Learning to value achievement

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Engineering Grand Challenge: Advance Personalized Learning

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OVERVIEW

I keep two journals on my computer. In the first journal, I record moments when I trusted my instincts and took worthwhile action despite feeling fear or reluctance. These entries range from “got off the bed to exercise” to “stole away the daughter of a revolutionary to join a magnificent Rajasthani wedding” (turned out fine). I document these events, as insignificant as some of them may seem, because they are moments when I exerted power over myself and grew. In the second journal, I note moments when I rationalized those growth opportunities away. One entry says, “Woke up, decided to go back to bed telling myself I had more time. Twice, damn it, what happened? Tuesday and Friday, ended up missing classes both mornings.” The journals were inspired by readings in *Artificial Intelligence: A Modern Approach* by Peter Norvig and Stuart Russell, which discusses how an agent’s ability to effect change is limited by perception and existing knowledge. Robots are outfitted with specific sensors to identify poorly understood environments, and these sensors enable the environment to provide feedback to the agent. The agent is then able to adjust its decision making to take more useful action. If fear and reluctance are signs of ignorance and incompetence, then I had sensors to identify opportunities for enhancing my perception and ability in the world. Keeping these journals resulted in dramatic personal transformation in just a few months across multiple domains, and is one of many ways I explore how to advance personalized learning.

I found that one of the most challenging aspects of learning is identifying meaningful progress. During projects that have taken me across multiple disciplines and countries, I have often been asked, “What have you learned?” The majority of these questions concerned non-technical matters, where answers tend to be more subjective rather than black and white. However, even with data, it can be difficult. I once attended a lecture by a professor who excitedly encouraged his students to create hospitals in a developing country, citing high economic and systemic impact. His research data loosely supported his claims, and I later identified several inconsistencies in his findings, rendering the conclusions almost worthless. The professor gracefully acknowledged the mistakes, but many of the students who attended the talk left misinformed and ready to invest incalculable time and effort in these ventures.

So it can be challenging to distinguish highly appealing “insights” from true knowledge gain. From participating in group reflections on class projects to hearing lessons learned by entrepreneurs, I found that those who aren’t subject matter experts are strongly biased to deem logical or persuasive arguments as signs of learning. I believe these metrics provide a false sense of progress and should be devalued.

With such complexity, then, how is it possible for us to appropriately analyze our experiences and take useful action? My experiences over the past few years suggest that it’s crucial to study and act at the same time – a challenging, but truly fascinating union. From designing novel software interfaces that accelerate personal learning to prototyping a medical screening service in the gritty industrial complexes of Assam, India, I have decided that it is more damaging to delay action in favor of objective validation than it is to quickly note the reasoning and make a decision. Only after my teams had accomplished ambitious goals could we look back and identify the false assumptions, critical actions, and unseen hurdles on the convoluted paths to success. In failure, unless our goal was common enough to have been accomplished

by several others, it was difficult to extract useful lessons. Although we could say how to avoid a specific type of failure, the ideas on how to achieve success were little more than speculation.

When operating in such ambiguity, I found the conceptual design tools provided in Olin College's "User-Oriented Collaborative Design" (UOCD) course especially useful. Abstractions from "personas" to "areas of opportunity" provide intuitive ways of quickly analyzing large amounts of data to identify the critical bits of information that can change the course of a project. For my design capstone project, a breakthrough came when I realized that our engineering models could be used as "design probes" to explore the complexities on the ground in India and to establish a strong working relationship with our partner organizations. By viewing our work as a powerful research tool, we eliminated a false moral choice between carefully researching health intervention and building a prototype of the product for our partner. Instead of continuing to futilely deliberate, by documenting our process and co-designing with multiple stakeholders, we obtained more actionable, domain-specific knowledge than we found in our weeks of research. We later then passed on the project to the next team, who hit the ground running.

Despite significant progress, several months later, the state of Assam was hit by severe flooding, and our partner organization's factory burned down. I am not sure if these are separate incidents. However, I cannot say that I know what it takes to lay the groundwork for an impactful medical screening service, because it was not completed. It is impossible to say how close the teams and our partners were, but it is quite likely that if we had more carefully accounted for major floodings or factory burnings, our process would have prioritized other elements. Of course, I know what it takes to accomplish what we did, but that's it.

So from having experienced a variety of complexities and hurdles unique to each situation and team, I have set my current mode of learning and operating to be nonstop action in pursuit of a focused goal, with careful documentation and feedback from experts - similar to the agent-based models of learning from AI. I now prioritize achieving these goals - whether through eliminating reluctance, embracing fear, collaborating with experts, acting then thinking, etc - and only then looking back and reflecting on the path to success.

Of course, it can be challenging to know how to identify useful goals, and even then it may not be apparent how to make progress. To that end, I found that being comfortable with finding and utilizing information from various disciplines, even with little prior exposure, has enabled my teams enormous flexibility in reframing problems. My first class at Olin required students to design a mechanical contraption inspired by studying bugs in nature. The path of our design process, which included biology, entomology, and hands-on field work, encouraged me to view engineering as fundamentally interdisciplinary. Less than a year later, when my team had to design new technologies for Emergency Medical Technicians, I didn't think twice about reading literature across domains, including biology, usability, and materials science, and then finding more knowledgeable experts who could help us prototype new designs.

Being comfortable with interdisciplinary thinking is one thing, but I found that doing this in a competent, structured manner to take useful action requires mastery of certain tools and styles of thinking. In my case, after several projects where I had to create instruments for ideation, assumption checking,

condensing of research into personas, and more, I can now more effectively recognize how to iteratively define useful goal states that can be achieved with some creative action.

Although I was interested in interdisciplinary thinking before college, it was a letter to me from a professor at Olin that inspired me to explore new paradigms for thought and action using engineering. He wrote:

> "As I read your words, you are telling me that you are natural researcher who doesn't want to get stuck with the mundane details of life, and you want to be completely free to create and discover. Part of your frustration, I feel, comes from the fact that you have talked to too many hands-on kinda engineers who is satisfied with just building things. Well... as lame as it sounds, engineering is much more than that. Engineering mindset is a way of life. I don't care how many A's you get in calculus unless you are somehow transformed after being exposed to it. If you like exploring/creating new paradigms (such as ones in physics) but don't want to get stuck in academia, you will find that the creation/discovery of new paradigms can be done virtually everywhere, for everything. I bet you will see something new this next few years. "

His words laid the foundation for my views on the world, and not just engineering. Although I knew nothing about sustainability and energy consumption, I co-founded an energy consulting business with other students in my first year. I came to realize how endorsing a popular notion, "Going Green", and being assertive and resourceful could sometimes generate several hundred dollars in little time. Much later, I tried to create another startup, a peer-to-peer food sharing network, a journey that introduced me to sustainability experts, local chefs, heads of global entrepreneurship networks, and even a twenty minute phone call with the founder of Virgin Mobile! These experiences expanded my worldview in areas that I hadn't considered.

While new ideas and perspectives are exciting, behavior is often deeply ingrained and can be challenging to change. Even though many people liked the idea of being sustainable, they preferred their hot, gushing, showers to aerated faucets. And even though they preferred home-cooked food to the frozen pizzas, many people who had families were highly suspicious about the cleanliness of their friends' kitchens, even if they had dined with them before. That behavior is hard to change is no surprise to the many who futilely try to make change in their own lives, but yet we try again and again to make things happen. Although one interpretation could be that we don't learn from our mistakes, another is that at some point, certain experiences are valuable for reasons very different from their concrete tangible benefits. Poorly executed engineering solutions inspire others to develop ones that succeed. And even the most whimsical of actions or projects can touch the lives of many.

But no matter the intent or vision, without clear communication and concrete action, these ideas remain only daydreams. And without a track record of accomplishment, it can be challenging to ask others to trust you, and often more critically, for you to trust yourself. When working with brilliant engineers from the IITs in India, my design capstone team found that often what stopped meaningful innovation was not lack of ability or resources, but the inability to let go of those great visions that have little basis in reality in order to make concrete progress, however small. When a team is successful, these initiatives become opportunities for meaningful growth for all involved, and inspire more experience-based visions that fuel further engagement and impactful action with others.

Although each person may define success in their own way, my reflections now leave me with one, deceptively simple idea: Only winners know what it takes to win.

Part 1: Grand Challenge Project

I did a yearlong project for Autodesk, the maker of several 3D design, engineering, and entertainment software, on advancing personal learning. The task was to redesign the learning interface for a professional engineering software package to make it very easy for students and professionals to use. The problem with current interfaces is that users don't read the long and dry text-based tutorials that provide instructions on how to use the many features. As a result, most users aren't able to fully utilize the power of the software, and few people achieve exceptional competence. Our final deliverable was the prototype for an interface that enables users of all backgrounds and skill levels to become highly competent in a much shorter amount of time. Our submission is now being patented and is under development.

We spent the first semester deeply understanding the problem space, our winter break in San Francisco at Autodesk offices, and the second semester prototyping ideas. Our initial inspiration came from videogames, where players rapidly go from knowing nothing to becoming highly engaged and very skilled in the game.

In the first semester, we studied motivation, learning processes, human factors in interface design, and domain-specific knowledge around the engineering skill the software was intended to enhance. Our literature search included several books and papers on learning theory, motivational psychology, skill building, and interface design. We interviewed experienced users to understand the thought process of a professional when using the software at a high level, and also inexperienced students to understand the thought process of new users. From conducting these user interviews, we were better able to understand the types of mechanisms needed to quickly allow new users to adopt professional ways of thinking. We performed several rounds of ideation, in between interviews, studying, and testing, where we designed and received feedback on software features and interfaces to enhance learning.

During winter break, we were selected to be residents at the IDEA Studio in San Francisco, where several of Autodesk's most advanced and imaginative research is performed. At this time, we studied how the company is organized, what different teams were working on, and how we could improve our designs to enhance the work of other teams. It was also a great chance for us to meet with Autodesk Sustainability leaders, which gave us insight on how to expand personal learning tools in software to other Autodesk products. This enabled us to develop designs that Autodesk could use to benefit users of other software. This was also an opportunity for us to focus on developing ideas that were most likely to have impact.

In our second semester, we focused on further developing a few core ideas and designing interfaces for people to experiment with. As our work is under development, it is under NDA.

The project was an amazing experience to understand how learning theory can be applied to skill building in many areas using software interfaces. We hope our work will enable Autodesk to build strong communities of very competent users in domains from mechanical engineering to animation.

Part 2: Interdisciplinary Experience

My first class at Olin was Design Nature, and our main project was to design and manufacture a toy inspired by a real creature. My first project, however, was to create a "hopper," a toy that could "hop" purely based off mechanical mechanisms. Our initial research consisted of venturing into the woods to capture a click beetle, a bug that can leap a few hundred times its height. It accomplishes this by lying on its back and snapping part of its spine into a notch on its back, which unleashes tremendous stored energy to launch the bug over a meter into the air. After spending a few days capturing and sketching these beetles, we began reading biology papers, including *The jump of the click beetle (Coleoptera, Elateridae) - a preliminary study* by M. E. G. Evans (1971). These papers had detailed descriptions of how the mechanisms worked along with photographs, and although it would have otherwise been incredibly dry, the content was fascinating to read after working hands-on with these beetles. I took the time to carefully sketch out how I thought the mechanism worked, and I recall several of us students - who had previously little interest in biology - crowding around a whiteboard to excitedly sketch and debate how we thought the click beetle accomplished its feat.

Some days later, we all began sketching our own designs inspired by their mechanisms. Most of mine were some combination of highly fanciful and vaguely realistic, but had I been asked to design a hopper a few weeks prior, I would have had absolutely no idea at all. Eventually, these sketches were modeled using Solidworks, a 3D CAD design software, which enabled us to more concretely focus on how the parts come together and also simulate how the assembled mechanism would work. Much to my disgust, my mechanisms resulted in the hopper jumping off into space and never coming back: hence, my introduction to the intricacies of modeling and simulation. When I learned to ask for help and get the simulation fixed, it appeared to show another bug: my click mechanism went off and the hopper didn't move. After some initial confusion, I realized that this is exactly what my design would cause.

After working with more experienced and insightful students to design a better toy, I created foamcore prototypes, the first time I had made anything with my hands. Despite attending engineering school, my interests were almost entirely theoretical, and I had previously put much effort into minimizing the time I would spend doing anything that prevented more abstract thinking. However, after a few months in Design Nature playing with the foam cutter, using machine tools to make plastic models, and assembling the shiny plastic pieces together to make my first toy, I finally came to appreciate crafting. In the end, at the class demonstration to present our work, my plastic joy jumped a meter into the air and promptly exploded, pelting pieces in all directions. I was relieved!

A year later, when designing new technologies for Emergency Medical Technicians in Boston, it seemed prudent to study them in the wild through interviews and ride-alongs in ambulances, perform basic literature research on their challenges across several domains, mock up designs using sketches to receive targeted feedback, and then prototype potential new technologies using foamcore. In the end, it was a highly illuminating experience, and the design process we used would not have seemed as natural had it not been for my early introduction in Design Nature to interdisciplinary thinking.

One of the major differences when studying EMTs, however, was that the professors introduced us more formally to the art of “design thinking,” which involved more formally processing the raw data we collected around “user needs” and “user values” into powerful, abstract tools such as “personas” and “areas of opportunities.” These tools served as the basis for both massive ideation and the filtering of ideas. Although I enjoyed this process of User-Oriented Collaborative Design, it wasn’t until a year later when designing the new software interfaces for learning that I understood how these tools could be used on businesses, transforming their needs and values into abstractions that were foundations for innovative technologies. Through literature research, numerous interviews, and interactive observation, my team studied pedagogy, psychology, interface design, technology trends, and company strategy very carefully in the development of these new interfaces. We then used insights from UOCD to rapidly create abstract design tools, many of which led to new innovations that are being patented and under development by our sponsoring company, Autodesk. The CTO said he hadn’t seen anything like it in his industry - not bad for a few kids with sticky notes and only two weeks of “real” engineering in the eight month project!

Both of my experiences in Design Nature and UOCD were enlightening, particularly because I always had more knowledgeable classmates or peers on my team. I was very nervous one year later, though, when I was asked to create a medical screening system using cycle rickshaws in Assam, India. No one on my team knew anything about health intervention, and although my teammates were mostly Olin students, no one had been assigned such a vague project so out of their field with such little guidance. In addition, Assam is known for its beauty but also its turbulence, poverty, harsh terrain, and distinct culture. No one on my team knew anything about health intervention, and although my teammates were mostly Olin students, no one had been assigned such a vague project so out of their field with such little guidance. However, after encouragement by a good friend and competent designer, I confidently took charge and applied my engineering and design experience to make substantial progress in little time.

The process I adopted for Assam was similar to my previous projects: research across domains, create designs to engage partners overseas while making real progress, document understanding by creating abstractions to check assumptions and maintain focus, and collaborate with others when possible. In the final few weeks of our project, we traveled to India to understand the situation on the ground, which of course, was way more complicated than we had imagined… but if we hadn’t worked in the polluted factory districts alongside local engineers, spitting out charcoal-gray saliva at the end of the day, we wouldn’t have achieved such a level of appreciation for the design constraints given the local capabilities. If my teammates hadn’t gotten on a half-built rickshaw and personally cycled 8 kilometers at dusk from the factory to our hotel across the main intersections in Guwahati, we wouldn’t have known if our designs were going to hold up in the road conditions and real-life obstacles that face the average rickshaw puller. And if we hadn’t spent some evenings meeting with rickshaw pullers in their congregations on the sides of the street, or clinicians at local hospitals, we wouldn’t have known to completely discard a tentative business plan or add critical features to our mechanical designs.

In the end, the service was not implemented for reasons beyond our control, which include severe flooding and a fire. However, I am certain that we could not have made nearly the progress we did without the combination of lateral thinking and constant action that characterizes the Olin education. The lessons we learned, not only in engineering, but also in personal interaction, compassion, and focus, are invaluable for any design engineer.

Part 3: Entrepreneurial Experience

Six of us Olin students started an energy consulting business called “Go Green” as part of a business class where we went to different neighborhoods, inspected homes, and suggested to homeowners how to be more energy efficient. For some, this meant aerating faucets and replacing incandescent bulbs with CFLs. For others, it meant figuring out how to fix up a 70-80 year old chimney to prevent massive heat loss. We charged $20/hr, and learned a lot about how hard it was to market the business. Even though we felt it would save people money, we we didn’t know how to get people to participate. Eventually, some creativity through giving energy presentations at local elementary schools resulted in parents becoming interested in our service.

A few years later, I thought it would be great to expand late night food options for the college by enabling locals in the community to sell food they make at home. If people are going to make spaghetti anyway, why not have students chip in a few dollars for a serving or two? This allows local chefs to make money and be recognized for their talents, and it allows students to have a great variety of late night meal options aside from Dominos and Lemon Thai for a cheap price.

Increasing food options was exciting, but more important to me, personally, was getting people who live in the same building to interact. One of my close friends lived in New York, and he was terribly lonely even though he lived in the same building as several hundred other people. He later committed suicide, and that hit me pretty hard. If people could sell food they make at home, then his building suddenly could have 20 mini-restaurants inside, which would promote interaction among residents. It would also give recognition to people for their cooking skills, a domain which even now hasn’t yet been popularized on the web.

This project - “Omnom” - drew a fair amount of attention, and many local cooks were excited about participating. We received approval from the MA Dept of Health to try it out, but we couldn’t expand outside of the state because of food regulations. Although we decided not to continue, it was a great learning experience.

I also did an Entrepreneurship Capstone project on how entrepreneurs learn and adapt. I interviewed entrepreneurship professors and successful entrepreneurs, read autobiographies and essays by famous entrepreneurs, and identified certain skills that would benefit an aspiring entrepreneur.

Part 4: Global Awareness

Global awareness encompasses many ideas, but in part it means understanding the invariant assumptions guiding behavior and decision making in cultures other than your own. This is closely tied with another equally challenging task: figuring out what to do. Methods that have a certain effect in one environment may have completely different, unintended consequences in another, and the consequences themselves can be hard to identify without a more intricate understanding of the system.

I dedicated two summers to help set up a new engineering center in Kerala, India for a telecom company based in the US. My responsibilities involved hiring local engineering graduates, developing training plans to ensure professional standards of performance, and creating incentive systems to encourage productive performance.

Aside from the standard challenges of setting up a new engineering facility, I found this to be particularly interesting in India. Personal and professional values seemed very different from the US, especially concerning the urgency of meeting project timelines, collaboration among coworkers, and the respect afforded to management and seniority.

My perception of working in the US private sector is that employees will respect the timeline of goals and do the necessary work to accomplish these or risk being fired. This, of course, assumes management is not making unreasonable demands. However, when working with new engineering graduates in Kerala, I found that there was no such urgency. They were there because they were supposed to be there, and since they had no visibility of the business effort to acquire customers, they seemed mostly oblivious to following schedules. Timelines seemed to be a very abstract concept to them; if the work wasn't completed, they'd simply get an extension, and without a need to complete work on time, there was little reason to become more competent.

Since the entire culture was like that, it didn't occur to them to think otherwise. There was lunch time, a few different tea times, and of course the time they should be coming to work, but that seemed to be non-urgent, too. If the management got angry and laid them off, well, there were many workers unions who could simply rebel and cause a lot more trouble for the company than it could handle. So it appeared there wasn't much of a choice but to continue along this path. While the local managers hired to oversee work were excellent at telling others what to do, they seemed otherwise incompetent.

We eventually helped the teams develop a new respect for clear communication, deadlines, and proactivity, but only after months of patient coaching, retraining, and explaining to help people understand what it means to operate at professional standards of excellence.

In order to improve competency of workers, incentive systems were introduced to reward hard workers who came up with innovative suggestions or who outperformed their peers. But a few weeks went by, and we noticed little change. Then slowly and later more directly, there was a backlash by the top performers. Even though they seemed to have the most to gain, many felt that rewarding individual performance was counter to local values that respected the uplifting of everyone together. When I went to visit a few of the

employees in their villages, a few of them explained to me that they felt very uncomfortable putting others down for their gain, and they would like a way “for everyone to be lifted together.” In response, I created a few different “leadership tracks” so people would be rewarded for proactiveness more than individual performance on a unit of work. It didn’t increase the average competence, but many more individuals felt excited about suggesting process improvements, and their ideas increased the company’s productivity and morale.

Another major difference was that the local culture highly respected seniority. If a manager from the US or India walked into a room, every person would stand out of respect. So, although I came from an American culture promoting the idea that “everyone is equal,” I immediately realized that everyone viewed me as their boss, although though I was just an intern. I tried to dispel this notion by being friendly, but that caused people to not take me seriously, and it undermined efforts to make progress. I was frustrated when I realized that I would have no friends at the workplace as long as I was in power, but there was little to do beyond simply adopting the role and asserting myself calmly and commandingly. I found, to my great surprise, that just being calm and formal won the respect of my coworkers, because the other managers felt more of a need to put others down in making a point.

Part 5: Service Learning

I worked on a team to convert cycle rickshaws to become roaming medical units in Assam, India. The idea was proposed by the leader of a non-governmental organization (NGO) in Assam, who wanted my team to make medical screening services affordable to low-income urbanites. Health intervention literature is littered with case studies of ventures that backfired and local resentment towards foreigners acting like heroes, and so I embarked on the endeavor with no small amount of cynicism. Of course, the hope was that by partnering with a local NGO who knew the region and people well, we could amplify the NGO's efforts without us blindly intervening directly.

The project lasted five months, but some of the most valuable lessons I learned were during the final three weeks of the project, when my team went to India. During our travels, we met several social entrepreneurs, famous academics, and activists who were each trying to make change in their own spheres. In addition, we traveled to several of the Indian Institutes of Technology to meet researchers, exchange ideas on education with students, and to build relationships with people who may be interested in collaborating on projects in the future. These people had all levels of experience, from students or young professionals just beginning to consider taking initiative to those who had worked hard to achieve meaningful change over decades.

Of the people we met who had no experience attempting these ventures, they seemed to be divided into two camps: Those who were very cynical, much like myself when I started the project, and those who were very excited. In the end, the opinions of both groups turned out to be irrelevant, because it was the people who were far older and more experienced who impressed me most.

The people I met who were very successful seemed to have something in common: they all recognized how limited their power in the world was, and how much of success seemed to center on nonstop action and execution with a strong dose of compassion. There was no talk of smart strategy, or brilliant decisions, or how to acquire funding. For those who were successful, there was only grim resolve, and a weary and very welcoming embracement of our team's efforts. I don't think those who supported us expected the project to succeed. In fact, I'm fairly certain they were gently preparing us for failure, but they never talked as if this particular endeavor was important as a singular event. For example, they might say things like, "I'm very glad you all are helping with the rickshaws. You know, the wives of these people are in much pain too. They need to look for work, but they don't know where to go, and so they make handicrafts and sell them on the street. Perhaps you can help them next time? Now please, come to my home for dinner."

It almost felt as if we were simply doing our duty, another chore. There was no hype, no dramatization, no strong personal identity attached to a particular project. This medical screening project was simply one of several things that we could spend our time on, and so it was simply most important that we took necessary actions and moved on. If the project seemed to be going well, then certainly we should put more time into it, and collaborate closely with others in the community to maximize chances of success. But this was no reason to become entirely focused on a single project. As we explored the medical screening project, some of us met with executives from Vodafone to discuss creating a cellular rickshaw

dispatch system, and other teammates worked on a drivetrain system to make rickshaws more comfortable for pullers. This way, we could stay focused on the more important, broader idea of collaborating with others to do useful things, instead of becoming obsessed with the potential of one particular idea.

In contrast, many students I met had a very different outlook, one that I could relate with at an earlier time. When my project team visited one of the Indian Institutes of Technology, we met several students who were passionate about various ideas they had, most of which were fascinating but entirely untested against reality. It wasn't clear that their ideas solved real problems; as we found when working on the ground, the complexities of reality weren't quite what we imagined in our minds.

As we walked up to the meeting building itself, there were several laborers, including children, with poor equipment and posture who were likely going to suffer health issues early in life. None of the students we met were particularly eager to help these people, despite some professors even offering projects in these areas. These were real problems they could take action on, but their imagination was more focused on the potentials of their visions. Some of the students I spoke with wanted help attracting the attention of wealthy beneficiaries or companies to fund their ideas. But there was no track record, no reason for any company or individual to donate their time and money to an idea. The question, "What have you done?" resulted in more than a few students responding with, "Organize conferences to attract attention of prestigious companies."

On one level, it is reasonable to promote dialog. But the student concerns were more practical: We need a prestigious company on our resume in order to get ahead and succeed in life. The focus was simply not on tangible impact. In fact, three of the students we met had untested venture ideas they were seeking advice for implementing, even though there were several organizations attempting similar ideas in a nearby city. It simply hadn't occurred to them to find out what other efforts were going on and team up or learn from them. It was hard for them to let go of great visions with little basis in reality in order to better the lives of the people around them.

This type of thinking is certainly a curse of many bright people in the world, especially those particularly imaginative. However, the many successful entrepreneurs we had the fortune to meet had a very different mindset: Identify a goal, and take action. And more action. And again, and again, and again, until the goal has been accomplished. What differentiated the successful from the dreamers seemed to be this unrelenting focus on concrete results, and not brilliance, strategy, or funding.