# Don't Ask for the Moon; You have your STAARRS[1]
### Skills, Technologies, Assets, Accomplishments, Relationships, Reputation, Strengths

*To know of and put to use a machine not fully employed, or somebody's skill which could be better utilized, or to be aware of a surplus stock which can be drawn upon during an interruption of supplies, is socially quite as useful as the knowledge of better alternative techniques.*

--The Use of Knowledge in Society*, F.A. Hayek, American Economic Review, 1945*

## 2A. Acres of Diamonds

Centuries ago near what is now Hyderabad, India, an ancient Buddhist priest told Ali Hafed, a successful Persian farmer, that mining diamonds could make him the wealthiest man in the world.[2] Excited by the prospect, and not satisfied with the considerable wealth that he already enjoyed, Hafed sold his farm, abandoned his family, and for the next two decades traveled throughout Asia, the Mideast and Europe in search in diamonds. He found none. When all of his money was gone, he found himself, starving and afflicted, on a steep cliff above the Mediterranean Sea. In his rags, wretchedness, and despair, he threw himself into a great wave. He "sank beneath its foaming crest, never to rise in this life again."

Shortly after Hafed sold his farm, the man who bought it noticed something shiny in a stream on the property while his camels were drinking. The man rolled up his sleeve, reached into the stream, and pulled out a curious black stone with a small round "eye" that reflected all the hues of the rainbow. He brought it home, put it on the mantel over the fireplace, and forgot about it.

A few weeks later, the same Buddhist priest returned to the farm. When he saw the stone on the mantel, he recognized it as a diamond in its natural, unpolished state, and shouted out to the farmer. Together the two men rushed out to the fields and with a bit of digging unearthed thousands of the black stones. The fields were literally covered with them. The farm would become Golconda, the greatest diamond mine in not just India but the world, where the crown jewels of England and Russia, among many others, were mined. Had Ali Hafed remained at home and worked his own fields instead of seeking greater riches elsewhere, he would have had – literally – acres of diamonds.

You, too, have assets you may not recognize that can help make your new venture a

[1] To mollify movie mavens: Betty Davis' character's exact quote which concludes *Now, Voyager* (1942) is, "Oh, Jerry, don't *let's* ask for the moon. *We* have *the* stars." Italics mine. Source: American Film Institute.

[2] Russell Conwell (1843-1925), founder and first president of Temple University in Philadelphia, popularized this story, "Acres of Diamonds," in early 20th century speeches. AmericanRhetoric.com today hails them as among America's finest.

success.  In this chapter, we are going not merely to discover, but catalogue and inventory, *your* acres of diamonds.

**STAARRS = Diamonds**

Your diamonds are your *resources* (and those of your of your co-founder(s), if applicable).  Your resources fall into six categories:

- **S**kills
- **T**echnologies
- **A**ssets (Physical, Financial, and Knowledge)
- **A**ccomplishments
- **R**elationships
- **R**eputation
- **S**trengths (as in *inner* strengths).

These are not in order of importance – that varies from case to case – but just in the order to spell "STAARRS" to make them easy to remember. As you satisfy customer needs, you will create new resources – STAARRS – for yourself, and these will eventually exceed in importance the resources you start out with.  But for the moment, we'll focus on the resources you are starting with.

Let's go through your STAARRS one by one.

**Skills**

Your ***S****kills* include abilities you have developed or acquired though study, practice, exposure, or application, *e.g.,*

- Microsoft Office
- Chemistry (bachelor's degree)
- Scuba certification
- Gourmet desserts
- Conversational Spanish
- Three years of work experience in medical services
- Played electric guitar in a rock band for four years.

**Technologies**

Your ***T****echnologies* are ones about which you have acquired significant first-hand knowledge and experience, either by using the technologies directly, working on or with the technologies, or worked closely with others who know them well.  Most of us think first of consumer technologies such as cell phones and microwave ovens, but these are only a fraction of all technologies that you probably know something about. Here are a few examples:

| Technologies | | | | |
|---|---|---|---|---|
| Transportation | Energy / Power | Life sciences / Health | Construction & Manufacturing | Information |
| • Airline cockpit avionics<br>• Automotive mechanics<br>• Geographical positioning systems (GPS)<br>• Highway paving<br>• Snow removal<br>• Traffic management | • Heating, ventilation, air conditioning (HVAC)<br>• Hydraulic fracturing<br>• Photovoltaics<br>• Power transmission and distribution<br>• Refrigeration | • Genomics<br>• Microfluidics<br>• Pharmaceutics<br>• Polymerase chain reactions (PCR)<br>• Prosthetics<br>• Radiology<br>• Sonography | • Brazing<br>• Ceramics<br>• Fire protection<br>• Home building<br>• Robotics<br>• Packaging<br>• Power tools<br>• Synthetic fibers<br>• 3D Printing<br>• Welding | • Circuit design<br>• Laptops<br>• Routers<br>• Photography<br>• Software development<br>• Telephony<br>• Twitter<br>• User experience (UX) design<br>• Video editing and compression |

Which technologies should you list among your resources? If your knowledge of a technology could give you an advantage over others (your competitors) satisfying the same need, or help you determine whether to satisfy one need vs. another, you should list it.

*New* technologies deserve a special place among your Technologies and your STAARRS overall. The Internet, social networks and mobile technologies are making it ever easier to share, mix and match ideas, and are accelerating the pace of change. As a result, old technologies are being replaced by new technologies and becoming obsolete ever more rapidly. Twitter and fax are both used for marketing communications, but knowing all about the newer one, Twitter, is likely to help you satisfy a broader set of customer needs today than knowing all about fax.

The same resource (e.g., circuit design) can sometimes be categorized in multiple ways: as a Skill, a Technology, or a knowledge Asset. The categories are mainly to remind you of all of your considerable resources. For our purposes, it matters less how you categorize them; more that you not overlook any of them.

## **Assets**

Your ***A**ssets* may be *Financial*, *Physical* or *Knowledge*, for example:

Financial Assets

- Funds you can invest from your savings
- Your good credit rating, enabling you to borrow funds
- Your ability to generate funds through services.

In my second company, CustomerSat, we funded software development for our first three years by providing services: designing, implementing and managing online surveys for corporations.

Physical Assets

- A bedroom or garage in your home that you can use as an office, research lab, showroom, or production facility
- Computers, servers, software, Internet access, and smart phones
- Equipment, machinery, and supplies relevant to your venture.

I started both of my companies from a large master bedroom that I turned into an office in my townhouse in Menlo Park, California. With CustomerSat, our programmers, desks, computers, servers, and peripherals gradually outgrew that "office" into my living room and dining room. When I received a not-so-friendly letter from the homeowner's association reminding me that residents were not allowed to run commercial enterprises out of their townhouses, and that our employees' cars were taking up all of the available parking on Sand Hill Circle, we finally had to move to commercial offices.

Knowledge Assets

- Practical knowledge that you possess – e.g., recipes, clothing or furniture design, electrical circuits, or algorithms – that is not widely known by others
- Knowledge of "a machine not fully employed, or somebody's skill which could be better utilized, or…surplus stock which can be drawn upon during an interruption of supplies" as in the quotation from Hayek above
- Recognizing an unaddressed customer need before anyone else
- First-hand knowledge of your hometown or the town where you currently live.

Yes, even your intimate knowledge of the town in which you were born and raised might well deserve to be listed. Your knowledge of its streets, merchants, civic leaders, buildings, businesses and neighborhoods could make your hometown an ideal place to start your new venture.

## Accomplishments

We list your ***Accomplishments*** to remind you of the strong foundation you have to build on and to build your self-confidence. Examples might include:

- Earning a college degree
- Making a down payment on a home
- Paying off a debt
- Completing a project on time and under budget

- Putting a child through college
- Taking first place in a competition important to you.

List at least 6-8 accomplishments starting with the ones you consider most significant.

**Relationships**

Your ***R****elationships* might include, for example,

- Family, friends and mentors who can provide advice, help, recruitment, funding, or encouragement
- Co-workers or others in your field who are potential co-founders, employees, customers, or partners
- Your social network, alumni or professional association
- A loyal and loving spouse or domestic partner who will help support you (and potentially your family) while you are getting your new venture off the ground.

**Reputation**

Your ***R****eputation* includes what people know, think and say about you; the extent to which they trust you; and what is generally recognized about what you have accomplished. How you treat people every day, one of your inner Strengths (below), is a major determinant of Reputation.

Think of your reputation as a reflection and summary of all of your thoughts, words, and deeds. It is tempting to try to build that reflection and summary directly – through self-promotion and exaggeration of your accomplishments – rather than by focusing on the thoughts, words, and deeds that they reflect and summarize. Succumbing to these temptations may help build your reputation in the short term but not the long term. We'll say more about this in Part II.

Among the most significant Reputation resources and profound satisfactions an entrepreneur can create and enjoy are previous investors who are eager or willing to invest in his or her next venture. That says, in a nutshell, "our previous experience with you was good and we trust that it will be good again."

**(Inner) Strengths**

Finally, your ***S****trengths* – here we use the term to mean *inner* strengths – include personal qualities such as courage, loyalty, health, integrity, perseverance, peace of mind, friendliness, intelligence, knowledge, convictions, physical strength and coordination, thoughtfulness, courtesy, vision, self-confidence, humility, and empathy.

| **Your Resources**<br>**S-T-A-A-R-R-S** | | | | | | |
|---|---|---|---|---|---|---|
| **Skills** | **Technologies** | **Assets** | **Accomplish-ments** | **Relation-ships** | **Reputa-tion** | **Strengths** |
| •Chemistry (bachelors degree)<br>•Three years work expe-rience in medical services<br>•Scuba cer-tification<br>•Play electric guitar<br>•Conversa-tional Spanish<br>•Microsoft Office<br>•Making gourmet desserts | •Natural Lan-guage Proc-essing (NLP)<br>•Geographical positioning systems (GPS)<br>•Social net-working (Facebook, LinkedIn, Twitter)<br>•Online search (e.g., Google)<br>•Web cameras (Webcams)<br>•Solar power | **Financial**<br>•Savings<br>•Full-time job and income (medical serv-ices)<br>**Physical**<br>•Laptop, printer, and high-speed Internet access<br>•Garage (to turn into office)<br>•Woodworking power tools<br>**Knowledge-based**<br>•Know my hometown well (born and raised here) | • Earning a college degree<br>• Making a down pay-ment on a home<br>• Paying off a debt<br>• Completing a project on time and un-der budget<br>• Putting a child through col-lege<br>• Taking first place in dog show | •Family who can provide help and en-courage-ment<br>•Loving and loyal spouse<br>•Mentors who can provide advice<br>•Co-workers who are po-tential co-founders, employees, customers, or partners<br>•Alumni asso-ciation<br>•Supportive parents | •Friends whom I trust and who trust me<br>•Re-commen-dations<br>•Strong credit score | •Leadership (Led soccer team to regional championship)<br>•Diligence/perse-verance (Got a raise (or made honor role) this quarter despite broken foot)<br>• Compassion (Helped neigh-bors after their house flooded)<br>• Entrepreneur-ship (Bought up friends' DVDs and sold them online for a profit)<br>•Excellent health |

**Exercise**: Make a table like the one above of your resources by category. Include as many as you can think of and reasonably list in each category, even if they don't seem applicable to your identified customer needs. You may later discover a way that they can be applied after all, or end up addressing a different need to which those other resources *are* applicable.

**OPTIONAL**

## The *Advantage* of Limited Resources

Don't be discouraged if your resources seem small: limited resources are an *advantage*. Harvard Business School professor Howard Stevenson actually defines entrepreneurship as the pursuit of opportunity without regard to the resources controlled. Immigrants generally have little in the way of assets and other resources, yet they account for very high percentage of new companies started. In fact, three of most entrepreneurial countries in the world – the US, Australia, and Israel – are ones who have enjoyed the greatest immigration [need reference].

CustomerSat survived the dot-com bust of 2000-2002 in part because we had no venture capital investors who would bail us out if we didn't make it on our own.[3] Knowing this, we had no choice but to cut spending immediately as market conditions deteriorated. Meanwhile, some of our better-financed competitors, confident their investors would bail them out, kept spending and unwittingly wasting money. Some of these competitors were not bailed out and went out of business; others were indeed bailed out and survived. However, the resulting dilution reduced their investors' and employees' interest in the business, both financially and psychologically, dulling their competitive edge. CustomerSat survived the dot-com bust and went on to grow profitably without dilution. As we have seen, passion gives you curiosity to find new solutions and enables you to break through obstacles, which have the effect of multiplying your resources, so if you are deeply passionate about your venture, your resources are both greater than they appear and than you may realize.

Entrepreneurs starting with less personal liquidity may also be more resourceful, cautious, and successful, according to finance professors Jarle Møen (Norwegian School of Economics) and Hans K. Hvide (University of Aberdeen). They found that Norwegian entrepreneurs in the top quartile of personal wealth fared *worse* in terms of profit than those with fewer assets. Less-wealthy entrepreneurs, they theorize, work with less room for error and may be more receptive to financial advice from investors and lenders.[4]

"Great wealth can do more harm than good for entrepreneurs," said Møen. "It has been normal to see a lack of capital as an obstacle to entrepreneurship and innovation. Our findings nuance this picture. If new businesses are not disciplined by a certain scarcity of capital, both the entrepreneur and investors should be very much on the alert."

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[3] CustomerSat had two great corporate investors, NICE Systems and J.D. Power and Associates, but no venture capital firms as investors. Corporate investors are generally more interested in strategic alliances that benefit their existing businesses than in growing start-up companies, and so often cannot or do not provide follow-on growth capital as do most VC firms. Of course, during the dot-com bust, VC firms also were unwilling or unable to provide additional capital to bail out many of their investments.

[4] Norwegian School of Economics. http://paraplyen.imaker.no/paraplyen/paraplyen_/english_ve/english_ve/entreprene/

Startups even have an advantage over well established businesses. As Clayton Christensen explains in *The Innovator's Dilemma*, the demands of existing customers – and natural flow of capital to address those customers' needs – constrain and disadvantage established companies from addressing opportunities that disrupt their current businesses. Your startup thus has an advantage over established companies in addressing such disruptive opportunities.

## Experiments Grow your Knowledge and Confidence

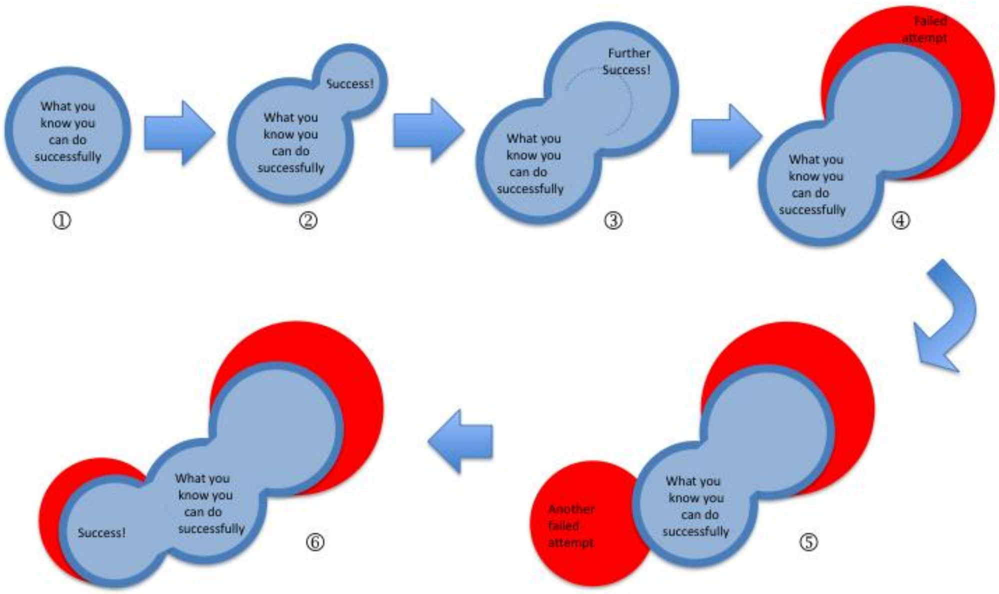
Your successes and failures together endow you with two invaluable resources:

1) First-hand knowledge of what has worked and not worked for *you*
2) As a result, a better sense of what can be achieved with a given set of resources *in general.*

The graphic below starts with what you know you can do successfully (1). It could be anything you are passionate about, for example, cleaning or selling houses, completing engineering projects on time and under budget, becoming an expert on the Python programming language, or winning a loyal following for your monthly blog. From that base, you try something new – think of it as an experiment – and complete it successfully (2). Congratulations! The region enclosed by the heavy blue line, which traces the boundaries of what you know you can do successfully, expands accordingly. Emboldened, you try something new of a similar type – another experiment – only larger or more ambitious (3), and again you succeed! The blue region expands again. You try again, but this time you fail (4); the blue region does not expand this time. You decide that you have pushed as hard and far as you reasonably can in that direction, so you try a different direction you are passionate about (5), and again you fail (5). But this time, you are confident that success is still waiting to be yours in this direction, and plus, you experienced important learning in step (5). You try again with a slightly downsized objective than before, and this time, you are successful (6). What you know you can do successfully – the blue region – is now about three times the size of what it was originally.

From your five tries in steps (2) through (6) above, you have learned a great deal: not only what you *can* achieve – the blue region – but what you could *not* achieve given your resources (skills, technologies, assets, etc.) at the time – represented by the white space directly *beyond* the outer edge of the red region. The red region itself represents uncertainty: had you set your sights somewhere in between the inner and outer edges of the red regions, rather than right at the outer edge, you *might* have been successful. Each time you succeed you directly enlarge where you know you can succeed; each time you fail you learn what did not work, and can better judge what will work next time.

If you are too conservative given the resources at your disposal each time you try something new, your chances of *success* will be high but you won't very far extend what you know you can do. If you are too ambitious, your chances of *failure* will be high and you won't extend what you know you can do at all. So for you and your resources, there is an optimal level of aggressiveness for you. If you have tried several new things in a row and been successful each time, chances are you can and should be more ambitious next time. If you have failed each time, chances are you should set a more modest goal next time.




Your success and failure *together* enable you to trace out *and extend* the boundaries of your potential, and better sense how much can be achieved with given sets of resources

This brings me to a second point, which is that each of your attempts that breaks new ground gives you a better sense of what can *in general* be achieved with a given set of resources. Eric Jacobus and Rebecca Ahn of Action Pact Entertainment produced the martial arts film *Death Grip* on a budget of $100,000. They now have a very good idea of how much work it takes to produce a film of that quality on a budget of that size, and can better advise other filmmakers and evaluate other projects. Building on the success of *Death Grip*, for their next film they are seeking to raise over $1 million.

*"I've missed more than 9000 shots in my career. I've lost almost 300 games. 26 times I have been trusted to take the game winning shot and have missed. I've failed over and over and over again in my life. And that is why I succeed." - Michael Jordan*

**Your Questions**

Q. I know a particular technology at multiple levels, for example, an overall system, the subassemblies that comprise it, and the components of those subassemblies. Should I list all of them?

A. List any and all skills and technologies that you think might either increase your likelihood of success in addressing customer needs, or suggest new customer needs for you to address, either alone or in combination with other skills and technologies.

For example, if you are an experienced automotive mechanic, your list of technologies might include power train, cooling, suspension, braking, steering, lighting, and dashboard subsystems. Could any of these subsystems be applied to bicycles, sailboats, skateboards, skis, or all-terrain vehicles?

If you are experienced in customer satisfaction measurement and enterprise feedback management, your skills might include authoring questionnaires, analyzing and reporting on survey results, in designing enterprise-wide feedback systems that map to the organization's business processes, and in linking customer satisfaction to management compensation. Might an automated interactive dialogue be able to empower anyone – not just a trained market researcher – to create a professional survey?

**Core lessons**:

1) You and your co-founder(s), if applicable, have resources—"acres of diamonds"—you may not even realize you have.

2) Inventory (list) your resources in six categories: Skills, Technologies, Assets, Achievements, Relationships, Reputation, and Strengths (STAARRS).

3) Virtually every successful entrepreneur and company starts out with limited resources. Limited resources can be an advantage: they force you to focus and act quickly.