

URL: <https://stvp.stanford.edu/blog/videos/problem-analysis-at-the-cellular-level>

How big is the problem? And how large is the opportunity to solve it? Mir Imran, parallel entrepreneur and CEO of InCube Labs, says that 90 percent of business concept development is simply understanding what's wrong with the status quo. One needn't start out as an expert, says Imran, but the savvy entrepreneur needs to know how to perform deeply probing research.



Transcript

So maybe you could describe the pipeline, things go from, obviously, an idea to something that becomes a research project, and then maybe it turns into a venture.. Maybe you could explain the process.. As most of you can imagine, it starts with a problem.. The process, it begins with the analysis of the problem looking at the attributes of the problem, and when I say attributes, you look at how big is the problem and how is that problem currently solved? Are there opportunities to improve that solution? Or sometimes, you stumble on problems that haven't been solved.. So you spend a lot of time understanding the problem.. Probably, during this first concept stage, 80 or 90% of my time goes in understanding the problem.. I feel that the more time you spend with a problem, the better chance you have of coming up with a good solution.. So I think just to give the audience a sense of the range of topics that you tackle, I think it's overwhelming, I cannot even imagine that one person can be a master of all these different fields, maybe you could give us a sampling of some of the projects you have going on right now.. Probably about half of them are in implantable devices.. There's one company developing a gastric pacemaker for the treatment of obesity..

Another one is focused on treatment of chronic pain with an implantable stimulator.. Another one is developing an implantable device for the treatment of atrial fibrillation.. Another one, which is a very exciting company, it's a drug device combination for the treatment of epilepsy, so it's an exciting novel approach, and I collaborated on that project with some scientists at Duke.. There are a couple of others - an artificial prosthetic colon and rectum company for people who have colostomies due to cancer or what have you.. So we couldn't potentially restore normal function, and then, another one which is focused on inflammatory bowel disease.. So a whole range of things.. How do you become so well-versed in all of these different fields? I am actually not.. What happens is I look at a problem, for instance, take any one of these things - epilepsy.. When you look at epilepsy and you look at the drugs that are out there and the device therapies that are out there, deep brain stimulation, you find that the success is really low.. The best therapies there have success rates that are amazingly low both drugs and devices..

So I see that as an opportunity.. So I go into that area of really not understanding it that well.. I went to medical school so I have reasonable understanding, but I don't have current understanding, so I do a lot of literature search.. The way most of you would start digging up a problem, I look at what is currently being done, what are the side effects of those therapies, and then I dig deeper.. I go into the cellular level.. What is happening at the cellular level? Do we understand the problem well enough? Sometimes, I end up coming up with a solution, not always...