

# Prototyping

Health Care Network • Namibi • MITx Prototype Camp • Field Structure of Prototyping • Principles of Prototyping • Field Notes

Having established a connection to the source (presencing) and having clarified a sense of the future that wants to emerge (crystallizing), the next stage in the U process is to explore the future by doing (prototyping). Prototyping is the first step in exploring the future through experimentation. David Kelley, founder and longtime CEO of the influential design firm IDEO, summarizes the design industry's approach to prototyping succinctly: "Fail often to succeed sooner."<sup>z</sup> Prototyping means to present a concept before it is perfected. Prototyping allows fast-cycle feedback learning and adaptation.

## Health Care Network

Dr. Schmidt and his colleagues left the dialogue forum with the intention of moving their system from levels  $z$  and 2 to levels 3 and 4, but they knew they needed different types of collaborative platforms to make it happen. So they

decided to start by holding regional conversations among the key institutional players about the practical issues they faced in their work. First, they defined the people who “own” the problems, the people who have the competence and responsibility to make decisions in their own institutional system. “We want to convene groups of practitioners who need one another in order to take effective action,” said Dr. Schmidt.

“We talk about all the issues and problems openly and focus on creating actionable solutions, and then we implement and review them quickly. When an issue is dealt with, the group dissolves. Currently we have ten of these groups operating. And they all work much more effectively than our groups used to do earlier.”

Schmidt said that when they visit their colleagues in adjacent regions, they are very aware of how far they’ve come. “They’re still worried about what the insurance companies will think and do. We’ve moved past that. Now we focus our time on where we can make the biggest difference.” One of Schmidt’s action groups focused on chronic diabetes. It convened key practitioners and diabetes patients and together developed a strategy for promoting new eating habits. In this way, they engage people to move beyond drugs and begin to live differently.

Other ad hoc action groups developed agreements for sharing specialized diagnostic equipment among medical groups; a new format for transferring information between hospitals and outside physicians; a jointly run office to coordinate care for patients moving between the two settings; and, last but not least, a new emergency control center. Now, in an emergency, patients have at least three networked options available. They can call a local physician, the center itself, or the emergency number to reach a centralized ambulance dispatcher.

Dr. Schmidt and his colleagues believed that by coordinating these three options across the region they would not only save money and time but also provide better patient care and make life easier for doctors. They have created an invisible connection to the area’s elderly and chronically ill people who live on their own but now feel “held” through the center. A physician hotline allows patients to consult a physician after hours and on weekends. This came about because research showed that 70 percent of all emergency calls

weren't really about emergencies at all; they were from people who were just seeking advice. Previously, an ambulance would routinely have been sent. But now, with physicians working side by side with paramedics in the new joint control center, taking hotline calls, they have reduced the number of unnecessary ambulance trips, and the patients are satisfied with their care. This change alone has saved the program four times its former costs.

The journey began with extensive and often frustrating negotiations among the key players—local hospitals, physicians, ambulance services, and insurance companies—each with its own interests, constraints, and turf allegiances. The breakthrough came when the practitioners began to speak about their own experiences, or those of loved ones, with the emergency system. The group soon reached a shared will and vision for more integrated, coherent patient service. That shared will allowed them to stay connected and to succeed in their negotiations.

The network of Dr. Schmidt and his colleagues emerged as one of the most successful among the dozens of similar networks started in Germany in the 1990s. In 2000, the network instituted a new emergency control center that includes a 24/7 physician hotline and provides higher-quality emergency service at lower overall cost. The project was unique in Germany in its use of cross-institutional collaboration. It operated very successfully for fourteen years, from 2000 to 2014. In 2014, however, a re-centralization of the federal system eliminated this once successful regional collaboration in favor of a more centralized and siloed structure. The regional network still exists, but with the generation of founders slowly moving out, its future is uncertain.

## Namibia

In the preface I talk about a different healthcare project that we facilitated in Namibia. The most interesting and successful prototype that emerged resulted in the idea for Regional Delivery Units (RDUs). A small cross-sector group of leaders, including nurses, doctors, and the regional director, began to hold weekly meetings as a way of learning by doing. Their objective was to significantly improve maternal health.

Each RDU meeting began with a review of the week's data and events, allowing professionals of different ranks to communicate, question each other, and exchange views in a supportive and nonjudgmental environment. At one RDU team meeting I attended, they discussed a situation of concern to the nurses. At one point in the discussion, a junior nurse, a young woman, turned to the most senior leader at the table (the director of the entire region), who had not participated in the discussion before. She said: "I gather from your body language that you do not agree with what is being said here." And then it was the director's turn to explain his reading of the situation. When I heard that junior nurse draw out the most senior person in the group, I knew that something was working—they had established a constructive communication and learning culture.

As of 2022, these RDU team processes were being rolled out throughout Namibia's thirteen regions. This work is being owned by and performed for Namibians, without any international partners. The RDU process helps the leaders in each region to focus on accountability for improved outcomes. The teams then drive policy implementation, coordinate service delivery, manage progress on goals, and solve problems to ensure the effectiveness of health interventions. Discovering what makes these groups effective is an ongoing process of learning by doing.

I took several observations away from my visits. The success of the RDR prototype seemed to depend on three enabling conditions: (1) the creation of an institutional infrastructure that could produce useful data; (2) the establishment of a group of key players from across institutional silos who commit to talk, learn, and adapt on a regular (weekly) schedule; and (3) the development of a learning culture, without which people just become defensive and blame each other.

### MITx U.Lab Prototype Camp

The key for successful prototypes lies in creating generative holding spaces. At the u.lab, we wanted to experiment with that a little bit, so in 2025 we invited a group of sixty MOOC participants who each submitted promising prototyping ideas to join us on the MIT campus for a four-day Prototype Camp. The purpose was to learn from each other and advance their initiatives.

The experience of the Prototype Camp felt like activating a generative container that keeps bubbling with lots of different entrepreneurial energies. As one of the participants remembers:

The prototyping activities were powerful. As people became less attached to their ideas and had to create something quickly, they found themselves rapidly moving forward. Some even said that they had achieved more in ten minutes than they had through the last couple of months of working on the idea. They immediately put their ideas out to be tested, and within another couple of minutes they had already improved the idea.

Another of the participants remembers:

I went to the camp with so many doubts whether to proceed or not with the project. This was mainly because of my limited idea on how to move forward without, for example, financial resources. I was also questioning myself; why should I be worrying so much about the state of the planet while millions of people, businesses, and governments don't? During the camp I learned about the power of people gathering together to make a difference in the World. I started low on the first day and ended very positive on the last because of people who helped me seeing other possibilities. More important, I learned that my call is there, waiting to be put forward. So I left MIT on Sunday with a feeling that I need to keep up. And I will.

### The Field Structure of Prototyping

Figure z3.z is a visual representation of the field structure of attention. It resembles the two earlier ones that illustrate presencing and crystallizing. But it takes the movement from presencing (connecting to source) and crystallizing (letting an image of the future emerge) to its next stage: the holding space (white outer sphere) is deepened, and the letting-come process in the center of the figure (the emerging white spiral) is expanded from envisioning to enacting.

To effectively prototype, we must integrate three types of intelligence: the intelligences of the head, of the heart, and of the hand. As Robert Redford's

character said in the movie *The Legend of Bagger Vance*, “The wisdom in your hand is greater than the wisdom in your head will ever be.” When we prototype living examples by integrating different types of intelligence, we always navigate the process between two major dangers and pitfalls: mindless action and actionless minds.

## Principles of Prototyping

Integrating these different intelligences effectively requires connecting to the source as well as to the whole, through fast-cycle feedback and infrastructures for reviewing and awakening.

Connecting to the Inspiration and Intention

First and foremost, when moving into prototyping you need to stay connected to the inspirational spark of the future “that stands in need of you” (Buber).

“How do you do that?” I asked Joseph Jaworski, who is a master at establishing this kind of direct link.

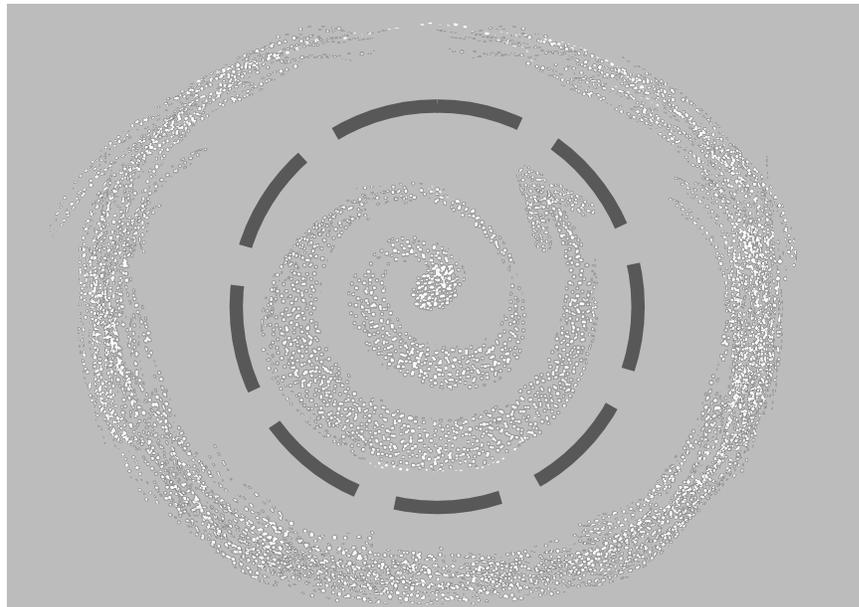


FIGURE 13.1: THE FIELD STRUCTURE OF PROTOTYPING

“First off,” he replied, “you need to do it on a daily basis. As a matter of fact, it’s the first thing you do when you get up in the morning.” Joseph has a set of personal practices that he does when getting up before dawn. “So the first thing is about practice, practice, practice. You create that place of silence for yourself every day.”

As Joseph was speaking, I thought of my parents. By five a.m., when my father started milking the cows, he and my mother had already finished reading a morning meditative text together. I also thought of several of my interviewees, who often practiced stillness during the first few hours before dawn.

“The second thing you focus on,” continued Joseph, “is staying true and connected with that deeper intention all the time, throughout the whole day or week or year, or even longer.”

What does it take to stay committed? Simone Amber of Schlumberger, an innovator in the area of corporate social responsibility, once told me, “It took me many years to take the step from idea to moving into action. What’s important is that you don’t blame yourself for that. What’s important is that you stay true to your intention. But once I took that first step, doors opened; helping hands began to show up. It was as if I had been put on a track.”

“The third practice,” continued Joseph, is “to sense and seize opportunities as they arise. Whenever the real opportunities arise, it usually is not exactly where you expect it to happen. So you have to be really attentive. You have to pay attention to where that opportunity may arise that goes clunk with what your deeper intention tells you to do. When that happens, then you act in an instant. Then I operate from my highest self, which allows me to take risks that I normally would not have taken.

“For example, I got the feeling, in the middle of a workshop, that we were called to create a larger initiative. I grabbed the CEO of a large multinational corporation, whom I knew only a little, and said: ‘Wait here, we need to talk.’ Then I went around and grabbed three more people: the head of a foundation, a senior executive of the US National Park Service, as well as an NGO activist. I brought them back to the CEO, pulled five chairs into a small circle, and started the meeting. That moment actually was the beginning of the birth of an initiative that now is known as Synergos Multistakeholder Partnership Program.”<sup>1</sup>

This little episode demonstrates several key aspects of acting from the future. First, the new shows up as a feeling, then as a vague sense of being drawn somewhere. It's more a sense of what than a sense of why. You feel drawn to doing something, but you don't know exactly why. And only then, after using the intelligence of your hands and your heart, does your head begin to figure out the why.

Acting, as Joseph did, “from the future”—sensing the feeling, feeling drawn to something, moving into that space, acting from the now, crystallizing what emerges from there, prototyping the new, delivering it into reality—can take years. Social innovators and innovators in business, like Simone Amber, claim that it took them up to five, six, or seven years before moving from a felt sense—feeling drawn to doing something—to crossing the threshold and beginning their journey of discovery and creation. But you also have to be prepared to act fast, as Joseph did. If it takes longer, the important point is not to judge yourself harshly just because you have been sitting with an idea for many years. Only one thing really matters: what you do in the very next moment—now. All the other decision points that are already behind us—all the should-haves and could-haves—no longer matter in any real way.

When acting from the past, we already know the outcome before anything happens. The head tells us to follow established routines, and the feeling we are left with is emptiness, at best, or sometimes frustration.

#### In Dialogue with the Universe

Alan Webber, a co-founder of Fast Company, tells a similar story. He left his post as editor of the Harvard Business Review to explore an opportunity to co-create a new magazine; the eventual result was Fast Company. He began by tapping into his real intention—or intuition or spark of the future—that he felt wanted to emerge. He coupled that with learning to listen to the “feedback from the universe,” as he put it.

“The universe,” explained Webber, “actually is a helpful place. That means: whatever the response you are getting, you look at it from the assumption that it wants to help you in some way.” Webber continued, “If

you're open in relation to your idea, the universe will help you. It wants to suggest ways for you to improve your idea."

"Part of the adventure is listening to all the ideas and suggestions and trying to make your own calculations about which ones are helpful and which ones are harmful," Webber explained. He called this process "listening with an honest ear." You have to maintain the integrity of what you're doing, he said, but also maintain a sense of personal conviction that the initial concept you received was in fact an honest and good one. "You listen with an honest ear and you stay true to your inner sense and knowing."

That is exactly what Dr. Schmidt and his colleagues did in presenting their concepts to different parties and players. They took in and accepted the feedback that helped them to tweak, evolve, and iterate their concept of a new emergency care system. And they did not allow themselves to go mad listening to all of the initially discouraging feedback from people interested in preserving the status quo.

Joseph Jaworski did the same things when he co-created the multistakeholder partnership. He took in the feedback that helped move the concept forward, but ignored the rest. Such "input" goes in and out at almost the same moment.<sup>3</sup>

In the preface to this edition I also share another more recent example, Denise Chaer, a young Brazilian entrepreneur, who attended a week-long U-process foundation program in São Paulo. Afterward she said, "During that week, an idea that I could feel but not articulate started to take shape." Her vision was to shift the patterns of consumption and social relations in cities in Brazil and to do this using the U process. Today, Denise heads up a cross-sector innovation lab called Novos Urbanos that focuses on one aspect of consumption behavior—sustainable food and nutrition—for São Paulo, Rio de Janeiro, and other parts of Brazil. Denise and her team chose this aspect of consumer behavior after prototyping the lab in 20z4 and receiving feedback that Novos Urbanos should focus on a topic more specific than consumption. Novos Urbanos now brings together 40 organizations and people from all sectors in the food system, including major multi-national food companies, academics, grassroots organizers, and representatives of city and

national government, to co-create new prototype initiatives to address this complex systemic challenge.

#### Principle 0.8: Fail Early to Learn Quickly

At Cisco Systems, the networking equipment company, Principle 0.8 says that regardless of how long-term your project is, you have to present the first prototype within three or four months. That prototype doesn't need to work. It's not the 2.0 prototype. But because it's 0.8 you have to show up with something—something that isn't finished but that will allow you to elicit feedback that will take you, and it, to its next, improved version.

In the case of the health care network, the early prototype was the meetings, which produced little but led to the next step: creating ideas for joint platforms. In the case of the multistakeholder partnership, the prototype was an early, globally conducted interview project followed by a workshop that convened a microcosm of future core players that helped to both refocus and refine the purpose and approach of the project.

In the case of Alan Webber's Fast Company, the production of an initial prototype of the magazine helped to create both excitement and commitment on the part of all the core players and sharpened the founders' focus on how to best evolve the approach and concept of the magazine.

#### Holding Space: Landing Strips for Emerging Future Possibilities

All prototypes need to be sheltered, supported, nurtured, and helped. From biology we know what happens when the new encounters an unfriendly environment: the immune system kicks in and does what it is designed to do: it kills it. Why? Because it is different. Because it threatens the status quo. Because it "doesn't belong here." That's why the fetus needs the womb, why everything new needs a cocoon to foster the right sheltering conditions in order for what's embryonic to be able to sprout.

On a farm you don't go out and pull up a shoot once a day just to check on how things are going. Instead, you water it and give it time. Seeds don't want transparency or publicity. The same is true in organizations. The last thing you want is to have people constantly checking. You don't launch a new

idea with a big public speech from an executive. No, you start in some smaller, quieter, and unpretentious place. You want to start with real practitioners dealing with real issues.

The health care network launched its strategy of building new collaborative platforms without public notice. Says Ursula Versteegen, who has been coaching several of the health care network's projects: "This initiative ... started as a small, purely physician-driven initiative and then evolved into a set of cross-institutional platforms gathering the key practitioners of the region." And it produced "a whole landscape of new collaborative relationships that now we all take for granted."

Prototype holding spaces that support fragile living "shoots" can be designed or they can be embedded into the existing infrastructure. Designed prototypes are wrapped around projects that are intended to launch innovations. Think of the new emergency care control center, which was designed to incorporate and deliver new types of services. Embedded prototypes, on the other hand, are situated in and wrapped around an ongoing praxis.

We asked a group of doctors and patients for examples of new "embedded" relationships being developed in the health care system. They pointed us to an NGO that helps patients to complete paperwork, interact with physicians, and navigate the system. It is an excellent example of an emerging innovation that is situated in the context of the old system, in this case in the context of completing a form. Here is one nurse's story: "An elderly woman patient was here this morning asking for a living will, but I told her we don't just hand this form out because it involves a far-reaching decision. The woman rolled her eyes and said, 'I just want to sign my name and be done with it.' I told her the form requires serious consideration. You might write on the form, 'I don't want any life-prolonging measures when I am terminally ill,' which might be interpreted, 'I don't want any infusions,' and that could mean that you would die miserably of thirst. Or this statement could also mean you would not be fed artificially, which would be legitimate while dying.

"These are the kinds of examples I give patients, and once I've managed to get their attention, they are all ears. Then they understand the magnitude of what they are signing. Having trained as a nurse, I have seen many people

dying without ever having had such a self-reflective process beforehand, but it was only when my own mother died that I realized what it really meant to have such a patient's will in our hands. I had to fulfill the role of guardian for my mother. She had had a stroke and was on a respirator. I remember watching three doctors standing at her bedside. My mother just lay there. She couldn't remember anything, even though she was still aware. She was like a babbling child, and she kept asking the same questions. At the beginning the neurologist and the senior physician stood there and talked to each other about her, over her head. She was like an object. But when I showed them my mother's living will, they read it and began to see her personality between the lines of the decisions she had made. She was no longer an object. Although she still wasn't clear about what was going on, they respected her because she had given this situation so much thought in advance. Her foresight gave them the capacity to act on an individual level. All of a sudden she was there as a person and I was greeted with a huge amount of respect. And there was deep relief on the doctors' side."<sup>0</sup>

Even a bureaucratic requirement to complete a form can be turned into a vehicle for an embedded prototype enabler. In this case, the purpose of the prototype is to spark a process of reflection that will have a profound effect on the patient-physician relationship. The prototype pulls the patient out of the "fix my problem" behavior and initiates a process of self-reflection that improves the relationship between the physician and the patient. The patient takes responsibility for her life and health. Other health care providers have found that scheduling chronic and acute patients in separate blocks of time allows them to focus on their conditions and as a result provide more personalized consultation and education.<sup>ā</sup>

The Sustainable Food Laboratory, initiated in June 2004, also exemplifies cross-institutional prototyping. It's a collaboration among governmental, business, and civil society organizations in Europe, North America, and Latin America. After several workshops, a learning journey, and a wilderness retreat in Arizona, the group formed prototype teams. Seven prototypes resulted from this group's use of the U process in order to create innovations that make food systems more economically, environmentally, and socially

sustainable. One of the prototypes linked sustainable food production from Latin American family farmers to global markets, thereby delivering high-quality nutrition from regional farmers to schools and hospitals, among others. Another one focuses on reframing food sustainability for citizens, consumers, and policy makers.

During the prototyping phase, the size of the Food Lab team tripled and now involves over sixty organizations. Sheri Flies of Costco, which joined the initiative during the prototyping stage, says that three essentials must be considered in order to shift the food system toward sustainability. “The first thing is that you have to have a critical mass of benevolent demand on the side of the consumers. Then you need full economic, social, and ecological transparency across the entire supply chain. And then you need to give a face to the producers, to the farmers; you need to personalize their connection with the consumers, which in turn will strengthen the benevolent demand for high-quality products and processes.”<sup>6</sup>

## Field Notes

We prototype these landing strips of the future by establishing three types of connection and communication mechanisms:

- The upward connection—by connecting to inspiration, to the initial spark of intuition and intention
- The horizontal connection—by listening to the feedback that the context (environment) is giving to you
- The downward or local connection—by engaging in and learning from locally embedded fast-cycle prototypes

We always need to foster the practical integration of these three relational dimensions of bringing the new into the world. And as we go forward, we need to navigate our way between the two major dangers and enemies: mindless action and the actionless mind. We discover ways to design and embed new actions that use the wisdom of our hands and our hearts, as well as our heads.