“Design is about making intent real. . . . When you design, something new is brought into the world with purpose.”

—Kevin Clark and Ron Smith, authors of "Unleashing the Power of Design Thinking"
6.1 WHAT IS DESIGN THINKING?

**LO 6.1 Define design thinking.**

What pops into your mind when you hear the word “design”? You might think of design as a way of enhancing products such as clothing, furnishings, or appliances with the intent of making them more attractive to a certain target market. Traditionally, this is what design has meant: designers take a developed product or service and make it look pretty or enhance the brand before launching it into the marketplace. Design has been generally associated with the final stages of a project; the wrapping on the gift.

However, today’s business environment is driven by the need for continuous innovation and the need for strategic initiatives to support innovation. More often than ever before, businesses are faced with complex challenges that have no easy answers. There is a growing demand for companies to create ideas to meet the needs of customers to create long-term value rather than merely enhancing existing ideas with limited value.

In Chapter 4, we explored the concept of opportunity and how generating valuable, useful, and economically viable ideas coupled with different approaches can improve our ability to identify meaningful opportunities. In the example of the invisible bicycle helmet, we could say that the two Swedish students identified an opportunity to reinvent the bicycle helmet, but they also did something more: they used **design thinking**, a thinking process most commonly used by designers to solve complex problems, navigate uncertain environments, and create something that is new to the world.

In the context of design thinking, **needs** are considered to be human emotions or desires that are uncovered through the design process. Those companies that succeed...
Look closely at the photo. Can you tell the woman is wearing an invisible bicycle helmet? If not, the helmet is fulfilling its invisible purpose. Yet, every time the wearer gets on her bike, if she falls off, or if she is struck, her head and neck will be protected. The invisible bike helmet is the brainchild of Anna Haupt and Terese Alstin, two Swedish industrial designers, who together set out to revolutionize the bicycle helmet industry. The idea took root when a new Swedish law was passed making it compulsory for children to wear bicycle helmets up until the age of 15. This sparked a debate as to whether the same law should apply to adults. "We saw this law as a threat to adult bicyclists, because many people in Sweden and the rest of the world are really bad at using conventional helmets because they don’t think they are good enough," Haupt said.

Haupt and Alstin, who were university students at the time, set out to find out why people didn’t like wearing the conventional bicycle helmet and discovered some interesting insights. Through anonymous questionnaires, they found that one of the main reasons was not as much to do with safety as with vanity; many respondents said bicycle helmets made them “feel geeky”; that they messed up their hair; and they were awkward to carry around.

Haupt and Alstin concluded it was not people’s attitudes that needed to change, but the product itself. And so they set out to create a product that addressed both safety concerns and aesthetics by developing a helmet that doesn’t mess up the hair, that looks fashionable, and that is easy to transport. Over the course of 8 years, Haupt and Alstin studied bicycle accidents—“everything from an icy road crash to getting hit by a car”—and enlisted the help of professional cyclists to help them develop the product.

Take another look at the photo: the clue is in the scarf the woman is wearing. Inside the scarf is a protective nylon hood which, in the event of a collision, is inflated by a small gas canister. Built-in sensors monitor the movements of the cyclist and signal when the cyclist has either been struck or has fallen off the bike. Similar to airbag technology in cars, the hood inflates within one-tenth of a second. Furthermore, it is thought to be safer than conventional helmets. “It’s actually three or four times better in terms of shock absorbance,” Alstin said. “And that the most important factor. It covers more of the head – including the entire neck – than the traditional helmets.”

Using the latest technology and design, Haupt and Alstin have succeeded in addressing not only the safety aspect of cycling, but the aesthetic side as well. Thanks to their innovative approach to helmets, cyclists no longer have to worry about their hair being messed up, or suffer the inconvenience of carrying a bulky helmet around. The scarf-style helmet is not just discreet, but a desirable fashion accessory, as it comes in a range of attractive colors designed to appeal to even the most discerning cyclist.

**CRITICAL THINKING QUESTIONS**

1. What do you think was the main catalyst for Haupt and Alstin to design a new bicycle helmet?
2. How would you describe the creative process of designing something that doesn’t exist?
3. What are some ways for an entrepreneur to go beyond convention to design a product to appeal to a particular market?
in identifying and satisfying the needs of customers have a better chance of gaining that all-important competitive edge.

Can you as an entrepreneur be trained in the art of design during this entrepreneurship course? Absolutely not. Great designers like Jonathan Ive of Apple, and home furnishings designer Jonathan Adler, have spent years in school and in practice honing their craft. Our goal here is not to introduce you to design. It’s to introduce you to the benefits of design thinking and to describe how such an approach to problem-solving is essential to the practice of entrepreneurship that has been introduced in this book.

While it is undoubtedly true that gifted designers Ive and Adler have the deep ability to visualize and define patterns that many of us would not be able to spot, the focus for you as an entrepreneur is not on specific studio training, but on the best way to solve problems to best meet the needs of the people for whom you are designing. In other words, how do you identify new solutions that meet the needs of a market? That is the essence of design thinking, and it can be taught to entrepreneurs.4

The concept of design thinking aligns with many of the facets of the practice of entrepreneurship, described in Chapter 2. Design thinking applies to everyone, regardless of experience levels; it involves getting out of the building and taking action; it requires continuous practice with a focus on doing in order to learn; and it works best in unpredictable environments. Design thinking incorporates the core elements of the practice and the essential skills of play, empathy, reflection, creation, and experimentation addressed in Chapter 2. Design thinking helps put the practice into action because it requires you to collaborate, co-create, accept and expect setbacks, and build on what you learn.

One of the biggest obstacles to design thinking is the fear of failure. What if the idea doesn’t work out? What if the prototype fails to meet expectations? However, design thinking does not see failure as a threat as long as it happens early and is used as a springboard for further learning—in other words, “Fail early to succeed sooner.”5 Design is a process of constructive conflict that merges into unifying solutions through the power of observation, synthesis, searching and generating alternatives, critical thinking, feedback, visual representation, creativity, problem-solving, and value creation. By using design thinking, you the entrepreneur will be better able to identify and act on unique venture opportunities, solve complex problems, and create value across multiple groups of customers and stakeholders.

How do we become successful design thinkers? The first step is being human.

6.2 DESIGN THINKING IS A HUMAN-CENTERED PROCESS

LO 6.2 Demonstrate design thinking as a human-centered process focusing on customers and their needs.

In typical situations where new ideas are being vetted, we often jump to answer two questions: Can it be done? Will it make money? But human-centered design involves a different starting point in the creation process. Taking a design thinking approach forces you to answer an entirely different question in the beginning while not even addressing feasibility and economic viability. The questions of feasibility and viability come later. The first question is: What do people need?6

Leading innovation and design firm IDEO has popularized design thinking, and is featured several times in this chapter to illustrate design thinking in action. IDEO takes on all sorts of diverse design challenges – from developing new ways to optimize healthcare, to designing advertising campaigns, to finding different approaches to
CHAPTER 6  USING DESIGN THINKING

Helping You Find Your Inner Adult

MassMutual Financial Group partnered with innovation and design company IDEO over the course of two years to design a service to encourage people under 40 to buy life insurance policies. What they had found was that while people under the age of 40 were happy to talk about life in terms of where they had been or where they are going, they were reluctant to delve deeper into the financial aspects of their future.

When they came together on the project the IDEO and MassMutual teams discovered was that when it comes to life insurance, age doesn’t matter – people are either smart with their money or they’re not. From this insight, the Society of Grownups was born. It covers a curriculum of all the “boring” financial stuff that the under 40s don’t want to deal with – from investing in a 401K, saving to buy a house, and starting a family, to planning for retirement, and budgeting for the future – but within the comfort of a hip, informal environment, with a bit of wine tasting thrown in.

The Society of Grownups is now a distinct brand with its own customized section in MassMutual; it is equipped with financial advisors who are in tune with the needs of the adults whom they are advising to help them understand their money and design strategies to help them to get where they want to go. As MassMutual explains: “Why ‘Society of Grownups’? Because we’re all here to help each other become a little smarter. And a little more grown-up.”

CRITICAL THINKING QUESTIONS

1. What do you see as the value of providing life insurance services to the under-40 age group?
2. Do you agree that people under 40 need a “hip, informal environment” to encourage them to think seriously about the future? Why or why not?
3. What other strategies do you think might appeal to this demographic when it comes to life insurance and financial planning?

Design thinkers welcome constraints and see them as opportunities to identify innovative solutions. An idea is deemed successful if it strikes a balance among three main criteria (see Figure 6.1):
feasibility – what can be possibly achieved in the near future;
viability – how sustainable the idea is in the long term; and
desirability – who will want to use or buy the product or service.9

The key point is desirability – what do you people need? It’s not about building a new product and service and then searching for customers. It’s about going to customers first, determining their needs, and then creating something to meet their needs.

A good example of an organization that has successfully achieved this balance is Nintendo. Rather than competing with other gaming companies which were focusing on graphics and consoles, Nintendo used new technology to create the Nintendo Wii.10 Through innovative thinking and design, with a fresh new focus on enhancing the user experience, Nintendo broke through the competitive constraints of the gaming industry to create an affordable yet profit-generating product that has become hugely popular with consumers.

Kaiser Permanente, the largest integrated health plan and health care provider in the US, came to IDEO with a very human problem that needed to be addressed: to improve the experience of hospital patients and medical staff.11 The IDEO team collaborated with the Kaiser team to identify opportunities for change. Early in the process it became clear that there was something not quite right in the way nurses exchanged information regarding the status of the patients when changing work shifts. The exchanges were done at the nurses’ station and could take up to 45 minutes; this delayed the incoming nurse from seeing patients, and delayed the departing nurse from leaving. Because of the informal nature of the exchange (sometimes notes hastily scribbled on scraps of paper or even on scrubs) some insights relating to patient care were habitually lost, and many patients felt there was a gap in their care with every shift change.
Following 4 weeks of shadowing the nurses, requesting their feedback, and making observations on each shift change, the IDEO team came up with new shift change design. Rather than exchanging information at the nurses’ station, information would be passed on in front of the patient, who was in turn able to provide their own input or correct any misunderstandings. The team also built some simple software which allowed the nurses to input and update patient notes throughout a shift rather than at the end, and which could be easily recalled by the nurse on the next shift.

The impact of these changes was significant: the nurses who had just arrived didn’t have to spend the first 45 minutes being debriefed, which meant they could spend more time with their patients; the departing nurses were able leave straight after their shift; and the patients were able to provide more input during the note-taking process, ensuring nothing fell through the cracks, with the added benefit of receiving more attention. By taking a human-centered approach, the IDEO team was able to see things in real time from the point of view of the people carrying out these tasks and activities, in order to create a holistic solution that could benefit everyone involved, rather than just a select few.

Another way to step into someone else’s shoes is to go undercover. In an effort to improve the patient experience, this time focusing on the emergency room, an IDEO representative feigning a foot injury went undercover to experience what it was like for people entering the emergency room. A hidden camera helped the undercover agent to capture the chaos of the checking-in process, the long wait times without anybody providing any information, and the bright lights and noise of the emergency room. These observations led to some significant insights: while the hospital was focusing on the practical elements like bed allocation, paperwork, and which patients should be seen first, they were neglecting the human element. The result: new systems, technologies and spaces to make the whole patient emergency room experience less chaotic and stressful.

The human approach ethos is not just based on thinking about what people want, but by exploring how they behave, asking them what they think, and empathizing with how they feel. By truly understanding the emotional and cultural realities of the people you are designing for, you will be more able to design a better solution with real value. This is why empathy is so important to the design process.

YOU BE THE ENTREPRENEUR

Entrepreneurs are designers who have to envision their final product, and then figure out how to get there. Dan Houser, founder of Rockstar Games, started the video game company with his brother. They created many famous titles such as Grand Theft Auto, Red Dead Redemption, and Max Payne. Many of their games involve violence, and Rockstar Games has had to deal with public criticism of the content.

Houser’s company released Grand Theft Auto in the late 1980s, but received a lot of backlash from the media. Tabloids and parent advocacy groups targeted the game for its depiction of casual violence. The series continued to be controversial as some retail chains pulled the game from their shelves. In 2005, the Federal Trade Commission investigated several employees because hackers had found an explicit sex scene hidden in the game’s source code.

What Would You Do?
6.3 DESIGN THINKING REQUIRES EMPATHY

**LO 6.3** Describe the role of empathy in the design thinking process

In Chapter 2, we introduced the concept of empathy as one of the five skills essential to the practice of entrepreneurship. We explained the importance of being able to relate to how others are feeling in order to truly understand and connect with others, and to identify unmet needs. Empathy is essential for networking, effective leadership, and team building. You may have noticed that every variation of design thinking described in this chapter considers empathy to be a core element of successful design. Developing our empathic ability allows us to better understand not only how people do things, but why; their physical and emotional needs; the way they think and feel; and what is important to them. In other words, to create meaningful ideas and innovations, we need to know and care about the people who are using them.

We all have the ability to practice empathy, but how do we actually do it? The answer lies in observation, engaging people in conversation or interviewing, and watching and listening. Let’s take an example of a real problem challenging the design thinkers at IDEO: A woman called Shanti, living in a poor area of India, fetches her water from an open borehole about 300 feet from her home. The water is free, but it’s not as safe as the water provided by the local community treatment plant. So why does Shanti continuously use unsafe water? Because the local facility requires her to buy 5 gallons of water per day and carry it back to her home in a 5-gallon jerrycan. Not only is the weight too much for Shanti to carry, but she doesn’t actually need 5 gallons of water a day.

Start with developing empathy for Shanti. How would you feel if you were forced into drinking unsafe water because you could not afford, carry, or even need the fresh water from the local facility? What do you think needs to be done to make Shanti’s life a bit easier? Design thinkers will use their empathy for Shanti as a means of working towards constructive and experiential ways to resolve the water problem.

While rationalism and analytical techniques are important when creating products and services, as we have seen, design thinking is very much a human-centered approach and looks at the emotional as well as the functional side of problems. It allows us to express ourselves through our own feelings – to put ourselves in the shoes of someone like Shanti and think about better, safer ways of making her life a little easier. As best we can, in order for us to solve Shanti’s problems, we need to be Shanti.

In another example, Ideo has been working with Ford to see how the car-making company can still survive another 100 years in a world where the travel landscape is changing. Innovations like Uber, ZipCar, and Lyft have given commuters have far more options to travel and the choice to opt out of owning a car at all. With self-driving cars under development, traditional car-makers need to find other ways to be competitive apart from manufacturing cars. The Ideo team were tasked with providing Ford with ideas for a unique product that would make money and differentiate it from the competition.
Empathy as an Ethical Challenge

The practice of design thinking is fundamentally human-centered and requires the innovator to imagine the feelings of users as they experience a particular problem. These elements of empathy and user engagement make design thinking an inherently ethical endeavor. What could arouse more empathy than the death of an infant? Yet, in developing countries, many premature and low-birthweight babies die from lack of warmth, or hypothermia. Is it ethical to turn a blind eye to these tragic deaths?

As a class project, Stanford graduate students Rahul Panicker, Jane Chen, Linus Liang and Naganand Murty had been designing an intervention for at-risk babies low enough in cost to be used in developing countries. As mentioned in Chapter 4, their specific challenge was to create one that cost less than 1% as much as a state-of-the-art neonatal incubator. But when they created a prototype, collaborative field testing in Nepal with village families proved that the incubators were impractical since the families for whom the design was created lacked electricity. During their field testing the students determined that the cold Nepal winters and limited heat sources resulted in frequent incidences of fatal hypothermia for low-birthweight babies.

Consequently, the students abandoned their electricity-powered incubator design. Instead, they began brainstorming creative solutions for a baby-warming device that didn’t require electricity. The students eventually designed what looks like an infant-size sleeping bag. The bag is made of phase-change material that, after being heated, maintains its warmth for up to six hours, helping parents change material that, after being heated, maintains at-risk babies.

During their field testing the students determined that the cold Nepal winters and limited heat sources resulted in frequent incidences of fatal hypothermia for low-birthweight babies.

CRITICAL THINKING QUESTIONS

1. How can you design collaboratively and inclusively when resources are highly unequal?

2. Design thinking requires incorporation of user feedback and possibly scrapping your original designs. Have you ever had to throw away work you’ve spent weeks or months on and start over? Would you perceive this as progress or failure?

3. Provide an example of a time when empathy, or an emotional desire to help solve a problem, prompted you to think creatively. What did you do? What were the results?

Sources


Ideo began by looking at the strengths and weaknesses of Chicago’s “multimodal transport” system (buses, subways, water taxis, ride hailing apps, bike shares, and walking). After experimenting with various modes of transport themselves, the design team connected with a diverse group of Chicago area commuters, and followed them for weeks as they went about their daily lives. During this period, the design team asked the commuters lots of questions about why they chose one form of transport over another. They also collated data from the commuters’ homes, and even recorded what they carried in their pockets. The team also interviewed city planners and academics to get the latest information on transport.
Several brainstorming sessions later, the Ideo team finally came up with a concept for Ford. Studying the Chicago commuters had brought them to the conclusion that three types of commuters existed: the “Time Trumpers” who prioritize speed over comfort, the “Everyday Improvers” who try to find ways to enhance their commute, and the “Experience Seekers” who consider alternative ways of getting to their destinations such as walking or taking a new route. The Ideo team then developed an app for each of these different personalities. For example, the app for the Time Trumpers would offer alternative routes in the face of delays, the app for the Everyday Improvers would include a text function informing them of weather conditions that might affect their commute, and the Experience Seeker app would offer different route options such as “connect with nature.” Ideo is testing these apps with a view to integrating them into Ford’s new FordPass app, which offers services such as car sharing and electronic payments for parking. By taking a human-centered approach, Ideo has not only succeeded in understanding the hearts and minds of commuters, but has also created a unique product for Ford that will help the historic organization remain competitive in the future.17

There are many ways in which we can use empathy to relate to the people around us. In an innovative way for students to empathize with older people, researchers at the Massachusetts Institute of Technology (MIT) created the AGNES suit (Age Gain Now Empathy Suit) which is designed for the wearer to experience the physical discomfort that many elderly people have to deal with every day, such as joint stiffness, poor posture, bad eye sight and hearing, and lack of balance.18 This is a very powerful way of encouraging people to empathize with older people to identify their needs. Given that our aging population is growing, there is ample opportunity for entrepreneurs to consider ways in which they can make the lives of the elderly more comfortable. This is yet another example of how empathy is one of the key elements of the design thinking process used to solve complex problems and identify needs.

6.4 THE DESIGN THINKING PROCESS: INSPIRATION, IDEATION, IMPLEMENTATION

**LO 6.4 Illustrate the key parts of the design thinking process.**

In this section, we explore the design thinking process and its effectiveness in designing solutions. IDEO looks upon the design thinking process as a system of overlapping phases, rather than a linear, predictive approach (described in Chapter 2), where organizations determine the goals they need to achieve and look for the resources to enable them to reach their goals. In this sense, the design thinking process consists of three main phases: inspiration, ideation, and implementation (Figure 6.2).

The design thinking process is based on two main types of thinking called divergence and convergence. **Divergent thinking** allows us to expand our view of the world to generate as many ideas as possible without being trapped by traditional problem solving methods or predetermined constraints. This is a similar concept to the practice of play, which frees the imagination, opens up our minds to a wealth of opportunities and possibilities, and helps us to become more innovative. In fact, IDEO builds its whole culture around play and creating a fun environment for people to work in.19

The second type of thinking, **convergent thinking**, enables us to narrow down the number of ideas generated through divergent thinking in an effort to identify which ones have the most potential. These ways of thinking allow us to move from openness to understanding, from abstract to concrete, and from what is to what can be.

Let’s explore the three phases of design thinking, inspiration, ideation, and implementation, in further detail.
Inspiration

Inspiration is the problem or opportunity that stimulates the quest for a solution. It starts with a broad problem, or what is called a design challenge. A design challenge should not be too narrow at this point, nor should it be too broad. You want to have the freedom to imagine but you also want to have some boundaries in order to manage the process. Finding this sweet spot can be quite difficult and requires practice. This is where we use the question, “How Might We?”

Think about a fill-in-the-blank questionnaire as you develop your design challenge statement: How might we enhance /create /improve /redesign /expand /reimagine /expand/grow...? Here are some examples.

- How might we enhance the entrepreneurship education experience of students?
- How might we improve how the elderly live independently?
- How might we redesign how adults learn in virtual worlds?
- How might we reimagine how people get around in a town without cars?

Imagine that you see a woman in a grocery store trying to reach something on a high shelf, you might conclude, “Hey, this woman needs a ladder.” If you thinking innovatively, you may think about the type of ladder she needs. What if the woman is 80 years old? What does that ladder look like?

Now let’s look at this from a broader perspective. Rather than simply saying the woman needs a ladder, what if we said, “How might we help customers reach products on a high shelf?” Now the solution set is much broader – way beyond types of ladders. Ideas such as robots, mini-elevators, or moving shelves are much more innovative ideas than a simple ladder. These ideas have been inspired by observing that woman trying to reach a high shelf in the store.
Designers actively observe people in their own environment to identify their real needs. By observing the actual experiences of real people as they go through their daily lives, entrepreneurs are able to imagine themselves in the shoes of the people they are designing for. This gives them an opportunity to develop empathy to better identify needs and ultimately develop solutions. It is also an excellent way of seeing the world differently in order to capitalize on needs that the competition hasn’t yet taken the time to recognize.

Ideation

The second phase of the design thinking process is ideation, which involves generating and developing new ideas based on observations gained during the inspiration process to address latent needs. Latent needs are needs we have but we don’t know we have. For example, we didn’t know we needed an iPad until we held one. The late Apple CEO Steve Jobs was very good at identifying latent needs of customers and possessed great observation skill, yet he was often criticized for not talking to his customers. Latent needs are more easily identified by observing rather than talking.

The ideation process is in line with the practice of creation described in the practice of entrepreneurship, as it requires a general openness to the world and involves using our creative ability to solve problems. Remember, it is up to you to come up with the big ideas; you cannot depend on the people you have been observing to generate them for you. Instead, you use your observation data as a basis for coming up with ideas. During the ideation stage, ideas are often generated in collaboration with a diverse group of people whose experience spans many different disciplines. Within IDEO, it is not uncommon for a design team to comprise a mix of architects, psychologists, artists, and engineers, most of whom have also had some kind of experience in business or marketing, or who have completed an MBA. By combining different viewpoints, the team can generate a wide variety of ideas and engage in productive debates about competing ideas.

Brainstorming is an important part of the ideation process. Brainstorming was created in the 1950s by writer and advertising executive Alex Osborne, who wrote about creativity in his text *Applied Imagination*. One of the key factors of brainstorming, in Osborne’s model, was to “hold back criticism until the creative current has had every chance to flow.” He considered the following four ground rules for brainstorming as pivotal to divergent thinking:

- suspending all judgement;
- being open to wild suggestions;
- generating as many ideas as possible; and
- putting ideas together and improving upon them.21

Thus, the ideation phase uses brainstorming as a way to generate as many ideas as possible to meet the needs identified in the inspiration phase. Similarly, IDEO follows a set of rules for brainstorming (see Table 6.1); many of these are based on Osborne’s four rules.
CHAPTER 6  USING DESIGN THINKING

Once you have used inspiration and ideation to identify some ideas that you think may have potential, it’s time to enter the third space of the design thinking process: implementation. Implementation tests assumptions of new ideas to continuously shape them into viable opportunities. During the implementation phase, the ideas generated through the ideation process are transformed into concrete actions.

At the heart of the implementation process is low-cost experimentation through rapid prototyping, which creates an actual model of the product or service which is then repeatedly tested for strengths and weaknesses until it leads from the project stage into people’s lives. Prototypes need not to be sophisticated or expensive.

For example, in an attempt to understand a client’s requirements for a new surgical apparatus to operate on delicate nasal tissues, an IDEO designer grabbed a whiteboard marker, a film canister, and a plastic clothespin and taped them together. This crude, cheap prototype helped everyone to visualize the new surgical instrument and to clarify exactly what the client wanted.22

Experimentation is also relevant to the implementation stage, as it involves acting in order to learn, trying something new, learning from the attempt and building that learning into the next iteration.

Rather than executing the ideas generated in the inspiration and ideation phases, the implementation phase focuses on early, fast, cheap testing to strengthen ideas and ensure that the design team is on the right path towards meeting the demands of the people for whom they are designing. This part is so important that we’ve devoted Chapter 7: Testing and Experimenting in Markets to this topic. Let’s take a look at a real-life example of the three phases of design thinking in action.

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TABLE 6.1

IDEO’s Brainstorming Rules

<table>
<thead>
<tr>
<th>Rule</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>1.</td>
<td>Defer judgement. You never know where a good idea is going to come from. The key is make everyone feel like they can say the idea on their mind and allow others to build on it.</td>
</tr>
<tr>
<td>2.</td>
<td>Encourage wild ideas. Wild ideas can often give rise to creative leaps. In thinking about ideas that are wacky or “out there,” we tend to think about what we really want without the constraints of technology or materials.</td>
</tr>
<tr>
<td>3.</td>
<td>Build on the ideas of others. Being positive and building on the ideas of others takes some skill. In conversation, try to use “and” instead of “but.”</td>
</tr>
<tr>
<td>4.</td>
<td>Stay focused on the topic. Try to keep the discussion on target, otherwise you can diverge beyond the scope of what you’re trying to design for.</td>
</tr>
<tr>
<td>5.</td>
<td>One conversation at a time. Your team is far more likely to build on an idea and make a creative leap if everyone is paying full attention to whoever is sharing a new idea.</td>
</tr>
<tr>
<td>6.</td>
<td>Be visual. In live brainstorms we write ideas on sticky notes and then post them on a wall. Nothing gets an idea across faster than drawing it. It doesn’t matter if you’re not Rembrandt!</td>
</tr>
<tr>
<td>7.</td>
<td>Go for quantity. Aim for as many new ideas as possible. In a good session, up to 100 ideas are generated in 60 minutes. Crank the ideas out quickly and build on the best ones.</td>
</tr>
</tbody>
</table>

Source: Adapted from http://www.designkit.org/methods/28
CHAPTER 6 USING DESIGN THINKING

The Three Phases of Design Thinking in Action

In 2004, Shimano, a Japanese manufacturer of cycling components, noticed a flattening in growth in its components for high end road-racing and mountain bikes in the US. The Shimano team invited the IDEO design thinkers to collaborate on an idea for a new type of casual bike, aimed at baby boomers—people born between 1946 and 1964, who were now in their 40s and 50s.23

During the inspiration phase, the IDEO-Shimano team set out to define the problem and to identify any constraints. Working off the statistic that 90% of American adults don’t ride bikes, the team set out to find out why. By talking to a range of consumers and observing them in action, the team found that while consumers admitted they had enjoyed riding bikes when they were kids, they were now put off by the cost of bikes, the amount of accessories, the complex controls, and lack of knowledge about which bikes were suitable for certain surfaces. In short, these consumers yearned for the simplicity of the bikes they had ridden when they were young.

During the ideation phase, the team brought together what they had learned from their time with the consumers, and came up with the idea of “coasting” – a term that would promote the casual nature of a new range of bikes. These bikes would be built for pleasure and designed for simplicity; there would be no complicated controls or visible gear shifts, and they would be easy to maintain. Even the three-gear shifts on the bike would be controlled by an onboard computer which would sense the speed of the bike and adjust accordingly.

The implementation phase focused on the design of the new components such as the computerized gear shift, creating prototypes of the new coasting bike with these additional components to test it for strengths and weaknesses. Impressed by Shimano’s innovative idea, cycling manufacturing giants Trek, Raleigh, and Giant were the first to sign up to produce coasting bikes, and developed them by incorporating the cycling components put forward by Shimano.

Yet, the project didn’t stop there. To connect with the nostalgia many people associated with their fun, relaxed cycling childhood experiences, the team designed a brand which promoted coasting as the new, trouble-free way to enjoy life, using slogans like “Chill. Explore. Dawdle. Lollygag. First one there’s a rotten egg.” The team also collaborated with local governments and cycling organizations to launch a campaign, and created a website identifying the safest places to ride bikes. Within a year of the first coasting bike’s launch, seven more bike manufacturers had begun to produce coasting bikes.

As we mentioned, the design thinking process is not linear. It is not unusual to loop back through the three stages of inspiration, ideation, and implementation when exploring and testing new ideas. An initially successful idea, too, may need to be revisited. For example, despite initial enthusiasm for the coaster bike, sales soon flattened.24 The concept might need a new round of inspiration, ideation, and implementation to identify key weaknesses and devise ways to remedy them. Because design thinking does not follow a strict pattern, it may at first seem like a chaotic process, but there is structure in the chaos that serves to produce creative, meaningful results. The design challenge
gives us direction but through observation we begin to uncover the real problems and needs. We will explore ideation and implementation in greater detail in later chapters, but here let’s take a closer look at what happens during the inspiration phase.

6.5 PATHWAYS TOWARD OBSERVATION AND INSIGHTS

**LO 6.5** Demonstrate how to observe and convert observation into insights.

Two of the most important techniques which entrepreneurs use during the inspiration phase are observation and insight. **Observation** is the action of closely monitoring the behavior and activities of users/potential customers in their own environment. Many of us are so very accustomed to just seeing, or simply talking to (or at) other people, that we don’t necessarily know how to observe. Because we are so used to our own environment, we tend to lose sight of the bigger picture. It can be difficult to consciously stop and simply observe, yet observation is essential for gathering facts and developing the most interesting insights. Observing people is really where we begin to hone our empathy skill.

The other technique, insight, is a bit more challenging to define. First, let’s start with what an insight is not. The term is quite often misused. It is important to understand that insights and observations are not the same thing. Observations focus on the raw data that you have consciously recorded from all the things you have heard and seen, without any interpretation. An insight comes later: it is an interesting, non-obvious piece of information derived from an interview or observation data that drives opportunities.

An insight is not just reporting what you heard in the conversations. An insight is not an idea. An insight is a statement that identifies a customer need and explains why. In other words, an **insight** is an interpretation of an observation or a sudden realization that provides us with a new understanding of a human behavior or attitude. If an observation is the what, then an insight is the why (see Figure 6.3). Probably one of the best ways to remember what an insight is, is the following: “Why is a good insight like a refrigerator?” The answer – “Because the moment you look into it, a light comes on.”

In Chapter 5 we discussed pattern recognition, a process in which people identify links or connections, or “connect the dots,” in order to identify and then build on opportunities between apparently unrelated events. You may remember the airline pilot who connected the dots between trends that were happening at the time, reinventing the compact wheeled luggage used by airline crews to make it suitable for passengers. Once these trends were recognized, the product was built and marketed to a huge customer base to enormous success.

Recognizing patterns generates **insights** that enable us to see everyday things in a new light. These insights can often take us by surprise. Think back to the *Entrepreneurship in Action* feature, for example. The two Swedish students, Haupt and Alstin, observed and gathered information from a whole range of adult cyclists, which helped them develop an insight about bicycle helmets: namely, on the surface people attributed their reluctance...

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**Observations, Insights**

<table>
<thead>
<tr>
<th>Observations</th>
<th>record what people do or say</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insights</td>
<td>answer the question ‘Why?’</td>
</tr>
</tbody>
</table>
to wear bicycle helmets to lack of safety, but the real reason lay in the aesthetics. It was this insight that led the students on a quest for a bicycle helmet that would be safe, comfortable, and aesthetically pleasing – the invisible bicycle helmet.

Insights often generate ideas for new products or services that we didn’t even know we needed. For example, how many of us have thought aloud, “Do you know what I really need? An invisible bicycle helmet!” Yet, some of the greatest innovations of today have fulfilled a need that we had no idea we had, such as the Internet or the iPhone. In fact, even the most boring tasks can trigger the most illuminating of insights.

Take the relatively mundane task of mopping the floor, for instance. In an effort to find a new home cleaning product, consumer products company Procter & Gamble went to observe people cleaning floors. Although it may not sound like the most exciting assignment, the observation generated important new insights. What the researchers found is that people don’t like slopping water around with a mop; nor does water really help get rid of the dirt.

From this new insight came the Swiffer brand – a range of waterless cleaning products that make surface cleaning easier and more convenient. The researchers had succeeded in looking beyond the obvious (the information that confirms our existing knowledge) to make an unexpected pattern between the drudgery of mopping and our desire for a product that makes our lives easier. Instead of simply observing what they saw, and had seen many times over the years—the act of mopping—they had approached something very obvious from a different angle, and had asked why, and continued to ask until they came up with a meaningful product that answered the question. In other words, they had spotted the gap between where we are now, and where we want to be.27

Observation Techniques

Observation is another skill that requires practice. The more we practice observation, the higher the likelihood of us generating new, meaningful insights. There are nine dimensions of observation (Table 6.2) that are helpful in encouraging us to focus on the things that are not necessarily visible or obvious at first glance.

<table>
<thead>
<tr>
<th>DIMENSION</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Space</td>
<td>The physical place or places</td>
</tr>
<tr>
<td>2. Actor</td>
<td>The people involved</td>
</tr>
<tr>
<td>3. Activity</td>
<td>A set of related acts people do</td>
</tr>
<tr>
<td>4. Object</td>
<td>The physical things that are present</td>
</tr>
<tr>
<td>5. Act</td>
<td>Single actions that people do</td>
</tr>
<tr>
<td>6. Event</td>
<td>A set of related activities that people carry out</td>
</tr>
<tr>
<td>7. Time</td>
<td>The sequencing that takes place over time</td>
</tr>
<tr>
<td>8. Goal</td>
<td>The things people are trying to accomplish</td>
</tr>
<tr>
<td>9. Feeling</td>
<td>The emotions felt and repressed</td>
</tr>
</tbody>
</table>

Another technique used in design thinking is the **AEIOU framework**: an acronym for **Activities**, **Environments**, **Interactions**, **Objects**, and **Users**. This is a framework commonly used to categorize observations during fieldwork. The AEIOU framework is similar to the nine dimensions of observation, but has a smaller number of categories which are a little easier to remember during field research. AEIOU is also the focus of the Mindshift exercise. Table 6.3 lists the five AEIOU dimensions.

There are also small adjustments you can make to your own lifestyle to increase your powers of observation. For example, you could deliberately change your own personal routine. Do you always take the same route to class? Or go to the same grocery stores? If so, then try do take a different route or go to a different store and see if you can make any observations based on these changes. Imagine you are seeing things for the first time and see if you can discover anything new. Furthermore, the act of observation doesn’t have to be a solitary activity. Bringing along someone else to help spot something you didn’t notice before, or offer a different point of view, can be invaluable in identifying new insights.

Here’s a direct challenge. Once a day, stop and observe the ordinary. Look at those everyday things that you normally take for granted, as if seeing them for the first time. Why are manhole covers round, for instance? Not only will this exercise improve your observation skills, but it will make you a better design thinker; for good design thinkers observe, but great design thinkers observe the ordinary.

### 6.6 INTERVIEWING AS A USEFUL TECHNIQUE TO IDENTIFY NEEDS

**>> LO 6.6** Demonstrate how to interview potential customers in order to better understand their needs.

Interviewing is an important part of the phase of inspiration as it is one of the most effective ways to identify and empathize with customer needs, create new ideas, and discover opportunities. A skilled interviewer is open-minded, flexible, patient, observant, and a good listener. Like observation, interviewing is a skill that improves with practice. When you think of interviewing someone, you may wonder why people would give up their time to speak to you, but the truth is that most people like to share their expertise.
MINDSHIFT

Observations to Insights

Now it’s time to practice a little design thinking. When talking about observation as a core tenet of design thinking, it’s easy to say, “I’ve observed all my life. I don’t need to practice observing.” Well, you haven’t been observing your entire life; you’ve just been seeing. When we observe with purpose and intention, we often see new things.

This mindshift is about getting outside of the classroom, observing, and then building insights from your observation data. The AEIOU framework is a tool to help you do this.

First, identify an area of curiosity for you. This could be fitness, video gaming, food, travel, education – any human activity you are curious about. Once you have identified an area of curiosity, find a space to observe that is related to this area. For example, if you are interested in food, you could observe waiters at a local restaurant. If you are interested in education, you could observe students in a class. If you are interested in travel, you could observe people in an airport or at a highway rest stop. What’s most important is that you must observe people. Remember, design thinking is human-centered and desirability comes first. By observing people you can identify what they need.

Observe for two hours and record your notes using a table like the one below. Using the AEIOU framework helps you organize your notes.

OBSERVATION WORKSHEET
AEIOU FRAMEWORK

<table>
<thead>
<tr>
<th>Activities</th>
<th>Environment</th>
<th>Interactions</th>
<th>Objects</th>
<th>Users</th>
</tr>
</thead>
<tbody>
<tr>
<td>What are people doing?</td>
<td>How are people using the environment? What’s the role of the environment?</td>
<td>Do you see any routines? Do you observe special interactions between people? Between people and objects?</td>
<td>What’s there and being used or not used? Describe engagement with objects? Are there any work-arounds you can identify?</td>
<td>Who are the users you are observing? What are their roles? Are there any extreme users?</td>
</tr>
</tbody>
</table>

Now think about any non-obvious insights that come out of your observations. Remember, an insight is not an idea; it’s a statement that drives your idea and identifies the needs of users.

CRITICAL THINKING QUESTIONS

1. Do you agree that observing and seeing are two different skills? In what ways, if any, are they different?

2. In the A-E-I-O-U framework, which aspect of observation did you find the most useful? The most challenging? Explain your answers.

3. What non-obvious insight can you identify for the space you observed in this exercise? To assess whether your insight is innovative, how would you go about seeing whether others have already had the same insight?
They might also be interested in your ideas and the subject matter you are exploring. Interviews are a great way to gather information and gain insights, but preparation is key.

Preparing for an Interview

First, think about whom you want to interview. For example, say you are looking to start your own French gourmet food truck business with a goal of selling to high-end customers such as business executives, at exclusive business events such as conferences and office parties. As a startup, the first step is to think about who you know. Who do you know that works in the business world? Or, if you don’t know anyone personally, who do you know that might know someone in the business world and can provide you with an introduction? Go through your list of contacts or try networking sites like Facebook, Twitter, and LinkedIn. Research the companies and experts that might be able to offer you some guidance and try to establish contacts there too.

Think about what you want the end result of the interview to be. What is the aim of the interview? Do you need to test assumptions or learn about preferences and attitudes? What is it you want to gain from the interview?

Second, it helps to draft an introduction to the interview (approximately 4 or 5 sentences) which lays out your intentions and the purpose of the interview. For example, say your interviewee is an events manager at a large bank. Your goal is to find out what he thinks of your gourmet French food truck business and if it is something that the bank staff and clients would be interested in for corporate events (see Figure 6.4).

Third, prepare your interview questions. In order to get the most information from the person you are interviewing, you need to minimize yes/no questions such as, “Do you like food trucks?” Instead, ask open-ended questions like:

- “What do you think of the explosion of the food truck industry?”
- “What would motivate you, your clients, and your employees to buy from a food truck?”
- “Do you have any frustrations around the food from food trucks or the service provided?”

If your interviewee expresses enthusiasm at your idea, you can ask “What do you like best about this venture concept?” If the interviewee’s reaction is less enthusiastic, you might ask, “In what ways could this venture concept be improved to have greater appeal for people like you?”

Make sure you also record some basic facts about the person (gender, occupation, age, profession, industry, affluence). There is no need to ask these questions directly as they can be offensive. Do your best to make some reasonable guesses.

Another useful interviewing technique is “Peel the Onion,” which is a way of delving into a problem one layer at a time (see Figure 6.5). Begin with the challenges the person
faces and then continue to dig deeper in order to understand the core root of the problem. Simply asking “Why?” or saying “Tell me more about ______” will help you gain a deeper understanding.

**Conducting the Interview**

Begin by briefly stating the purpose of your interview. Take notes throughout, and if you are intending to also audio record the interview, make sure you ask permission first. Remember to use your questions as a guide only – it’s best to keep the tone conversational and relaxed, but directed. The golden rule of interviewing is to actively listen to the other person. Don’t become so focused on your prepared questions that you neglect to pay attention to what the other person is telling you. Furthermore, when you reflect back or paraphrase what the other person has said, this shows that you are listening. However, do not interrupt, or try and second-guess the answers. If there is a pause in the conversation, don’t feel obliged to rush in and try and fill the space – your interviewee may be thinking about something or planning what to say next.

Remember, your goal here is to learn as much as possible – you’re not selling to the person (although keep in mind that this person might well be a future customer of yours). The focus should be on the person, getting to know them, the problems they have experienced, and how they have tried to solve them (or not); and the outcome. If you are unclear about something or have a question, don’t be afraid to seek clarification. In this way, you will come away from the interview with as much concise information as possible.

One of the most common interviewing mistakes is to seek validation for your ideas. Remember, at this stage, you don’t even have an idea. You are trying to better understand the needs of potential customers. For example, if your interviewee tells you his business associates might not be pleased about eating from a food truck at corporate events, do not rush in to tell him that he is wrong – and that food trucks are the answer to all his problems. The aim here is to listen, and to seek to understand why he doesn’t think food
trucks would be that appealing. His answers may not be the ones you are looking for, and sometimes the truth hurts, but his feedback may lead to new ideas and opportunities. Figure 6.6 provides examples of “bad” interview question types to avoid and “good” interview question types that are often helpful.

As you are wrapping up the interview, it’s a good idea to ask your interviewee to provide introductions to other contacts. This is a useful way to continue your research and expand your network. Finally, in addition to thanking the interviewee on the spot, it’s always common courtesy to follow up with a thank-you note or email afterwards. You never know when your interviewee may be in a position to tell others about you, and the more gracious you can be in your interactions, the better the chance that what he or she will say about you will be favorable.

**After the Interview**

As soon as the interview finishes, take some time to go through your notes, listen to the recording, and write down any additional observations or thoughts while the interaction is fresh in your mind. Try to craft insights from your research by looking for themes and patterns based on body language and tone of voice, and make note of any other questions or findings that have emerged. Develop your reflection skill; reflection is useful here as it helps you to make sense of your own feelings, the knowledge you have gained, what questions you may have, and what you need to consider as a result. Reflecting on the interview also gives you the opportunity to come up with new perspectives, outcomes and conclusions.

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**FIGURE 6.6**

**Bad and Good Question Reminders**

<table>
<thead>
<tr>
<th>Bad Question Reminders</th>
<th>Good Question Reminders</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Too Soon</strong></td>
<td></td>
</tr>
</tbody>
</table>
- Asks a stranger for commitment or personal information before it’s appropriate in the conversation. |
| **Leading** |  
- Makes assumptions about your customer that may be false. This can drag your own biases into the conversation. |
| **Dead End** |  
- Usually have yes/no or one word answers, and don’t give your customer a chance to tell you anything meaningful. |
| **Poor Listener** |  
- Shows that you clearly didn’t listen to your customer’s earlier responses. |
| **Sales Pitch** |  
- Asks your customer if they’re interested in a product or service. You should be learning about them, not pitching or selling. |
| **Insulting** |  
- Offends your customer so much that they end their conversation with you. |

- **Ask permission**: get the customer’s permission to conduct a short interview.
- **Customer pain**: while exercising sensitivity, get the customer talking about a problem or pain that they have.
- **Existing alternatives**: learn what the customer has tried to do to solve their problem in the past.
- **Prioritize pain**: clarify that the customer pain is one of their top priorities.
- **Dig deep**: follow up a question to learn more.
- **Get a story**: ask the customer to tell you a story.
The Empathy Map

One of the most useful ways to efficiently record the information from an interview is by completing an empathy map. An empathy map which is a tool that helps you collate and integrate your observations in order to discover surprising or unanticipated insights. It is a useful way to put yourself in the shoes of someone else and allows you to uncover unmet needs, find the source of any frustrations, discover areas for improvement, explore different perspectives, and question your own assumptions and beliefs. In other words, empathy mapping gets you out of your head into someone else’s.

Figure 6.7 is an example of the type of content that goes into an empathy map – you can either use this one or draw your own. The map contains four main components that help you organize data from person you have interviewed: Say, Do, Think, and Feel.

Drawing from the observations you have made during your interviews, note down the following:

**Say:** what sort of things did the person say? What struck you as being particularly significant? Are there any interesting quotes you can use?

**Do:** What sorts of actions and behavior were displayed by the person? Any particular body language that you noticed?

**Think:** What might the person be thinking? What sort of beliefs or attitudes might be relevant?

**Feel:** What sort of emotions do you think the person is experiencing?

When complete, the empathy map is a useful way for you to spot contradictions and certain tensions which can spark a whole host of interesting insights. Sometimes we have a tendency to say one thing and mean another.

![Empathy Map Diagram](http://www.slideshare.net/EpicenterUSA/dtal-template-empathy-map-and-problem-statement)

Entrepreneurship at Work feature spotted this disconnect when people at first claimed lack of safety as the reason for not wearing bicycle helmets when the real reason was vanity. This triggered an insight to create a helmet which addressed both safety and aesthetics.

6.7 VARIATIONS OF THE DESIGN THINKING PROCESS

>> LO 6.7 Identify and describe other approaches to design thinking.

Earlier in the chapter we described IDEO’s three phases of design thinking (inspiration, ideation, and implementation), but it is important to recognize that there are also other schools of design thought. The authors of Designing for Growth suggest four questions that are useful to ask during the design thinking process; all of which have periods of divergence and convergence:

- What is?
- What if?
- What Wows?
- What works?

What is encourages the entrepreneur to explore the current reality of the problem; What if encourages you to imagine all of the possibilities without regard to the reality of the ideas; What wows focuses on making some decisions about what the customer really wants; and What works tests these solutions in the market place.

Another variation on the design thinking process is from the Stanford Design School. Rather than IDEO’s three phases or the four questions suggested by Designing for Growth, the Stanford Design School uses five phases: empathy, define, ideate, prototype, and test (Table 6.4).

Regardless of the variations of each of the design thinking approaches, the themes and goals are similar. Each approach focuses on the importance of the people using the product/service; encourages entrepreneurs to get outside of the classroom and in front of real people in order to understand them; emphasizes the identification of needs before developing solutions; and recommends testing and experimentation, not for the purposes of killing an idea but to shape it and make it stronger.

Design thinking can be used to develop new products and services but also to build organizations, design strategy, improve processes that all bring value and deliver

<table>
<thead>
<tr>
<th>TABLE 6.4</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Stanford Design School Five Phases of Design Thinking</td>
</tr>
</tbody>
</table>

- Empathy is getting out and talking to your customers directly
- Define is defining a problem statement from that empathy work
- Ideate is brainstorming lots of ideas that could help you solve the problem you identified
- Prototype is building a crude version of the solution that you want to test with users
- Test is getting out and testing with users.

Source: An Introduction to Design Thinking: Process Guide, Hasso Plattner Institute of Design at Stanford (pdf online)
meaningful results. By adopting some of the methods designers use when approaching problems, entrepreneurs will be better able to find effective solutions to complex problems.

So far, we have explored the different processes of design thinking, the power of design thinking in solving complex problems, and the importance of empathy, observation, and interviewing in the creation of successful design. In the next chapter, we will build on some of the concepts we have learned from design thinking to explore market testing and experimentation.

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1. **Define design thinking.**

Similar to the practice of entrepreneurship in many ways, design thinking is ultimately a constructive and collaborative process that merges the power of observation, synthesis, searching and generating alternatives, critical thinking, feedback, visual representation, creativity, problem-solving and value-creation.

2. **Demonstrate design thinking as a human-centered process focusing on the customer and their needs.**

Before business feasibility and economic sustainability are considered in the design process, the creator first discovers what people need first. Products that achieve all three are bound to be the most successful, but the product or service must first be designed to provide a desired solution or fulfill a need for the design process to be considered human-centered.

3. **Describe the role of empathy in the design thinking process.**

To create meaningful ideas and innovations, we need to know and care about the people who are using them. Developing our empathic ability allows us to better understand the way people do things and the reasons why; their physical and emotional needs; the way they think and feel; and what is important to them.

4. **Illustrate the key parts of the design thinking process.**

The design thinking process is comprised of three main overlapping phases: inspiration, ideation and implementation.

5. **Demonstrate how to observe and convert observation data into insights.**

An insight in this sense is an interpretation of an event or observation that, importantly, provides new information or meaning. Observations can fall along one of nine different dimensions, and like entrepreneurship, the ability to discern trends and patterns from each dimension is a skill that can be practiced and improved.

6. **Demonstrate how to interview potential customers in order to better understand their needs.**

There are keys to the potential customer interview that are especially important to emphasize. The interview must be well-prepared for, the customer must be listened to and intelligent questions asked, and the interview must be evaluated when it is over.

7. **Identify and describe other approaches to design thinking.**

The authors of Designing for Growth suggest four questions that are useful to ask during the design thinking process, all of which have periods of divergence and convergence. They are: What is? What if? What Wows? What works? Another variation on the design thinking process is from the Stanford Design School which uses five phases: empathy, define, ideate, prototype, and test. Design thinking can also be used to resolve wicked problems.
Bruce H. Jackson, Ed.M, MBA, MA, Ph.D., MPA; Speaker, Writer, Business Owner, Foundation Director, Entrepreneur

In 2013, Dr. Bruce Jackson received his fifth advanced academic degree: an MPA (Masters of Public Administration) from Harvard’s prestigious John F. Kennedy School of Government. Few would have pegged Jackson as having so much academic potential back in the 1970s when he was diagnosed with ADHD (Attention Deficit Hyperactivity Disorder) and dismissed from his elite private school for being “disruptive.”

As a seventh grader, Bruce discovered tennis, and for the next several years, he ate, slept, dreamt, and lived the sport. Eventually, Bruce became a successful college athlete at Gustavus Adolphus College in St. Peter, Minnesota, where he was coached by Dr. Steve Wilkinson—the winningest college tennis coach in US history. Over time, Bruce learned to apply the ingredients of success that had helped him succeed in tennis to other life endeavors. He had never been a very good student until college, where he received counsel and encouragement from one of his professors, Lot Christensen, who changed Jackson’s perspective. From that point on, he became a straight “A” student, eager to embrace a whole new realm of academic possibility.

After completing his bachelor’s degree from Gustavus, Jackson moved to Washington, DC, where he served as an intern for two US Senators. After that, he earned a master’s degree in counseling psychology from Boston University and, subsequently, an MBA from the Carlson School of Management at the University of Minnesota. Jackson’s MBA work was not easy. He remembers experiencing panicky feelings on a daily basis and “hating every second of it.” Nevertheless, he persisted to eventually accomplish his goal and achieve a top GPA in the process.

During this time of great humility and success, Bruce became more active in cultivating his spirituality. After studying many of the world’s religions, Jackson decided to join The Church of Jesus Christ of Latter-Day Saints. This decision produced a grounding effect that has served as an existential anchor in his life. It also led to further educational and professional opportunities, as well as meeting his future wife.

Desiring to put his graduate education to work, Bruce identified a company that used sport psychology to train managers and executives. When the CEO declined to hire him because he lacked sales experience, Jackson offered to work for free for one month if they would give him a chance to see what he could do. Shocked, the CEO took him up on his offer. Whatever they asked him to do, he did efficiently and effectively. When they saw his work ethic and results, they offered him a salary and a chance to become a salesman.

Within a few months, Jackson filled multiple programs and brought decision makers to the table. On his own initiative, he grew the company’s database from 215 to 10,000 potential clients, developed an in-house network, identified its software and coordinating solutions, and developed an automated fax broadcasting system that could send invitations to thousands of potential customers throughout the US. With this system in place, Jackson was able to manage multiple open enrollment programs around the country, and fill the company’s pipeline of business. From there, he moved on to the larger challenges of negotiating major company contracts. One day, Bruce closed and inked a $300,000 contract with a Fortune 100 Company. Within five years, he became a company partner, and was personally responsible for bringing in over 1 million dollars of corporate revenue per year.

During his time in the business world, Jackson earned two more advanced degrees—a master’s in psychology and a doctorate in human and organizational systems from Fielding
Graduate University. He wrote his doctoral dissertation on the subject of flow and has since become a world expert on the subject. In 2010 he published a book titled Finding Your Flow: How to Identify Your Flow Assets and Liabilities—the Keys to Peak Performance Every Day, and uses this model to teach students and professionals throughout the US how to strategize to sustain flow in any life arena.

Aside from his corporate work, Jackson had a vision of creating leadership centers at universities around the country. He wrote up a comprehensive plan and began sharing it with academic and business leaders. Utah Valley State College had already begun developing a leadership center, and was in need of a new executive director. Jackson applied for the position and got it. Though the job paid only a third of what he had been earning in the corporate world, he was eager to pilot test his vision in a real academic environment.

Jackson started out in a small office in the corner of a campus building with a $100,000 government grant, with the caveat that he would have to raise enough money to support his own salary and all programming efforts within a year. Jackson immediately invested the same energy, passion, and work ethic he brought to tennis, academics, and corporate work, to his new role as Executive Director of the Center for the Advancement of Leadership (The CAL).

Hundreds of students enrolled in leadership courses and many earned leadership certifications that bolstered the credibility of their academic degrees. This redesigned program included student assessments, a new mentoring program, a lecture series, and several community engagement efforts. In addition, thousands of elementary, middle school, and high school students were touched by various programs and conferences held by the CAL.

After seven successful years at the CAL, Jackson decided it was time to move on. As a way to take a step back, reflect, and spend time with his family, he took his wife and their three children on a series of trips over a period of six months, traveling to 67 cities and 32 countries in 168 days. His goal: to explore as much of the culture, art, history, and geography of Planet Earth as he possibly could and to give his wife and children a chance to “know” the wonders and diversity of the world. It was Bruce’s way of creating his own, practical academic degree. It was after returning from this trip that he was accepted to the Kennedy School of Government and went on to earn his MPA degree. Along the way, he has become a mountain climbing enthusiast and summited Mount Kilimanjaro. He has also facilitated the passage of multiple parties along sections of the Inca Trail in the heart of the Andes Mountains en route to Machu Picchu—one of the seven natural wonders of the world.

In his spare time, Jackson built and now serves as Executive Director of his father’s foundation – The C. Charles Foundation – which has served more than 200 universities, colleges, schools, and nonprofits throughout the world. Bruce is also the CEO of his own peak performance training company, The Institute of Applied Human Excellence.

Critical Thinking Questions
1. The three core components of design thinking are inspiration, ideation, and implementation. How did Dr. Jackson gain inspiration, generate ideas, and then successfully implement his academic goals to become a successful student?
2. How did Dr. Jackson apply design thinking in his leadership and development of The Center for the Advancement of Leadership (The CAL)?
3. How might Dr. Jackson’s professional work assist him in effectively tackling “wicked problems?”
4. How do you think Dr. Jackson’s proactive world tour with his family may help him as a design thinker in his current and future ventures?
5. How might you apply design thinking to your own academic endeavors to maximize your potential for success and graduation? How would you apply design thinking to your present relationships or future business ventures?

Sources
NOTES

20. The ladder example is borrowed from Dev Patnaik, co-founder of Jump Associates.