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## WHY I *wrote* THIS BOOK

There are many great design books about design process, tools and methods. With increasing popularity of Design Thinking and human-centred design, we're seeing more material discussing aspects of this practice. One aspect missing, almost in an ironic twist, is what it takes to be the human who is doing the designing.

# THIS HUMAN IS ABOUT THAT PERSON.

Within these pages I share what I know and have experienced as a human who is doing the designing. I wrote with the intention of evoking new reflections within design practitioners, opening up new perspectives and experiences of their work and helping you to make sense of it all.

In writing this book I connected with every aspect of my twenty years in human-centred design. I excavated aspects of myself and my experiences that I had devalued and buried a long time ago. The most enjoyable, and traumatic, reconnection was with my time studying the brain. I've always been fascinated by the squishy grey mass we carry around in our skulls. I had almost forgotten that I am a published neuroscientist, because it was such a long time ago. This fascination with the brain shaped my perspective on why some things in design are easy and others are hard. It taught me how we process information and where information gets processed. You'll notice a few scientific geeky references to neuroanatomy throughout—now you know why.

My PhD was in human-centred design. I was given the opportunity to live out my dream of being Charlie from *Top Gun* when I worked as a civilian contractor in the Air Operations Division of Australia's Defence Science and Technology Organisation. My PhD was concerned with situational awareness of fighter pilots, and I worked mostly with FA-18 and F-111 pilots. I learnt hard-core Human Factors, not only through my own research, but also from supporting the work of the other scientists in the Human Factors Lab. I also became a glider pilot during this time, which taught me that some-

# I BELIEVE EVERYTHING IN LIFE IS AN APPRENTICESHIP FOR THE NEXT THING.

times you've just got to learn to fly the plane while you're already up there, flying.

I think this is why design and I get along. It is a way of thinking and being that requires you to work out the way while you're already heading down the path. It is action-oriented, curiosity-driven and resilient to big mistakes... if you do it well.

My time at Ford and Sumitomo taught me about the design process in its most tangible form. I worked as a design engineer on both the supplier and assembler side and observed how a studio designer thinks differently to a manufacturing engineer. Each look at exactly the same part but speak two different languages. They are concerned about completely different things. It was here that my passionate advocacy for the human in the system began. Although everyone knows it is a person who drives the car, back in those days human factors were still a relatively new thing and consideration for the person came very late in the design process. I learned how important it was to make sure human-centricity was there from the beginning.

Being a general manager within the Chief Technology Office at Telstra taught me about leadership and furthered my

understanding of how large organisations work, or don't. It taught me about the powerful role technology plays in the lives of people and how enamoured we get with the technology itself, rather than thinking deeply about what it actually means for the human condition.

The culmination of these apprenticeships prepared me to establish my own strategic design firm, Huddle, with my husband. We work with large enterprises, government organisations and communities in Australia, Europe and the US. Huddle taught me how to be a graceful beginner and how to pick myself up after a hard fall while maintaining my values and principles. It taught me to fight for what I believed in and to listen with humility. It has been a vehicle for me to grow as a leader and a mentor to other leaders, and it has challenged every aspect of my identity.

It also showed me the endless generosity of people when they believe in you and what you are trying to do. I am greeted by this every day when I head into work. My wish is that, through reading this book, you will learn more about yourself, even if you're not a human-centred designer, and that learning will help you have great positive impact in the world.

# THE FLOW OF

THE LINK BETWEEN  
OBSERVATIONS AND INSIGHT,  
AND ALL THE MODIFIERS  
IN-BETWEEN.

## OBSERVATIONS

We use our senses to observe other people's realities.

**TRIGGER**

Our observations trigger beliefs we have about how the world works.

## BELIEFS

**INFORM**

These beliefs inform our biases (whether we realise it or not).

## BIASES

**IMPACT**

Our biases impact our judgements about what's OK and what isn't.

## JUDGEMENTS

**AFFECT**

Our judgements affect how we make sense of what we are observing.

## SENSE MAKING

**COLOUR**

These filters lead us to an explanation of an observed reality that fits into the world as we already believe it to be.

## INSIGHT

# INSIGHT

Insight is the capacity to gain an accurate and deep understanding of the world as it exists for another person. We all have beliefs that inform our judgements about what is right and wrong, or good and bad. These biases and beliefs filter the information we receive and can distort our interpretation of what we observe. This is completely normal. As a human-centred designer, you need to be acutely aware of your own biases and beliefs. You have to acknowledge and understand them so that you can come closer to true insight about the people you are designing for.

IT IS THEIR  
TRUTH THAT  
IS IMPORTANT,  
NOT YOURS.

#### CHAPTER 1

This chapter explores different ways of gaining insight and how to distinguish between perception and genuine insight.

### SOLUTION SEDUCTION

Sometimes you can fall in love with a solution to a problem. I call this 'solution seduction'. It is a phrase I coined about seven years ago and I still use it (and see it) today. It can be dangerous to converge too early on a solution, especially if you are still at the stage where you are exploring and imagining how you might visualise your work.

Here are some symptoms of solution seduction:

- *You have a fixed perspective on how this idea will come into being.*
- *You perceive other's ideas relating to your vision as criticisms and feel you need to defend your vision.*
- *You feel other people's suggestions are not as good as your idea.*
- *You think if you don't create it exactly as it appears in your mind's eye, it will be wrong.*
- *You find it really hard to compromise on any aspect of your idea.*



At the early stages of your work, having a fixed view of your vision is dangerous as it stops you from exploring other, perhaps more meaningful, pathways. You will know you have been seduced by a solution when the image you hold in your mind is fixed. When you are envisioning your ideas, these images should be fluid, they should morph and change daily as you continue to make sense of the most meaningful pathway to delivery. If your idea is fixed and you are yet to communicate it to anybody, you've converged too early and have been seduced by your own solution.

Unfortunately, the only way out of this is to break up with your idea. It doesn't need to be a complete break, you just need to come to an understanding that you need to see other ideas. When you allow yourself to experience other ideas, they bring richness and colour to your own. From here, your chances of finding a more engaging, complete and resilient scenario is heightened.

FALLING TOO EARLY FOR YOUR BEAUTIFUL VISION CAN LEAD TO HEARTBREAK LATER.

TIP

If we let our  
current reality  
define our  
future reality...

# BE CONSIDERATE OF YOUR MEDIUM AND GET CREATIVE

Communication is a creative process. In this sense, the word ‘creative’ means the act of going from something that doesn’t exist to something that does.

A concept that was once unknown becomes known through the act of communication and we can choose to be innovative and original in the way we convey it. There is more room for creativity in the communication of research findings than we allow for.

The topics we enquire about are important, so we treat them respectfully. It is possible to enjoy yourself while remaining respectful to the topic. Access your imagination, your art and your craft to present your work in a way that makes it enjoyable for your audience and you.

TIP

WHEN CHOOSING THE MEDIUM AND USING YOUR CREATIVITY TO FORM YOUR COMMUNICATION, REMEMBER TO USE THE INTENTIONAL COMMUNICATION FRAMEWORK AND DESIGN WITH THE AUDIENCE IN MIND.



## COMMUNICATE to CREATE

Communicating with people is something most of us do every day and largely take for granted. The importance of communication to your work is underestimated, especially in the realm of

## MEANINGFUL WORK AND REIMAGINING REALITIES

. When you communicate, you create realities for yourself and for others. The simple act of asking someone for a glass of water creates a reality in which you can drink and relieve your thirst. The act of asking someone to leave you alone creates a reality in which you are on your own. Seeing the power of communication through this lens of reality creation gives it much more importance. This requires you to be present and accountable for what is actually being communicated and, more importantly, how it is being communicated.

## AUTHENTIC SELF- EXPRESSION, INTEGRITY AND COURAGE

are fundamental to ensuring you effectively create meaningful realities through communication.

### AUTHENTIC SELF-EXPRESSION

You might think that during your work, particularly the research stage, you need to provide an objective view of your findings. This is essential and true. But when it comes to the *process* of communication, you can get personal! If you communicate from your ‘researcher’ persona, you put up a barrier to connection. It’s important to connect with your audience as a human being. An authentic expression of what you’ve found in your research will resonate with your audience. Your authenticity makes it easier for them to connect with you and your work.

### INTEGRITY AND COURAGE

You will sometimes find yourself in the position where you need to communicate something that isn’t easy to hear. This might be due to the subject matter—you may be enquiring into the treatment of women in war zones. It might be because of the impact of your findings on an individual stakeholder—you may find the target market does not want a recently launched product. Or it might be because the person you are working for is listening from a fixed mindset or viewpoint, so they perceive you as wrong or incompetent.

The trick with all of these scenarios is to retain your *integrity* while communicating what needs to be said. *You* have done the work. The knowledge is embedded within *you*. As a person committed to doing impactful work, it is vital you don’t shy away from communicating the true message, regardless of the context. This takes an incredible amount of courage, but it is essential if you’re passionate about making a difference in the world.

Sometimes the stakes are high. If we are to do impactful work, we need to become experts at crucial conversations. Our work as human-centred designers is not only about finding elegant solutions to complex issues, it is about being masterful communicators of our findings so they have the positive impact we intend.

# GENUINE CONNECTIONS

The following ideas are designed for you to contemplate, apply and learn from. They are not steps, they have no order, they are simply for you to consider, explore and experiment with.



## BE AUTHENTIC

Building heartfelt connection requires you to share aspects of yourself. This may require you to be vulnerable. We often have a facade or persona that we bring to work, because work environments can be competitive and combative. If you try to connect with people while you are being disingenuous, your connection will only be as deep as your facade.

Sometimes people are afraid to be authentic, even in encouraging environments. It takes courage to share aspects of yourself. But when you begin to share, others around you do too, and you ultimately create more meaningful relationships.

Relax your perceptions about who you should be friends with. Be open to random connections and experiences. You might need to be a little more open than usual, a little more curious than usual and a little more adventurous than usual. For people who are interested in understanding the human condition, inviting in the unexpected is a powerful way to uncover your 'unknown unknowns'.

## INVITE RANDOMNESS

Chapter 1 discussed beliefs and biases and their impact on our sense making. This is also true of building genuine connections with people. Be very vigilant about your expectations of people's behaviour, what they are capable of and how they will work with you. Be discerning about the people you build strong connections with. Acceptance doesn't mean compromising your own values and standards. It is crucial to know yourself for you to be successful at building genuine connections with others.

## ACCEPT PEOPLE

Allow people to see what makes you tick, what really drives you. This might be directly related to the work you're doing, or it might not. It might be something completely random and obtuse. Let people see your passion and allow them to be moved by what moves you. Sharing your passions encourages others to share theirs. And sharing stories about the things that are important to us creates connections that go beyond the task at hand.

## EXPRESS YOUR PASSION

## CONNECT TO CONNECT

Connecting with someone should never have an ulterior motive. You should be fully present, listening and attentive to what they are saying and what they need. Your only motive should be how you can be of service to them. Building connections based on a mutual willingness to support and enable another person creates the perfect conditions for collaboration and great work to emerge.

## CULTIVATE IMPORTANT RELATIONSHIPS

Human connections need nourishment and attention. They are like the synapses in your brain. If you don't keep reinforcing them, they will wither away. Know the people in your life who are really important to you and make sure you cultivate those connections.

**TIP** TAKE NOTE, NOT ONLY ARE THESE IDEAS APPLICABLE TO YOUR WORK, THEY ARE APPLICABLE TO YOUR WHOLE LIFE.

“A connection is the energy that exists between two people when they feel seen, heard, and valued; when they can give and receive without judgement; and when they derive sustenance and strength from the relationship.” *Brené Brown*

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#### CONNECTING TO INTENTION

For meaning to be created we need a clear pathway to guide it, otherwise we might see nonsensical patterns and build very convincing cases around them. Because our form of work is often emergent and not guided by numbers, we need to rely on our skills of observation, recording and sense making.

It is particularly important to connect with the intention of your work during research and synthesis. You need to give your thinking an orientation so your sense making remains relevant to your design context. This doesn't mean you analyse towards a certain objective—that would defeat the purpose of emergent learning and insight. Instead, reconnect with why you are doing the research in the first place. What outcome does this research seek to inform? This provides you with direction in your search and excavation.

There is a trap, however. You don't want the intention to be so clearly defined you end up finding evidence for a solution that has already been prescribed. Unfortunately this happens sometimes. You need to have a clear intention to guide your sense making, but without being so specific that you miss things that could take your findings in a more meaningful direction.

As your work progresses, you will probably learn something that changes your intention. This is OK as long as there is a good reason for it, and you are still meeting the needs of the people you are helping in the first place.

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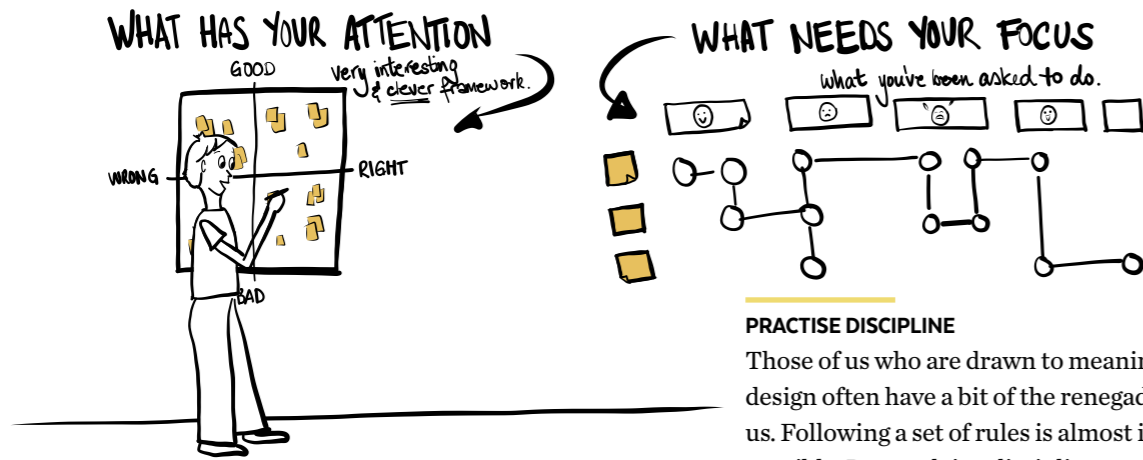
#### INTEGRATION AND TRANSFORMATION

When you are sense making, what you are actually doing is integrating and transforming data. Sense making doesn't just occur at the early research phases of human-centred design, it happens throughout your work and has many different inputs. You integrate the data into patterns to tell a more coherent story about what you've observed in the research and then you transform that data into information and, eventually, you turn your findings into insight.

**THIS TAKES ENERGY.**

When you are in the throes of synthesis, you can feel drained and fatigued by the end of the day, even if you spent most of it staring at a wall of sticky notes. The amount of connecting, discarding, rearranging, challenging, remembering, deciphering and mental high-fiving that your brain does is incomprehensible.

Having a clear  
intention is  
energy giving.



**TIP**  
 BEING AWARE OF WHAT IS PULLING YOUR ATTENTION WILL HELP YOU ASSESS IF YOU ARE FOCUSING ON THE RIGHT THING.

Another thing to be aware of is how much energy an idea is using up. If there's something that is taking a lot of effort for you to sense make, group cohesively with other findings or explain its relevance, then perhaps you're manufacturing something that isn't actually there. Sometimes you desperately want to find something, because if you did it would be interesting to write and talk about. Sometimes you put too much effort into it and end up conjuring it into existence. Findings that are strong, resolved and real don't take a lot of effort to sense make.

At other times, we are so busy looking under couches and between the cracks in the bricks that we don't notice the Mona Lisa right in front of our noses. We excavate and explore bizarre associations when in fact the key insight is simple and clear, staring us right in the face. Sometimes when the insight is so simple, we think 'it can't be that' and keep looking. The key is to be mindful of how much energy things are taking.

### PRACTISE DISCIPLINE


Those of us who are drawn to meaningful design often have a bit of the renegade in us. Following a set of rules is almost impossible. But applying discipline to your craft makes your creation more powerful: the discipline to keep going, to see the creative potential in all constraints, to return to the drawing board and keep coming back with the next idea and the next and the next. Just as an athlete trains to perform harder for longer, so must a designer who wants to change the world. Training your will and your personal power comes from practising discipline. If you say you're going for a run, do it. If you say you need a day off to visit museums and galleries, do it. If you say you're going to go to bed at 10 pm, do it. This is how you strengthen your will. You become proactive in the creation of your own reality so you can then facilitate this for others.

Without discipline, you'll be ineffective and, when you're someone who wants to achieve great things for humanity, this can be disheartening. Discipline is your friend... and remember, you can still break the rules. Discipline doesn't mean you need to conform with anything, except your own free will.

### DOING WHAT IS NECESSARY

Dreaming, visualising and communicating an idea you are passionate about can be very motivating. But to bring something into reality you actually have to DO something. You have to sit down in front of your computer and finish the design, hire the developer, meet with the stakeholders, solve the problems, negotiate the constraints and so on. Sometimes you won't want to do that. This is where your strength of will and character come to the fore. It's also what sets you apart from the rest. Many people have dreams and visions and ideas they want to make real, but only a few of us are prepared to do what is needed to make this happen.

Doing what's necessary comes down to two things:


 BELIEVING YOU CAN + KNOWING YOU WILL.

**BELIEVING YOU CAN** comes from your belief in yourself and your role in creating this new reality. Your belief is the essential ingredient to actually bring your idea into reality. Your belief gives you energy and creates motivation in others. People will look to you for guidance.

**KNOWING YOU WILL** is determined by your level of free will and your conviction about what you are doing. The greatest realities in life have been created by people who KNEW they were going to do what they said they would—no matter what it took. These are the people who make history and whose stories are told over and over. When you are creating designs for the improvement of humanity and you are faced with difficult constraints, you need to know you're going to get through it. You will make it through the trials and emerge stronger than ever.



EXERCISE 6.1

This framework has been adapted from Dr Elizabeth B.-N. Sanders, originator of the 'of the Say, Do, Make' model.

# DISCOVERING EMOTIONS

TECHNIQUE

SAY

Example: Workshops, focus groups.

DO

Example: Contextual enquiry, observational research.

MAKE

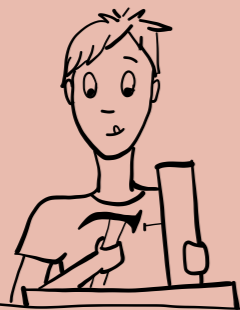
Example: Artefact creation, collage, journals, maps, diagrams, drawings, stories.

THINK & SAY

DO & USE

KNOW & FEEL

DREAM



TYPE OF INSIGHT

EXPLICIT KNOWLEDGE

Learning what people can express in words.

OBSERVATIONAL EXPERIENCE

Observing their behaviour and seeing things they don't realise they do.

TACIT KNOWLEDGE

Gaining insight into their perceptions of their experience and their feelings to build empathy.

LATENT NEEDS

Assessing what they dream of provides a future view and hints of latent needs.

TIP

WE NEED A COMBINATION OF APPROACHES TO CONNECT WITH THE EMOTIONAL CONTEXT OF OUR DESIGN.

UNDERSTANDING EMPATHY

Daniel Goleman, the author of *Emotional Intelligence*, describes three types of empathy: cognitive, emotional and compassionate. Knowing the type of empathy you are experiencing lets you watch for the different impacts that type of thinking may have.

People feel empathy in different ways. An emotionally sensitive person is more likely to experience emotional empathy than a person who is less so. It doesn't really matter if you are better at experiencing cognitive or emotional empathy.

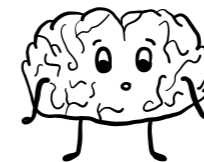
What matters is that you know there is a difference and you can manage yourself accordingly.

As a human-centred designer, you do need to master compassionate empathy. You will have to design effectively and meaningfully in many different situations. Having too much of an emotional investment can be draining and cloud your perspective on the most appropriate design for that particular human context. Having too little may mean you miss the nuances that emotional empathy often communicates and reveals.

TIP

KNOWING THE THREE DIFFERENT TYPES OF EMPATHY HELPS YOU TO UNDERSTAND IF WHAT YOU ARE EXPERIENCING IS CONSTRUCTIVE OR DESTRUCTIVE FOR YOUR WORK.

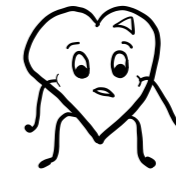
COGNITIVE



When you can see things from their perspective (also known as perspective taking).

Can result in an over-intellectualisation of your insight, leading to loss of meaning.

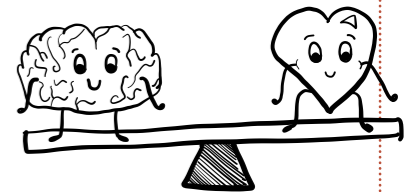
EMOTIONAL



When you actually feel what they feel (also known as emotional contagion).

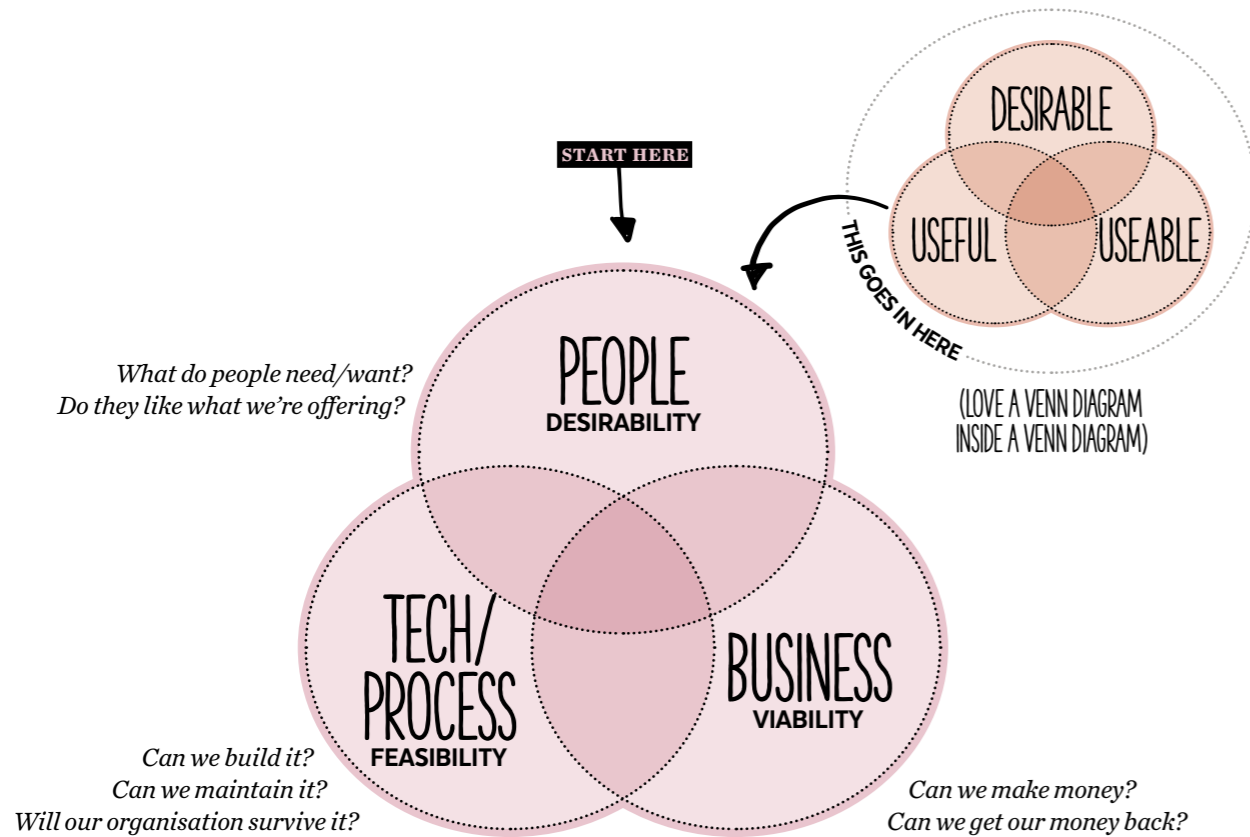
Can result in transference, where you lose the benefit of being an external observer.

COMPASSIONATE



When you can appreciate what they feel and can do something to support them.

The balanced point of view that allows you to design with compassion and objectivity.



**VIABILITY**

Businesses use money as a mechanism for the exchange of value between customers and themselves. When this is present, so is an interest in whether the money invested in the design and delivery of the service will be returned (return on investment). Most organisations have to choose where to invest their money. If your design takes too long or costs too much to deliver, it won't be a viable proposition. Most government agencies provide services for

free, but viability is still cost-based. Will they be able to deliver the service or strategy you've designed within the budget they have allocated for this activity?

Sometimes you won't have enough information to determine if your design is viable for your client, although understanding this dimension will inform the way you engage with them. During iteration and refinement, they can provide you with guidance to ensure that your design is viable.

**PRAGMATISM**

Keeping these three dimensions in mind as you create your design ensures you keep one foot in business reality.

THERE WILL BE PEOPLE WHO ARE FEARFUL OF THE REALITY YOU ARE CREATING.

They may need to do more work than they currently do, or work in a different way, or operate with more accountability. Your design might expose their mistakes or failures. Hopefully these scenarios are uncovered and dealt with early in the design process, but sometimes you are faced with difficult situations later in the process.

DO NOT LET THEIR FEAR INFECT YOU.

Do not allow it to slow your progress in this important work. It is OK to feel your own fear—in fact, it is critical to acknowledge the feeling and move forward despite it. The inability of people to move beyond their fear prevents the implementation of great work.

I USE THE WORD 'FEARLESS' INSTEAD OF 'COURAGE' FOR A REASON. FEAR CAN STOP PROGRESS.

FEEL THE FEAR, THEN BE FEARLESS.

