used the term Decide, he also referred to this step as Hypothesis, suggesting the uncertain nature of the decision. He suggests that the decision is really movement forward based on the best hypothesis. This step is then tightly coupled with the next step, Act.

Act. Action is the only way that *We* can learn about the hypothesis and continue to adjust. If the new hypothesis proves to be off, *We* starts the OODA Loop over. *We* continues to iterate through the loop until a new normal is established - harmony between the organization and the outside world.

The more comfortable *We* becomes with this way of thinking and working, the more successful *We* will be in navigating the dynamic environment in which *We* exists. By regularly evaluating tactical, pivotal, and strategic metrics, *We* is systematically taking the first step in the OODA Loop. This frequent observation provides input for *We* to cycle through the rest of the loop on a regular basis as needed.

When interacting with *They*, it is best to assume that *They* rarely know how things are going. For example, patrons of a restaurant delegate food preparation to others for a reason. Typically, business sponsors delegate projects to other teams to focus on their own projects. So, almost by definition *They* don't know how things are going because *They* delegated the task or project to *Me* and *We*.

With this in mind, it is up to *Me* and *We* to talk with *They* and discover what information is beneficial for their peace of mind.

For example, a children's hospital applied this principle when it developed a method of keeping parents and family members updated on a child's status during same-day surgery. To honor the privacy of each patient, this system provided regular updates through a mobile app. Concerned family members around the world could receive information regarding the child's status.

More examples of this include the implementation of countdown timers at airport terminals, which alert waiting passengers to the time remaining until the terminal doors close, or a good server at a restaurant who seems to instinctively know when to refill your drink or ask about the check.

One way *They* evaluate the quality of a product or service is based on how well *Me* and *We* keep *They* updated with relevant information. A pertinent message at the right moment promotes *They*'s peace of mind.

Regardless of the situation, when *Me* and *We* attempt to achieve a goal, remember that understanding the progress toward that goal will increase overall well-being. If *Me* or *We* do not understand the progress, seek out the appropriate tactical, pivotal, and strategic tools that will provide the necessary information. Set the feedback at a proper frequency that helps *Me* and *We* always know how things are going.

Don't forget about *They*. Consider the message and regularity that keep *They* informed as well, because *They* also want to know how things are going.



Quality is Baked In

Quality is Baked In

A “Killer Brownie” from Dorothy Lane Market (DLM) in Dayton, Ohio isn’t an ordinary brownie. It contains chocolate and caramel and peanuts. It’s a 2” x 3” x 1.5” delight that costs \$5. Why do people pay \$5 for a brownie when they could buy a box mix for less money and have a whole batch of brownies? Clearly, there is something about these brownies that make them just taste better.

A master carpenter who builds a fine cabinet does not use just any piece of plywood on the back, even though no one would ever see it. The carpenter would know the quality of the materials put into it, and because of the pride taken in the work, the master carpenter would make the whole cabinet consistent and excellent. An artisan knows that to sleep well at night, the entire cabinet must be exceptional.

A solid definition of quality is elusive. Whether low or high, all products, services, and experiences have a quality. The question is how to measure or determine quality, and the answer to this question is unique to each person. One pair of jeans may be “the best ever” for

one person and uncomfortable for the next. A movie may be very enjoyable to a teenage girl, and put the guy sitting next to her to sleep.

The Harmonics Way is a path toward excellence - high quality. As such, we need to consider an entire product, service, or experience. It's the whole thing, and that which produces harmony for *We* and *They* is high quality. That which disturbs their peace of mind is poor quality. When a product "just works" or when a movie keeps you on the edge of your seat the entire show, there is evidence of high quality.

The ultimate test of high quality for *Me* is the state of flow during the product creation or service delivery process. If *Me* doesn't have peace of mind during the act of producing the product or delivering the service, the problems *Me* brings to the experience will likely spill over into the overall experience.

For example, many factors contribute to the experience of DLM brownies including the ingredients, the recipe, and the employees (*We*) who produce them. The greatest source of possible variation in the process of producing exceptional brownies is the people - the *Mes* who bring to work a myriad of issues that possibly block their peace of mind. These issues can turn into missteps in following the recipe or process.

Similarly, if the master carpenter is not in flow during the construction of the cabinet, the issues that block the flow may manifest themselves in a saw cut that is slightly off or a drill hole that is a little too big.

When *Me* is in flow it is readily apparent in the attitude and approach to work. A programmer who is in tune with the code will recognize excellent code as it emerges. A writer who is in peace of mind knows excellent writing as it is written.

There is one important caveat to this and that is that the result is highly dependent on the capability and experience of the individual. A recent college graduate may be in flow and produce her best work, but this will not be as good as a seasoned veteran who is in flow. People produce their best possible work while in flow, but what is possible for one person may not be possible for another.

It is much easier to control the quality of ingredients and materials and processes than it is people. Therefore if you manage or influence *We*, work hard to create an environment in which *Me* can be in a state of flow. The quality of your product or service depends on it.

The premise of the Harmonics Way is that if all of the *Mes* are in flow, it is easy to assume that *We* will be in harmony with each other as well. And when *We* has a harmonic flow, excellent products will be produced and 5-star services will be delivered.

The environment for *We* to be in flow varies across industry. Csikszentmihalyi describes factory workers and computer programmers and musicians all being in the state of flow while working. It is very likely that if you work at it a bit, you can discover the process and practices that will enable the *We* in your world to aspire to high quality while working in flow.

So, rather than try to prescribe guidelines for specific activities, the Harmonics Way provides principles that can guide you in the discovery of practices and processes that work for you and your environment. Each team should discover processes that work for their specific project. Or, to put another way: Discover the process per team per project.

A team can work on a new project and discover that the process used previously doesn't quite work. This is why it is important to learn to constantly adjust. If you add a *Me* to a team, it is a new *We* and the processes may need to be adjusted slightly. If the project takes an abrupt turn, it may be a new project and *We* needs to accommodate the change. Again, it is important to keep in mind: Continuously discover the process that supports the team for each unique project.

While all of the Harmonics Way principles contribute to *Quality is Baked In*, three principles in particular serve as a starting point as you explore processes that work for your *We*:

Always Know how Things are Going. Each *Me* should know how *We* are doing in the pursuit of *We*'s goal.

Always Know how the Parts Relate to the Whole. Each *Me* should be aware of how an individual action contributes to *We*'s goal.

Interaction should be Distraction Free. Each *Me* should be able to complete a task without interruption.

Creating an environment and a work process that supports these three principles will take your *We* to a new level of flow and, with it, a new level of quality.

The pursuit of excellence is sometimes elusive, yet there are two telltale signs that one is on the path: invitation and trust.

Many customers are willing to pay \$5 for a brownie from DLM. Or, another way of looking at this is that *They* regularly **invite** a DLM brownie into their lives. *They* invite the brownie to parties and personal indulgences because it is a high quality experience. DLM knows it is delivering something of value because people keep inviting it back.

Similarly, when a computer programmer builds quality software components, more people want to work with that person and the opportunities to work on increasingly interesting projects grow.

While there are many factors that affect the opportunities a person or product is presented with, a pursuit of excellence definitely helps open the door to the unexpected. Only the high quality candidates and experiences get invited to the next level.

Invitation is one sign that *They* like an individual or product or company. However, invitation alone paints an incomplete picture. *They* may repeatedly invite a product to do a job, not due to its high quality, but because it is the only one available on the market.

A more complete picture of quality must also include **trust**. Consider a new product that no one has heard of. The people sociologist Everett Rogers calls innovators and early adopters in the market are willing to take a chance with the product [REF]. These customers don't necessarily trust the marketing slogans, but they are curious enough to step out.

As the number of people experience the product and find it beneficial, *They* begin to learn about the product and trust the early adopters. *They* only trust the company and its product because of the experience of the early adopters. An excellent product will be invited into a growing number of *They* domains as the trust in the experiences of others grows.

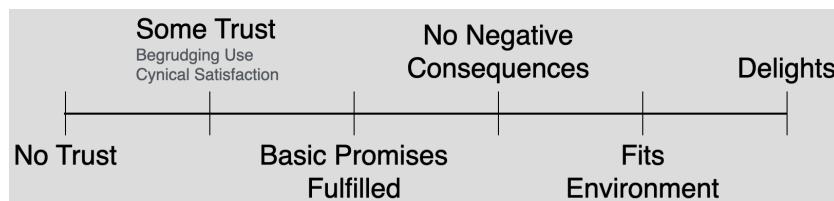


Figure X: Trust continuum

This is true of physical products, software products, and services as well. Think of a software system you use at work or an app on your phone. Where does it fall on this trust continuum displayed in Figure X?

Another useful tool to use to understand how others perceive your product, service, or team is the Net Promoter Score (NPS). The NPS was originally developed to measure customer experiences and predict business growth. Today this one proven metric is used world wide in customer experience management programs.

While the NPS is typically applied to an organization's brand, it can also be helpful to measure any product, service, team, or even an individual. This metric is obtained through a survey comprised of one simple question: "On a scale of 1 - 10, how likely is it that you would recommend [product, service, team, person] to a friend or colleague?"

Respondents are grouped into three general categories, as illustrated in Figure X:

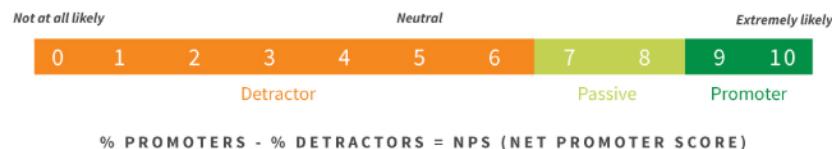


Figure X: Net Promoter Score [New Image Coming]

Promoters (score 9 - 10) are fans. These loyal supporters will continue to utilize and/or refer others, which fuels growth.

Passives (score 7 - 8) are satisfied, but not fans. These people may choose to work with a different person/team or use a different product/service if the opportunity presented itself.

Detractors (score 0 - 6) are unhappy, and potentially adversarial. These people may impede growth through negative word-of-mouth conversations and social media posts.

The NPS is calculated by subtracting the percentage of Detractors from the percentage of Promoters. The NPS can range from a low of -100 (everyone is a Detractor) to 100 (everyone is a Promoter).

This score provides a key measurement of the quality and overall perception of your product or team. This is vital, for as you may recall from the chapter on Things Should Work as Expected, perception is reality.

Ask your customers, patrons, or stakeholders this one simple question and find out how well you are performing. You may be afraid to know the results, but at least you will know how things are going.

People continue to pay \$5 for Killer Brownies at DLM. In doing so, they trust that the brownie will delight their palates, and it is very likely that their customers will recommend them to a friend or colleague. DLM was able to grow their brand because the quality is baked in.

As you consider your entire product, service, or experience, pay attention to the whole thing. The aspects that produce harmony for *We* and *They* are high quality. The best way to understand this elusive measure of “high-quality” is to know how things are going. Ask *They* for feedback. You may be surprised at what you learn that will contribute to the quality of the product or service you provide.



Always Know How the Parts
Relate to the Whole

Always Know How the Parts Relate to the Whole

Inevitably each spring thousands of people head out to mow their lawn only to find that they can't get the mower started. This leads to great amounts of frustration and potentially a trip to the lawnmower mechanic.

From a typical homeowner's perspective, a lawnmower works or it doesn't. *They* expect to put gas in it, pull the starter cord, and hear a loud noise erupt from the mower. When the starter cord is pulled and no loud noise is to be heard, the homeowner is often at a loss and doesn't know what to do next. In this case, the lawnmower does not work as expected, leading to frustration. This annoyance may arise due to a lack of knowing how a lawnmower actually works. Without this insight, the homeowner cannot come up with a question to pose to the lawnmower to solve the problem.

Unfortunately, *They* have an incomplete understanding of the lawnmower. The homeowner views the mower as a single entity, and doesn't understand how all of the parts relate to the whole.

From the mechanic's perspective though, there is a sense of peace and maybe even joy when a crippled lawnmower shows up at the shop. This is due to the mechanic's understanding of the underlying structure of the device and how each part contributes to the overall operation of the lawnmower.

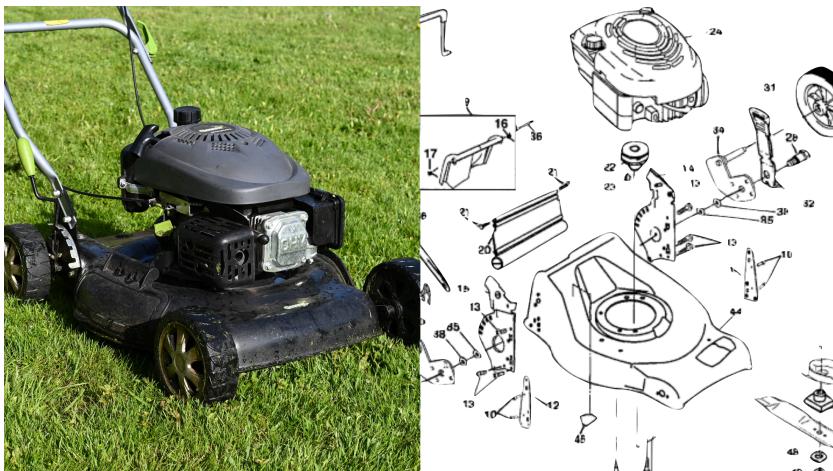


Figure X: Two different views of a lawnmower

The mechanic understands the lawnmower as a system - let's call it the lawnmower's **architecture**. The mechanic thinks about spark and fuel and air flow. When a lawnmower doesn't start, a good mechanic feels in control, and has many questions to ask it to discover what is wrong. As the mechanic attempts to get the mower to start, there is much to learn about the situation, many possible problems, and he or she can begin to invent special variations to get it started again.

When things go awry in business operations or organizational projects, it is helpful to have a similar perspective to know how to get things back on the right track again: You want to know how the parts relate to the whole.

A project can deliver the right thing in the wrong way, and a project can deliver the wrong thing in the right way. Successful projects, though, deliver the right thing in the right way.

It is helpful to consider project delivery from three different perspectives: the implementation team (*We*), the benefactor of the project (*They*), and the client (*They*). Each perspective contributes to the project's success, and each has its own view of the underlying architecture of the final deliverable. For the project to deliver the right thing, high-quality teams look to the benefactor to provide a lot of input for the final outcome. The implementation team must pursue excellence in the delivery to deliver the right way. The client must understand the overall business value of the project and create an environment for the project team to succeed.

Just as every product or service has a quality (good or bad), every product or service also has an underlying architecture. The architecture underlying each of these perspectives may not be readily apparent, but it does exist. Greater clarity of the elemental architecture will produce greater understanding of how the parts relate to the whole. This understanding leads to the same peace and feeling of control that the mechanic has when fixing a lawnmower.

Consider a software development project as an example.

There is an entire discipline within software development called **software architecture**, and in fact *Software Architect* is a job title in some organizations. Software architecture focuses on the fundamental structure of a software system and its underlying components. The primary goal of software architecture is to ensure that the overall vision of a software system creates the right thing in the right way from the implementation team's perspective. Unfortunately, this pursuit may be constrained by the communication mechanisms of the organization. This constraint is called Conway's Law.

Think about the lawnmower example. Lawnmower engines require a few simple components to support spark, fuel, and air flow. If a mechanic described to you in detail how a lawnmower works and the

interfaces between components, you may get lost in the technical details. This is Conway's Law applied to lawnmowers.

In order to minimize the constraints of Conway's Law, software architects spend a great deal of time thinking about how all of the components of a system are related and the best way to communicate these relationships to *They* (benefactors and clients). The architects' goal is to ensure that the integrity of the design of the system is preserved, and verify that the right thing is developed.

Once a software architect has managed the complexity of the software system, and is able to clearly communicate the architecture, there is enough understanding to manipulate the system at an architectural level, invent possible solutions to new problems as they arise, and have a sense of control.

One of the *Theys* who cares deeply that the right thing is developed is the benefactor. The benefactor of a software system is the end user. End users aren't necessarily the person paying for the system, but they are the person who will interact with the system. Usability experts, user experience professionals, and human factors engineers specialize in engineering experiences for end users, and a primary tool they use for knowing how the parts relate to the whole, from a benefactor's perspective, is called information architecture.

Information architecture is the structural design of an information system. It is a combination of the organization, labels, and navigation subsystems that support the usability and find-ability of a software product. The conceptual framework of information, the context, a user's awareness of location within the system, and a resilient structure all contribute to the information architecture.

Another *They* who is interested in the success of the project is the client, the person who will finance and support the development effort. The client's primary goal is to ensure a positive return on the investment (ROI) and fulfillment of the greater purpose of the project within the organization. This purpose, or vision, is often referred to as business value.

A **business value architecture** focuses on the interrelationships between various stakeholders and those who define the value of the system. This group can be comprised of investors, customers, the development team, and even the system itself. It is important to keep in mind a balance between investors looking for an ROI, a set of features that a customer is willing to pay for, the capacity of the team, and constraints of the system itself (due to software and/or information architecture decisions). Important decisions are made based on the emphasis the various stakeholders place on business value.

When the architect of each perspective (software, information, business value) knows how the various components within their purview are related, they are more likely to:

- feel in control
- know why the components are structured the way they are
- see what is possible and invent special variations to solve problems

These same benefits apply across different areas of life and work. There is very likely an architecture underlying your project deliverables as well. A deep understanding of this will take you a long way toward knowing how the parts relate to the whole.

It is also important to consider the processes *We* use to complete a mission. If *We*'s process is not spelled out and the individual *Mes* do not fully understand how the parts relate to the whole, *We* will likely perform below capacity. A great way to develop a deep understanding of *We*'s process is to spell out the method by which any one step within the process is completed.

Figure X illustrates a simple, yet thorough, exercise that can help with this.

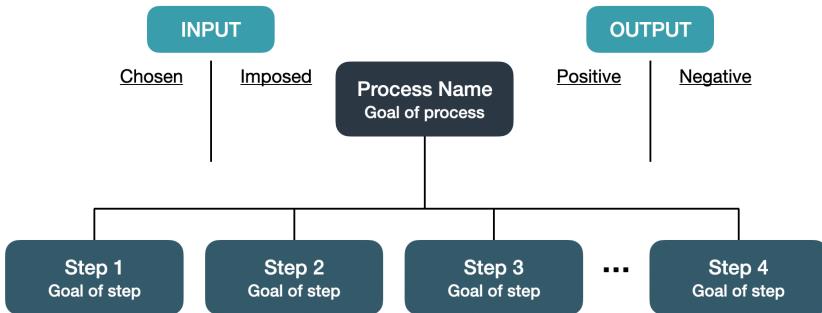


Figure X: By What Method Process

Gather *We* together in a room, draw a box at the top of a piece of paper or whiteboard, and write the name of the process in the box. Add the goal or purpose of the process under its name.

To the left of the process box, list the chosen and imposed inputs into the process. Chosen inputs consist of contributions to the process that *We* controls or can choose. The inputs that *They* impose on *We* are also important in understanding where the process fits within the organization.

On the right of the process box, list the potential positive and negative outcomes of the process. Not only are positive outcomes those that occur when the process is successful, but can also include those that are useful to process improvement, such as constructive criticism. Negative outputs of the system may be consequences of operating the process itself, including waste or unproductive by products.

Finally, beneath the process box, spell out the steps to complete the process. Each of these steps in the process should then be analyzed in the same manner. Continue to drill down into each step until you have a checklist or some document that describes the step in detail, and could be taught to someone in less than 30 minutes.

Figure X provides a simple example for recruiting a new employee to your organization. To follow this approach, *We* draws a box at the top of the page and labels it ‘Recruiting’. Beneath the name of the process is the goal of the process. In this case, the goal is to fill an open position with a qualified candidate.

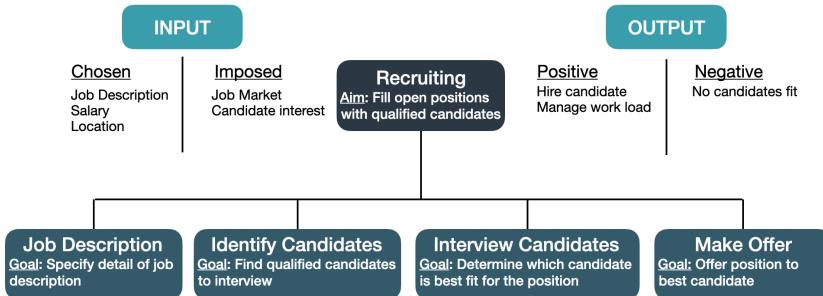


Figure X: Recruiting Process

The inputs to this process are listed on the left of the box. The inputs that *We* chose for the recruiting process are a job description, a predetermined salary range, and the physical location in which the new employee will work. Next to these chosen inputs are also external constraints imposed on the recruiting process, such as the current job market and candidates that are interested in the organization.

A positive output of the Recruiting process is a new employee who can help balance the current workload. Unfortunately, there are circumstances in which negative outcomes can occur as well such as wasting time and not finding any qualified candidates. *We* lists these outputs on the right of the process box.

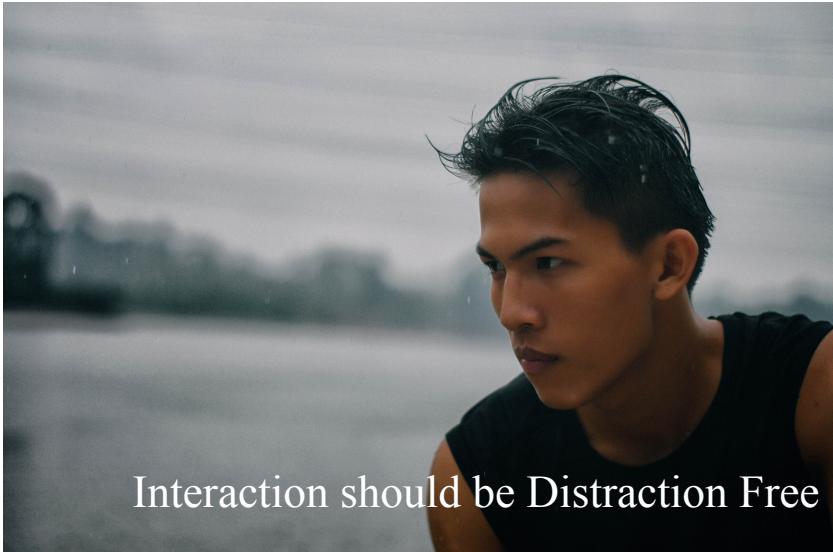
Then beneath the process, with its lists of inputs and outputs, *We* identifies the steps: create a job description, identify candidates, interview the candidates, and make an offer to a qualified candidate.

This is *We*'s first step in understanding the 'Recruiting' process. Now it is time to iterate again. This time *We* will write 'Job Description' in the process box at the top, and identify the inputs, outputs, and steps of performing the Job Description process. Ideally, *We* will keep breaking the steps down until there is a checklist or some form of documentation that enables *We* to perform the entire process with minimal specialized knowledge or coaching.

Breaking down the process by which your organization delivers its product or service will take a bit of time, but it is worth it. Upon completion of this exercise you will know how all the parts of the organization relate to the whole.

Regardless of your role within an organization, there are at least three benefits when you know how the parts relate to the whole: first, you feel in control; second, you know why things work the way they do; and finally, you have the ability to see what is possible in a given situation and invent special variations to solve problems.

Do you know how the parts of your system relate to the whole?



Interaction should be Distraction Free

Interaction Should be Distraction Free

Alex is a lead software developer at a large insurance company. Fifteen years ago he single-handedly wrote an insurance agent portal as a side project. Since then, the portal has grown to be used every day by a majority of the company's insurance agents. Over the years his team grew from Alex working by himself to a team of 4 developers, 3 testers, and a project manager. Since Alex is the most experienced with the system, his teammates go to him regularly for help, his customer representatives pull him into meetings, and even a couple of the agents call him directly for help when needed.

Fifteen years ago Alex was pleasant to be around and greatly enjoyed his work. As a motivated junior developer, he was left alone to be creative and build what he thought would be most beneficial for the company. Now, as a Lead Software Developer, Alex is commonly interrupted throughout his day. He always has a long list of things to do. Sadly, Alex's attitude has deteriorated over the years, and now his

responses are short and rough. Many coworkers perceive Alex to be a curmudgeon who they interact with only when needed.

How did this promising, creative Jr. Software Developer grow into someone people prefer not to interact with?

Alex's attitude decline is common among capable developers, and based on the research literature, is all too predictable. In one study of 50 participants researchers found that for a person who is engaged in a task that requires moderate to high cognitive load, an interruption has a significant impact on the time required to complete the task. The study also demonstrated that interruptions bring on an increase in levels of annoyance and anxiety. [Baily] The results of a similar study indicated that interruptions promote waste of time, annoyance, and frustration. [Mark]

It is not a surprise that after becoming the go-to problem-solver any time anyone had an issue with the system, Alex was not a pleasant person. He had spent the first few years of his career focused on building something useful, only to become overwhelmed with interruptions. These interruptions not only took him away from what he wanted to do, they slowed down his attempts to be productive, while increasing his annoyance and anxiety.

Alex's manager Melissa spends her days in a similar tornado of activity. Melissa's days are mostly consumed by meetings in which she 'multi-tasks' to keep up with email. Melissa rarely has a list of things to do because she is driven completely by interruptions. Melissa mentioned once, "I used to be really good at keeping a list of things to do, but once I became a manager, the list slowly disappeared, and now I focus on whatever is in front of me in the moment."

In one study entitled, "I'd be Overwhelmed, but It's Just One More Thing to Do" [Hudson], the authors reported on interruptions affecting managers. They found that managers tend to be interrupt-driven; they have learned to rely on serendipitous encounters and interruptions as primary sources of information. One manager reported, "I have sort of come to rely on interrupts. If I'm not being interrupted, I don't know what to do. I have to generate an internal interrupt of some sort to get me going."

Surprisingly, this report's findings suggest that managers experience an internal tension in their attitude toward interruption. On one hand, interruption can be disruptive to the task at hand, but an interruption might bring news related to something that is important as well. Managers need uninterrupted time to accomplish some tasks, but view the interruptions as important to accomplishing certain goals. Happier and more productive managers set aside uninterrupted time to focus on a task, and provide time for the team to interrupt as well.

Not only do interruptions have an adverse effect on *Me*, but disruptions can also lead to negative outcomes for *They*.

Consider how users interact with an e-commerce website. In his now famous article “The \$300 Million Button”, usability expert Jared Spool reports how a client of his required users to register with an online store as they completed the checkout experience. [Spool] When Spool evaluated the usage records of the site, he noticed that people filled their virtual shopping cart with products, but abandoned the site when they began to checkout. The registration step interrupted the user’s flow by requiring the user to either log in or register.

Register	Login
<p>Email</p> <input type="text"/>	<p>Email</p> <input type="text"/>
<p>Password</p> <input type="password"/>	<p>Password</p> <input type="password"/>
<p>Repeat Password</p> <input type="password"/>	<p>Repeat Password</p> <input type="password"/>  <button>Skip for Now</button>

Figure X: \$300M Button [rework image after reading entire article]

Many customers didn't want a long term relationship with the seller. All they wanted to do was buy their items and go about their day. The interruption caused them to rethink the purchase and go somewhere else. By simply adding a button to enable users to check out without registration, the company increased sales \$15 million in the first month!

A little self awareness can help *Me* identify distractions that prevent full engagement in life. Recall from the chapter on Foundations that some of the happiest times in life are when *Me* is fully engaged. With that in mind, *Me* should work to create an environment that is as free from interruption as possible. Here are a few practices to consider to reduce the distractions in your life:

- **Turn off the alerts on your phone / devices.** Countless mobile apps use notifications to provide *Me* with information that may or may not be important. Try to reduce the number of apps that provide a notification to three or less.
- **Make use of Do Not Disturb Software.** There are a few different software packages that *Me* can install on a computer to curb the temptation to spend time in unproductive ways. Some block applications on the machine itself, while others block specific websites. Some provide a simple “on/off” switch, while others support a timer that prevents the blocker from being turned off for a period of time. Find one that works for you.
- **Take a pad of paper to meetings rather than your laptop.** There is a lot of research that destroys the myth of multitasking. Rather than trying to do two things at once in meetings, focus on really engaging. If *Me* is in an unorganized or unproductive meeting, graciously leave and work in a focused environment. The value of the meeting (or lack thereof) will become readily apparent without a laptop to distract *Me*.
- **Look people in the eye and really listen.** Too many misunderstandings are a result of distraction. When *Me* interacts with *We* or *They*, remove the distractions and really listen. It is surprising what *Me* may hear.

While these simple practices increase engagement, there is another tool, called the Pomodoro Technique, that can have a huge impact on engagement of *Me* with *We* and *They*.

The Pomodoro Technique was developed by Francesco Cirillo in 1992 and has become popular among high performers over the last few years. The primary goal of the technique is to improve productivity and focus. It is a very practical tool to help *Me* get into flow, even when motivation may lag. [ref]

A basic implementation of the technique only requires a simple timer, a prioritized list of things to do, and a place to record unplanned or urgent activities. When Cirillo first developed the technique, he used a tomato shaped kitchen timer. Pomodoro is the Italian word for tomato, thus the name Pomodoro Technique.

Figure X presents an example of a form *Me* can use for recording the prioritized list of things to do and other activities.

Figure X: Maker Pomodoro List

The To Do List is comprised of tasks that *Me* believes can be completed in a 30 minute to 4 hour time period. This is not the to do list for simple tasks that only take a few minutes. It is best suited for tasks of engagement such as clearing out email, thinking, studying,

writing, and designing. Yet the tasks should be small enough that *Me* can confidently expect to complete them in the time allotted.

There are times when *Me* has a task that will take longer than 4 hours, or a task *Me* does not know how to accomplish at all. The Pomodoro Technique is great for this situation as it encourages *Me* to plan out a method of attack. Rather than planning to accomplish the entire task, break the task into smaller subtasks that can be completed within the 4 hour window. Some of those subtasks may include a list of topics to learn more about in order to accomplish the primary task at hand.

For example, imagine that you have to write a report at the end of a project. This large task is comprised of many smaller subtasks. One task may be to calculate the time and resources spent on the project. Other tasks include writing the project summary, facts on the progress of the project, target vs. actual accomplishments, risks and issues, and describing the resources spent on the project. Each of these subtasks could possibly require more than 30 minutes to complete, yet be done in less than 4 hours. So, write out each task on the To Do List.

As you begin to work on the first task, set the timer for 25 minutes and focus on that task. Assuming that you were able to focus for the entire 25 minutes on the task, place an X next to the task, and set the timer again for 5 minutes. Take a 5 minute break in which you get a drink, use the restroom, or sit quietly. Do not open email or check your phone, or engage with any other activity during the break. At the end of the break, set the timer for another 25 minutes, and continue working on the task. Repeat this 25 minutes of work followed by a 5 minute break for 4 repetitions (2 hours total). At the end of the 2 hours, take a 15 minute break.

Continue this process until the task is complete. Once the task is finished, move to the next one. Sometimes you will wrap up a task in the middle of a 25 minute session. Cirillo suggests that you take the remaining time to calmly recheck your work, however many Pomodoro users just move on to the next task.

While this technique will help you get into flow, it also helps with procrastination. Sometimes it is hard to get started on a project. By telling *Me* to work on the project for only 25 minutes, *Me* is more apt

to get started. Once started, the flow kicks in and *Me* can work on a project for hours.

Flow and help with procrastination are huge benefits of the Pomodoro Technique, but the real power comes from managing distractions. The bottom portion of the Pomodoro List helps with this.

Distractions can come from many different places, both internally and externally. An internal distraction may be when you remember to do something that you had forgotten or a tangential thought pops into your head as you are working. When these distractions come along, simply write a short reminder for *Me* at the bottom of the list and immediately get refocused on the task.

Even though you have already turned off the alerts on your phone, there are other forms of external distractions such as phone calls and visitors. These can be handled in a similar way to the internal distractions. Politely let the person know that you are focused on a task and that you will get right back to them at the end of your Pomodoro (25 minutes). Then make a note at the bottom of the list to follow up with the person. This process will take some courage on your part and some training on the part of *We*, but it will pay huge dividends. If you are faithful to follow up, *We* will increasingly trust you, and will be more apt to believe that you will get back to them.

Continuing with our example from above, once you have your To Do List, you can put on your headphones to give off the “I’m focused” look, and you are ready to go. Fifteen minutes into your work session, Byron stops by to ask a quick question. He doesn’t take the hint from the headphones and taps on your desk. You look at him, pull down your headphones and ask how you can help. Byron begins to ask a long question. You politely interrupt him, look at your timer, and say, “Let me finish what I’m doing here. I’ll come find you in 9 minutes. Ok?”

If Byron persists, try to be firm. “Seriously, 9 minutes and I’ll come see you.” As Byron leaves, make a note at the bottom of your list to follow up with Byron. In 9 minutes when your timer goes off, be sure to follow up with him. Hopefully, after a few interactions like this, Byron trusts that you will follow up with him and isn’t as persistent.

If you are curious about the number of interruptions you have during a day, you can mark internal interruptions with a ` and external interruptions with a -. So, when you have an internal interruptions, mark the task you are currently working on with a ` and write a reminder at the bottom. Similarly, for external interruptions. After a full day of working on the report, your To Do List may look something like what is illustrated in figure X.

Harmonics Way

Daily Reminder

To Do Today	
Calculate time / resources on project	XXX ` -
Write project summary	XX
Describe Targets vs Actuals	XXX
Describe risks and issues	XXX
Unplanned & Urgent	
Call about the check-engine light	
Lunch with Robin	
Follow-up with Byron	
Schedule meeting with Sarah	

F - Flow X - Compled O - Termed ` - Internal - - External

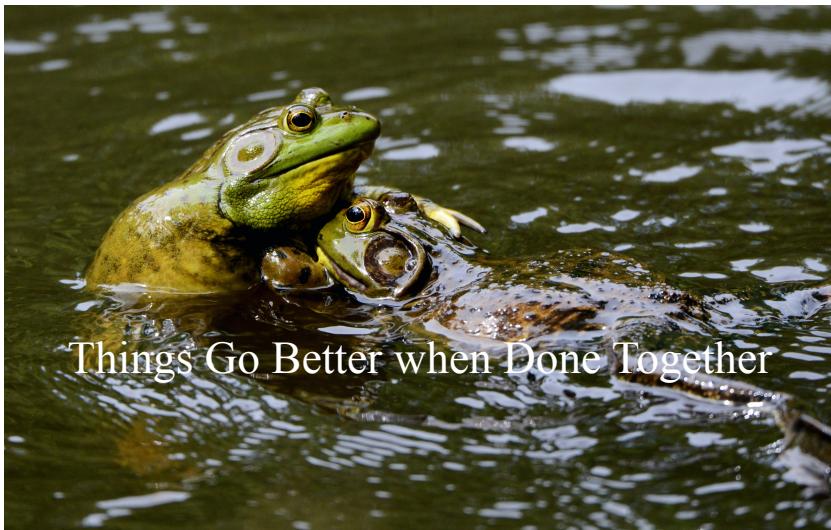
Figure X: Pomodoro Example

Recording the occurrences that *We* distracts *Me* is the first step in creating distraction free interactions. This tracking of information may reveal distractions that *Me* was not aware of and clarify issues. This leads to solutions that minimize interruptions.

Remember that optimal experiences during times of complete engagement in an activity are some of the happiest moments of our lives. Distractions diminish the opportunity to experience flow. Thus, it is important to pay attention and try to create distraction free interactions with *Me* and *We*.

Even if one does not experience flow by minimizing the interruptions in a day, *Me* can avoid becoming annoyed and anxious. If you find yourself frequently distracted and annoyed, take a look at your

schedule to find periods where you can focus on being productive. You will appreciate it, as will your friends, family, and coworkers.



Things Go Better when Done Together

Things Go Better when Done Together

Today's corporation exists in an increasingly complex and ever-shifting ocean of change. As a result, individuals rely more than ever on the intelligence and resourcefulness of *We*. Collaboration has become an essential ingredient for survival and success.

Unfortunately, *We* doesn't genuinely believe that things go better when done with others. Too often collaboration looks much like the Dilbert cartoon in which the ever-cynical character of Wally views his coworkers as his competition.



Figure X: Our coworkers can be mistaken as our competition

The story of Byron is an extreme example of this competition. Byron is a stereotypical big-ego software developer. He had worked for the same company for many years where he built and maintained systems that customers used. Byron was very smart, and he knew it. Byron thought he could walk on water, and he was very dedicated to making sure everyone knew that he was awesome.

Byron also had a very aggressive personality. In fact, Byron was a boxer - literally. He spent his lunch period every day boxing at a local gym and kept his boxing gear near his workstation.

Byron's manager hired a consultant to help his development team become more efficient and increase the quality of their deliverables. The consultant spent a few weeks attempting to develop a rapport and training the team on a new approach to develop software.

This approach relies on a useful tactic called Limiting Work in Progress. Essentially, it is a way to keep the developers focused on a specific task until that task is completed. Upon completion of the task, the developer lets *We* know that it is complete and selects the next highest priority task to tackle.

As the team prepared to begin work on the project, the consultant had the developers select one task to complete. Byron pushed back with great intensity. He wanted to have a small collection of important tasks because he believed that he was the only one on the team who could build these components correctly.

The consultant did not let Byron's intensity detour the team from following the approach of limiting the work in progress. At the end of a long and very aggressive debate, Byron finally conceded and agreed to work one task at a time. However, at the end of the heated discussion Byron turned and grabbed the boxing gloves that sat next to his desk and yelled, "But if anyone takes my tasks, we're gonna to have to box!"

The danger in this situation is that Byron's negative emotion can infect the other members of the team. This is because emotions are

contagious, some believe even more contagious than the common cold.

James Fowler, professor of Political Science at University of California San Diego, and Nicholas Christakis, a Harvard professor of Sociology, were curious about the contagiousness of emotions and dug into data from a comprehensive, longitudinal study called the Framingham Study. [REF]

The Framingham Heart Study was initiated in 1948 when 5209 participants were enrolled in the original cohort. In 1971 another cohort was formed called the 'offspring cohort'. This additional cohort was comprised of children from the original cohort and their spouses. Then in 2002, 4095 children of the offspring cohort were enrolled. Thus, there is data spanning three generations from a similar geographic region. Many of these people know each other either through friendship or by direct family relationship.

Participants in the study agree to engage in physical, mental, and emotional assessments periodically throughout their life. Fowler and Christakis selected four questions from the mental health assessment that were determined to measure 'happiness' on a scale of 0-12. Their statistical analysis led to a few conclusions that apply to *We*:

- Happy people tend to be connected to one another and unhappy people tend to be isolated or connected to other unhappy people.
- The spread of both happiness and unhappiness seems to reach up to three degrees of separation, just like the spread of obesity and smoking behavior.
- Both happiness and unhappiness is not just a function of individual experience or individual choice, but is also a property of groups of people.

One has to wonder how this happens. John Cacioppo, a professor of neuroscience from the University of Chicago, believed that the muscle fibers in your face and body can be activated unbeknownst to you, at much lower levels than if you were to perform those movements yourself. The muscle movements trigger the actual feeling in the brain. Thus, we may mimic the expressions of another person without even

realizing it, and when we mimic an expression with our bodies our emotions follow. [REF]

Interestingly, Cacioppo explained that the more expressive someone is, the more likely the conversation partner is to notice that expression and mimic it. Thus, a person's role or position within a group isn't as important to setting the emotional tone as the intensity of expression.

This should give hope to those who are on teams with the Byrons of the world. You can have a positive effect on the happiness of those around you as long as you are more expressive than the nay-sayers.

Since you should always know how things are going, the answer to a few questions may give you some insight into your emotional impact on others:

- What types of emotions do I give off and how do they affect *We*?
- How easily does *We* affect my emotions? Do I even know it is happening?
- Is *We* the type of people I really want to surround myself with?
- What actions or changes do I need to make?

Even in a positive environment, *Me* has a tendency to work independently and attempt to complete projects alone. Some may be motivated to do this through service to others, a desire not to bother anyone. Some may be motivated by pride, seeking admiration through completing a difficult task on their own. And there are some that may be motivated by laziness, as they think involving others is a hassle. Regardless of the motivation it is easy to identify times in which *Me* is not open to sharing.

As the complexity of a project increases, the value of an interdisciplinary team increases as well. In the most productive case, an interdisciplinary team is comprised of individuals who not only have acquired interdisciplinary skills, but who also value the disciplines and experiences others contribute to the project.

With a project of any reasonable size and complexity, a *We* that believes that things go better when done together will pitch in where

needed. Engineers may package goods. Owners of companies may empty the trash. Provided that *Mes* keep the proper attitude, when *We* is comprised of *Mes* who possess a diverse set of capabilities, it is much easier for the team to manage complex projects.

Sadly, too often *We* doesn't work in an environment that genuinely values doing things together. What can these people do?

Here are three things you can do to give off the happiness contagion and improve your team.

Start with Me. One small tweak you can make is to change the use of personal pronouns (I, me) to plural pronouns (we). This simple substitution will begin to engender trust from your colleagues and get everyone on the team to think about the health of *We*.

Also keep in mind that the most expressive person has the strongest impact on the emotional state of *We*. A genuine expression of happiness will have a positive affect on *We*, and potentially overcome the negative attitudes of others.

Begin with your next new hire. Strong, confident personalities who value working together are a catalyst for change, and will also attract other similar personalities. People who value doing things as a unit want to work with people who value the same thing.

Recall that happy people attract and affect the happiness of others. If two candidates are similar in experience and skills, you may decide based on their emotional state or commitment to working with others.

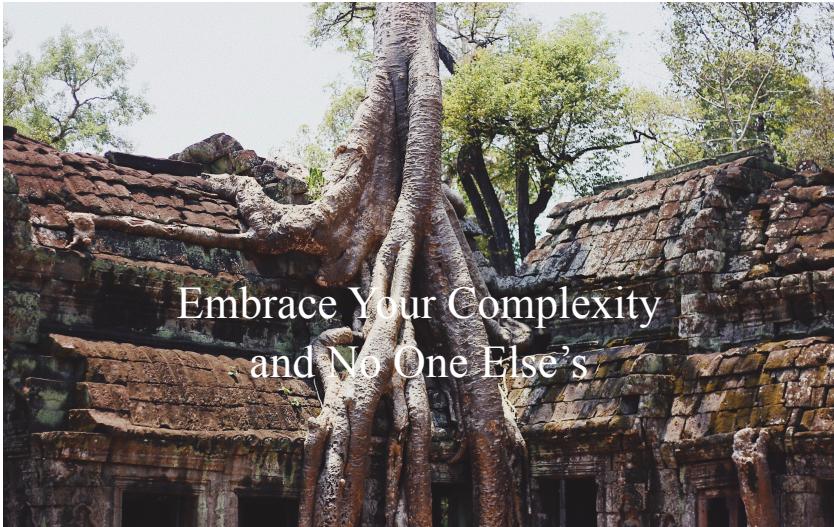
“Make” people get together. Ed Catmull, one of the founders of Pixar, reports in his book *Creativity Inc.* that Steve Jobs valued the benefits of interpersonal interactions. At one point during the design phase of the Pixar Headquarters building, Jobs wanted to have only two bathrooms (a men's restroom and a women's restroom) in the entire building. He believed that this would significantly increase the possibility of these interactions. [REF] Incidentally, the building does have a large open atrium to serve as a gathering place and encourage the serendipitous conversations to occur.

Finally, there are a few characteristics high-functioning collaborative teams tend to possess:

- Everyone understands the shared vision.
- Each team member has compatible and complimentary skills.
- Everyone values clear communication.
- Each team member values (and is rewarded for) cooperation over competition.
- Everyone trusts their team members to provide useful feedback.

[Grant]

While it probably seems intuitive or even obvious that things go better when done together, it is rare to find a group who actually believes in this principle enough to genuinely practice it day to day. With that in mind, don't feel overwhelmed; you don't have to support a cooperative environment alone. Find a colleague with whom you can brainstorm how you can both have a positive impact on your organization. It will pay dividends because things really do go better when done with others.



Embrace Your Complexity and No One Else's

Embrace Your Complexity and No One Else's

A few years ago Robin set out to meet a friend at a Panera Bread restaurant for lunch. She was familiar with the part of town where she planned to meet the friend, and had been to the Panera a few years before, so she confidently set off to her lunch appointment without using a GPS.

When Robin arrived at her destination, the Panera was not where she expected. Realizing that the restaurant had likely moved to a nearby location, Robin pulled out her phone and looked up the store locator on the Panera website.

What she found frustrated her. The store locator asked her for a zip code, and she didn't know the zip code for the part of town she was in.

Consider this for a moment. Robin probably only knows a few zip codes, two of which are the one for her house and the other for her office. Also, it is likely that Robin knows where a Panera is located near her home and her office. So, in fact, prompting Robin for a zip code was absurd.

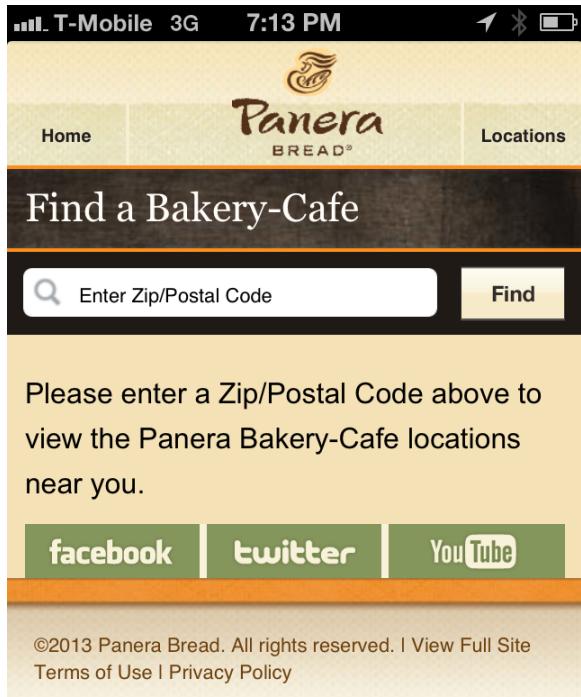


Figure X: Panera Bread Bakery-Cafe Finder

Not to be deterred, Robin went to Google and queried for Panera Bread locations near her current location. Unfortunately, the closest location that Google was aware of was her current location, so the restaurant must have moved recently enough to not be updated in Google.

Still determined to find the Panera without calling her friend, Robin decided to drive around a bit. She was sure it had to be nearby.

Eventually, Robin made her way past the restaurant district and decided to pull into a church parking lot and turn around for a second pass. As she did she thought, “Oh, I could Google the church.”

So, she stopped and searched for the church name on her phone. Fortunately, the church’s address was listed on its website. She pulled the zip code from the website and entered it into the store finder on

Panera's website. Sure enough, it listed the Panera she was looking for just down the street from where she had been.

Throughout this interaction Robin was forced to embrace complexity that wasn't hers. She didn't know the zip code that her phone was in, but her phone knew where she was. Software developers have tools at their disposal that can be used to find out where the phone is at a given moment. Rather than embracing the complexity of asking the phone where it was, the developer pushed that complexity out to Robin and asked her where she was. And, as has already been pointed out, she is unlikely to know the answer to this question.

This lack of complexity ownership and management appears in many aspects of life.

Imagine yourself in a situation in which you have just been assigned to a new project and now you are allocated 30% to four different project. As you wander back to your cubicle, you wonder how you are going to contribute 120%. What do you do?

Too often employees embrace their manager's complexity. They willingly take on more than can be accomplished and work on the projects they find to be most interesting or most important. In a world without priorities, people will set their own direction.

In this situation, to embrace your complexity, and no one else's, go to the manager, explain the situation and ask for direction. It is the manager's job to set priorities and make decisions on the relative importance of projects.

When you are in a situation that just doesn't feel right, consider three steps as you decide how to proceed.

- **Admit that the complexity exists.** Whether it is the complexity of managing a project team, managing a family, or simply getting to work in the morning, complexity is hidden everywhere.
- **Determine who owns the complexity.** It may be your complexity and it may be someone else's. It is important to know who should embrace the complexity.

- **Manage the complexity.** If it is someone else's complexity, politely push back and let them know. This could lead to a difficult conversation with a family member or boss. From the previous example, if you are waiting on your management to make a decision, find out what you can do to help with a resolution and encourage them to make the decision. But, if it is your complexity, embrace it! Take it in and do the very best you can to navigate through it.

Unfortunately, it isn't always easy to embrace your complexity. Complexity is often hard to manage, and various mental blocks may keep you from engaging with it. Two blocks that commonly hold people back are exhaustion and indecisiveness.

There are times in your life when the demands of work push you to **exhaustion**. By the time you get home at night, you have reached your limit and don't want to take time to genuinely recover by exercising or spending time with friends or family.

This not only applies to people who are on their feet all day, but also to those with desk jobs. According to Simon Laughlin, professor at Cambridge University, the average adult brain consumes about 20 percent of the body's energy when it is at rest. For those who spend their day on intense mental tasks, this increases significantly. [REF]

When you are exhausted, your mind may be dulled, which prevents the body from functioning effectively. During these periods of time, it is important to take a bit of your depleted energy and create a prioritized plan of attack. A good practice is to focus your limited energy wisely to get the important things done.

One of those important things is to take time to genuinely recover. Activities such as watching TV, scrolling through social media, and playing video games are not restorative and lead to further exhaustion. [REF] Reading, listening to music, and spending time in nature are all activities that can help you recover and help you sustain a long term high performance.

Another block that can keep you from embracing your complexity is **indecisiveness**. Unfortunately, putting off a conscious decision may lead to a situation that you don't want to be in.

The story is told of how former U.S. President Ronald Reagan learned the need for decision-making early in life. As the story goes, an aunt took him to a cobbler to have a pair of shoes made. The shoemaker asked young Reagan, “Do you want a square toe or a round toe?”

Reagan hesitated and struggled to make up his mind. The cobbler smiled and said, “Come back in a day or two and let me know what you want.”

A few days later the shoemaker saw Reagan on the street and asked what he had decided about the shoes. “I still haven’t made up my mind,” the boy answered. “Very well,” said the cobbler.

When Reagan received the shoes, he was surprised to find that one shoe had a square toe and the other a round toe.

“Looking at those shoes every day taught me a lesson,” said Reagan years later. “If you don’t make your own decisions, somebody else will make them for you!”

In his book *Only the Paranoid Survive* [REF], former INTEL Corporation CEO Andy Grove addresses indecisiveness. He points out that there are many situations in which it is not clear what is right or wrong. He states, “if you’re wrong, you will die. But most companies don’t die because they are wrong; most die because they don’t commit themselves. They fritter away their valuable resources while attempting to make a decision. The greatest danger is in standing still.” Grove goes on to state that your only way out of indecision may be to choose a path and work hard to make that choice be the right choice.

Ever notice how exhaustion and indecisiveness can lead to a downward spiral? When *Me* is exhausted decisions that affect *We* are pushed back. *We* may then get behind in the pursuit of a goal and *They* get frustrated. This leads *Me* to have to work harder or longer to recover for lost time. Awareness of how exhaustion and indecisiveness are related can be a first step toward getting out of this loop.

When you embrace your complexity there is an energy and engagement with the situation. You may have a curiosity that drives you learn more or take advantage of an opportunity. This energy will prompt questions and spur you on to involve other people in your quest to tame the complexity.

It is good to keep a few things in mind when you engage *We* or *They* in the pursuit of your goal. People are typically very helpful when you embrace your complexity as much as possible. If you try to push your complexity onto others, it may get pushed back onto you.

Here are a few tips embracing your complexity:

- **Do your research.** It is your job to understand the tasks you've been given. If you need answers to questions, take time to formulate good questions. If you need to know what others have done, do the background research required to develop expertise related to the task.
- **Try something.** Be curious and experiment with the problem. Sit with the problem and potential solutions for a bit. The famous physicist Richard Feynmen often tried to solve a problem before reading someone else's solution so that he was more familiar with the problem and had a context for reading the solution.
- **Formulate a good question.** Put together a short outline or graphic that illustrates your problem. An illustration or demonstration of the problem really helps communicate the situation as you understand it. Remember, *We* and *They* are not thinking about your complexity, so part of embracing your complexity is to help them quickly understand your problem, what you have tried and thought about, and how they can help. Most of the time people are happy to help if you formulate a good question.

It is worth noting that often when you do the research or try something, you learn a lot about the problem and may solve it yourself. This research and experimentation will go a long way toward developing expertise and taming your complexity.

Regardless of the type of project you are working on or environment you are operating in, take time to understand the complexity and note who owns the complexity. If it is your complexity, embrace it: research it, experiment with it, learn more about it, make a decision about it, and eventually tame it. Put it in a box on the shelf.

If it is not your complexity, politely push back and encourage others to tame their complexity. Embrace your complexity and no one else's.