Why Not?

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Some people have the notion that innovation is beyond the capacity of the typical person. The authors feel that innovation is a skill that can be taught. And what's more, the potential for innovation is all around us. This book aims at teaching us simple methods for generating our own ingenious solutions to problems.

Introduction

Innovation is not something that needs to be left to experts or rocket scientists. In fact, non-experts sometimes have the advantage of not being constrained by the accepted wisdom.

Most "original" ideas aren't completely original, but instead are the result of two basic methods for generating ideas: problems in search of solutions and solutions in search of problems.

By raising four questions and finding answers to them, people can find new opportunities to innovate. These questions are:

- What would Croesus do?
- Why don't you feel my pains?
- Where else would it work?
- Would flipping it work?

What would Croesus do?

An easy way to solve a problem is to have someone else solve it first. One just has to find that person.

Customers are a regular source of solutions. Companies can watch their customers to see how they use and misuse products. Although watching customers offers valuable, insights, there are many solutions we might miss if that's all we did. We might watch the wrong customer. Or the typical customer might not find it worthwhile or even possible to solve the problem on his or her own.

Often, a better way to go about innovating is to think about what a person with vast resources – connections, money or time – would do to solve the problem. The authors call this approach "What would Croesus do?" Imagining how we might solve a problem if we had almost unlimited resources often results in a solution expensive through it

might be. And by automating or standardizing one of these expensive solutions, an innovator might produce 99 percent of the benefit for 1 percent of the cost.

Why don't you feel my pain?

People do what they are incentivized to do. If we give them the wrong incentives they will do the wrong things.

Looking for misguided incentives is a great way both to identify problems and solve them. People often ignore the costs and benefits that their decisions impose on other people. The authors call this approach "Why don't you feel my pain?" The technical term in economics for these effects is externalities.

A driver, in deciding whether to take an extra trip to the store, doesn't take into account how driving those extra miles increases the chance that someone else may die. To make drivers feel the pain of driving the extra miles, we need to charge drivers for insurance on a per-mile basis. People who drive more should pay more.

We can also look for behaviors that create an external harm that is greater than the internal benefit. Look at some choice that buyers or sellers make whereby the decision maker's benefit from the choice is less than the costs that it imposes on others. The general problem here is one of misguided or missing incentives. The problem is that the buyer or seller does not take into account the external costs of his or her decision making. So the solution is to internalize those external effects. In other words, if the decision maker is made to feel the pain, she will end up doing the right thing.

There is a lot of scope for innovation if we keep asking whether we are feeling other people's pain. Ignoring others' interests leads to inefficient decisions. An innovative solution can be developed by designing incentives so that all parties more fully feel the impact that their decisions have on each other. This logic is especially applicable to regulatory authorities.

Where else would it work?

We can start with a solution and search for problems. We can try to find new contexts where the same idea will solve somebody else's problems. Or we can start with solutions developed elsewhere and see if they can help us solve our own problems.

We can start by writing down simple declarative sentences describing the solution that we think might be ripe for translation. The goal here is to identify those specific attributes of the solution that explain concretely why it solves the problem at hand.

A second step is to try to restate the description of the solution in more general terms, i.e., identify the essential attributes of both the problem and the solution that might be

generalized to other settings. The core task is to identify the general class of problems for which this type of solution might be effective.

Just as a linguist must understand the essential meaning of the original text in order to produce a faithful translation into another language, an innovator trying to apply a solution from one setting to another must understand the underlying mechanism that makes the original application work.

The authors illustrate this with an example. Many IKEA (the Swedish furniture retailer) stores provide baby-sitting for parents who come to shop. Where else might this idea be applied?

The problem: Parents with young kids have trouble making last-minute shopping excursion because they can't easily arrange by baby-sisters.

The solution: By providing drop-in baby-sitting, a retailer can sell products that would be difficult to sell if parents had to bring the kids along or set up baby-sitting in advance.

The same logic can be applied in other contexts. Thus, Walt Disney long ago understood that lack of baby-sitting can impede parents from enjoying vacation services. Kid's clubs at Disney World allow parents to enjoy themselves.

Another way to innovate is to look for problems to which we can apply particularly clever solutions. And as we become more proficient at this way of thinking, it is often useful to switch back and forth between the two perspectives. Sometimes we might start with particular problems and search for solutions, but then turn around and ask whether there are any existing solutions that with some adjustment might already solve this problem. By translating ideas that have worked in one context and modifying them to suit another, we may come up with a solution to a heretofore unnoticed problem. The translated solution needs to be modified and blended to fit the context and institutions of the new setting.

Would flipping it work?

Most things in life are symmetric. Adjustable mortgages adjust upward and downward. Phones receive and make calls. Sometimes it is useful to look for cases for which it would make sense to break what seems to be a natural symmetry.

Flipping things around provides a powerful new solution. Even if it is not a better solution for the problem at hand, it may well offer a useful solution to a different problem. Symmetry can be viewed as a translation with a twist. It takes an existing solution in a given context and turns it around to get a new perspective.

Constraints and Problem solving

The authors recommend thinking inside the box. At first, this advice seems to contradict popular creativity mantras, which emphasise: "There are no wrong answers. Consider all options. Break the boundaries that prevent you from innovating." The authors emphasise that not all boundaries should be broken. Some boundaries are real and need to be respected. By understanding what the real constraints are, we can better identify the ones we artificially impose.

If we identify some constraints that any solution must obey, this can help channel our search into more productive directions. At some point, we have to take our possible solutions and figure out which are workable and which are not. Understanding what box they will ultimately have to fit into, helps separate the wheat from the chaff. By imposing some constraints on our solution search, we can filter out unworkable ideas before they begin to take shape. Perhaps we can even prefilter our thinking so as to prevent these unworkable ideas from forming in the first place.

Principled problem solving means that we take into account the principles that any solution must satisfy. The more of these principles we can identify, the closer we are to the solution. There may be fewer options to explore, but those are the right ones to focus on.

It does not help to generate ideas unless we then evaluate them. But evaluating them is time-consuming and costly. In fact, the fear of being inundated with proposals is often what holds many companies back from asking their employees to contribute more ideas.

But what are the right filters? This is where the principled problem-solving approach helps. The first step is to identify all the attributes that will be a necessary part of any solution. These necessary attributes of a solution are the principles that will serve as problem-solving catalysts. The approach helps focus our search. It prevents us from having to start from scratch every time we run into a roadblock.

Principled problem solving, constitutes a powerful way of filtering out solutions that are nonstarters. True, we must break out of the false constraints that we artificially impose on problem solving. But it is equally useful to identify real constraints – in order to narrow the list to a more manageable number.

Unprincipled thinking outside the box often fails because it makes the problem solver consider any potential solution, no matter how farfetched.

Thinking outside the box and principled problem solving are, thus, the yin and the yang, the dialectic of innovation. We must think of these two approaches together as thinking inside the real box.

Indeed, a powerful way to identify new problems to solve is to focus on the artificial constraints that are limiting our vision. Once we have identified a false box that has kept us from seeing an answer in one context, we should systematically start looking for other contexts in which the same false box is distorting our thinking. One way to find other questions is to recognize that solutions are often found when we identify false or artificial constraints.

Innovation in action

The authors feel that by applying a few principles, various innovations in government regulation are possible. For example, we want management and labor to keep feeling the same pain as with traditional strikes. But we do not want customers to feel the pain. So how do we do it? Instead of a traditional strike, why not have a virtual strike? In a virtual strike, the workers keep working as normal and the firm keeps producing as normal, but they sacrifice to the government an amount of money equal to the pain of the strike. As a first cut, workers lose their wages and employers lose their profits during a strike. So during a virtual strike, the workers would work for nothing and the employer would hand over to the government (or a charity) all its revenues.

Similarly, we can improvise upon boycotts. Under a boycott, the protesters agree not to buy some product until the company changes its behavior in some way. Under a buycott, the protesters would promise to buy the company's product if it changes its behavior in some way. The reason a buycott is potentially so much more effective than a boycott is that most people don't buy most products. Thus, if a thousand people say that they won't buy a vodka, it isn't really clear how many of them would have bought the product otherwise. In contrast, if a substantial group of consumers all agree to buy the product, this would have a large impact on the company.

Implementing Why-Not

Coming up with a great idea is only the beginning of the battle. If we really want to change the world, we need to sell the idea and we need others to buy in.

In pitching an idea, we must try to make it familiar. It's hard enough for listeners to absorb a radically new idea. We must not make them also absorb a new context. The idea of keeping the idea similar or familiar means trying to translate the idea so that the product or service is as similar as possible to the status quo. Paying close attention to each group's interests helps identify different audiences to pitch.

And we must not limit ourselves to one audience. Even if our pitch does not initially convince the person with power to make it happen, we must pass along the idea to others. There is, at times, a certain momentum of innovation, and a decision maker

who is initially reluctant often becomes less reluctant in the presence of building a consensus.

We are more likely to solve a problem if we can start thinking that an answer exists. An optimistic attitude can become a kind of self-fulfilling prophecy. The same holds true for a why-not idea. When test-marketing some of the proposals in this book, the authors have occasionally encountered the person who devotes of all his or her intellectual energy to finding flaws in the idea, but doesn't try at all to find good responses to the objections.

Critical feedback is important. A critical listener is probably also a listener who is truly paying attention to what we have been saying. But a genuine conventurer tries both to identify an idea's problems and to figure out how to overcome them. It's a cliché to favor constructive criticism, but we must know who are the constructive criticizers, who seem genuinely engaged in the creative process, and who are the trashers, who are never satisfied with anybody else's ideas.