Be A Star: Finding Important Problems

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Introduction to the Goal: Great Careers or Great Ventures

The goal of this instructional unit is to help every University of Waterloo student take his or her talent to its highest expression. We want you to be a star in the domain of your choice. If you are an employee, the goal is to be an exceptional employee. If you want to start a company or charity, the goal is an exceptional venture.

Why try to be an exceptional employee?

Competitive pressures continue to rise and there is no end in sight. There are steadily more competitors and technology is rapidly changing job requirements and eliminating certain jobs altogether.

The primary result is a rising standard of performance for everyone and for every kind of venture. Many people respond to this demand for greater performance by accepting a mounting workload, with less security or reward than would have been available in the past.

Or you can become an exceptional employee. Exceptional employees have more control over the type of work they do, the conditions under which they do it and the reward they earn for it.

Why do they have this greater control?
Their employer does not want them to quit. The employer is concerned that they cannot be easily replaced.

Why try to start an exceptional company or charity?

As for employees, the reason is competition. Thousands of existing ventures are in competition with each other. More ventures are started every day. The customer has many choices and it is even hard to attract attention to a new venture or a new product or service. This is also fierce price competition in a low inflation marketplace.

A Venture can have either a commercial or charitable purpose.

It is easy for a new venture to find itself in a “swamp”, with just enough customers to survive, but not enough to thrive. Even if you execute brilliantly the solution to a modest problem, you have only a modest venture. And modest ventures are always at risk. They are inherently harder to finance. Most importantly, modest ventures steal your life, preventing you from finding the better opportunity that you did not have time to discover
The exceptional venture finds many sources of help and tends to gain the attention of the marketplace quickly. The world sees that the venture has the potential to grow in scale and consequence. The exceptional commercial venture is more profitable; the exceptional charity gains more donors or supporters.

Which is easier to start, a good career or a great career? Which is easier to start, a good venture or a great venture?

A good career or venture is often easier and faster to start. There is less to critically examine, fewer alternatives to worry about and there is a well-established pathway before you. Unfortunately, after an easier start, the risk of stressful work or a venture failure mount. That of course assumes you can even find a good job to start with, or find investors or donors with low expectations if you are starting a venture.

A great career or venture usually is more difficult to develop. There is much to more think about and considered. Many more alternatives will need to be considered. It involves a large up-front investment of your time, focus and energy. The pay-off is a rewarding career with autonomy, or a venture of scale and significance.

If everyone is supposed to be exceptional, doesn’t that mean that then no one can be exceptional?

Yes, as the future unfolds, it will become more difficult to be exceptional. But if you concentrate on particular domain, each one can be a star within their chosen domain.

How do you become an exceptional employee?

How do you create an exceptional venture?

You deliver a series of important accomplishments.

**Exceptional Accomplishment**

How?

You solve important problems.

How?

You behave like an entrepreneur.

What do entrepreneurs do?

In the past entrepreneurs would:

1. Find problems
2. Find or develop solutions to problems
3. Implement solutions to problems
Today’s entrepreneurs need to:
1. Find important problems
2. Find or develop solutions to important problems
3. Implement solutions to important problems

Why is it necessary to focus on solving important problems, instead of just problems?

Again, this is the result of rising competition. In the past, there was significant advantage from being someone who solved problems. Now, everyone is supposed to solve problems.

Regular employees find and solve regular problems, and are no more than average employees.

Exceptional employees find and solve important problems.
Exceptional ventures find and solve important problems.

One person does it within the employer’s organization; the other person does it in an independent venture. There is considerable similarity between these two pathways to stellar accomplishment.

How do you find an important problem to solve, one that you want to solve and that you may be able to solve?

Find MANY important problems so you can choose the one best suited to you.

Aren’t entrepreneurs just driven by making money?

Some people start businesses solely to provide a livelihood, and some employees work solely for money. Others work for those reasons and to enjoy a degree of satisfaction from their accomplishments. Entrepreneurs or entrepreneurial employees are more likely to value the satisfaction of accomplishment very highly, and thus to be interested in creating an innovation, the most difficult accomplishment of all.

Important Problem Defined

A killer problem offers a must-have solution, not an OK-to-have solution. A killer problem is mission critical, where a failure severely affects or imperils the organization or individual customer or user. You are not looking for a pain point; you are looking for an excruciating pain point. The customer should think the problem needs to be solved urgently. It is a matter of degree. The closer you get to an urgently mission critical problem, the higher the probability of great success.
For an organization, a killer problem could be high cost, a sharply rising cost, a rapid erosion of customers or market share, a competitor suddenly attacking, a new competitor about to emerge, an imminent public-relations disaster or regulatory response. Notice that your employer or customer might not recognize there is a serious problem until you tell them; an example would be the identification of an unrecognized competitive threat.

For an individual consumer or user, a killer problem is one that seems urgent, essential, something they must have at once. It is the opposite of discretionary. [Of course, you could give away discretionary products, and hope that after the consumer has them and gets used to them, the products then seem indispensable. Welcome to the Web!]

Since individual preferences are the result of a complex mix of personal goals, experiences, information, misinformation and peer pressure, it is harder to identify killer consumer problems than organizational problems.

**The Test of the Killer Problem:** You know you have identified a killer problem when you discuss the problem and you are told that there is no realistic solution. But no one tells you that the problem does not need to be solved. This means that if you offer a solution to your employer or customer, they will tell you it could not work. Notice you have just dramatically simplified your “marketing” challenge: you do not have to persuade anyone they need or want your solution. You just have to prove it works.

**The Power of Alternatives**

**Opportunity Cost:** The Opportunity Cost of any action is the benefit foregone from your next best alternative. It REQUIRES that you generate a significant number of viable alternatives for every major action involved in the formation of an enterprise. If you do not generate alternatives, you do not know the cost of what you are doing. That is, you do not know what you are doing.

This is an essential basis of an enterprise that is successful by design, rather than by luck. And since many persons and start-ups ignore or misapply opportunity cost, it is your competitive advantage.

The process for finding important problems discussed herein is based on opportunity cost.

How do you find a large number of important problems?

Develop an information strategy to conduct two kinds of searches.

1. Search in the curated business media for important problems
2. Search in your workplaces experiences and those of others at the University of Waterloo
3. Search for confirmation of important problems by searching the media for problems you found in the workplace; search in the workplace for confirmation of problems you found in the media.

Search continuously, developing an alertness for important problems no matter where you might find them.

Why search constantly and why not alert to just problems?

You need lots of important problems. You need to choose an important problem from a set of important problems. You do not want to choose an important problem from a set of ordinary problems. Remember you are trying to find the best possible important problem for you to solve, that best meets your needs and that has the best likelihood of success.

Information Strategy

If you are looking for important problems, an efficient approach is to listen to what important people are talking about. They frequently talk about problems important to them; they are telling you what they need. And important people often have the ability to pay.

In addition, listen to what informed observers tell important people about what problems they should be concerned about.

One of the best ways to do this is to read the Globe and Mail daily, and Bloomberg Businessweek every week. Notice that journalists are paid to look for problems; they are doing part of your job for you. By read, we mean read the opening couple of paragraphs of each major article, alert to the discussion of important problems. When you find an important problem of interest, create a record of it. You do not have enough alternatives if you can keep them all in your memory.

Recognize that this is curated content, chosen and written with the goal to report important news/problems. [Not all news media report important problems, or even try.] There are other news media sources that also report on important problems, but the Globe and Businessweek are especially broad and reliable.

Can non-traditional media be used as a substitute for curated media? No, they cannot. Blogs, special interest news sites, news aggregators and such sources are often of uneven quality and accuracy. They frequently contain unreported conflicts of interest and covert ads. And even when they are accurate, they are narrowly focused. That means they are a very inefficient way to identify a large number of important problems across a wide range of possibilities. You would have to read a very large number of non-traditional media to get the same content as in the Globe or Businessweek.
**Warning:** Some online news sites are dangerous to you because they use your past choices to recommend further information. These recommendation engines may be efficient to satisfy personal interests. But they actively stop the generation of business alternatives by narrowing your focus, sometime without you noticing. Alternatives must be different from each other to be real alternatives; they should not just be versions of the same alternatives. At this stage, you want breath, not depth.

Can non-traditional news sources and social media help in the identification of important problems?
Yes, they certainly can. With the background provided from the curated media, you can identify reliable and useful non-traditional sources. Moreover, the social media offer a powerful tool to continue the investigations of problems through discussion and dialogue. It is also the case that non-traditional news sources or the social media might identify a new problem that you would need to validate and elaborate through the curated media. But you must recognize that curated and non-traditional sources must be used in tandem with curated media, and that the curated media are a central and indispensable tool for problem identification.

**Continuing Coverage**

In addition to consulting the current media, it is also essential to look for problems methodically, over time. You do not want to take action based on a single report or posting. Continuous and detailed coverage is not usually available on the public internet since this content is copyright protected. You should use one of the proprietary databases that are available to you through the University’s library website. Factiva is particularly useful.

**Workplace Experience**

Review *all* your workplace experiences to identify important problems. Focus your review based on problems you may have previously identified from the business news media, course content or other sources.

Why focus on workplace experiences?
It is again an efficient way to find commercially important problems because all goods and services are both produced and sold in the workplace. As a result

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Why focus on workplace experiences?
It is again an efficient way to find commercially important problems because all goods and services are both produced and sold in the workplace. As a result, the workplace is the arena in which problems are solved or ignored or go unrecognized. In the workplace, you are surrounded by problems and you can find those that are most important.

Look for anything that is **constantly failing** to perform its function and requires fixing or replacement. That could include anything from software to machinery, from services to facilities. Identify whether this failing function is being bought from an external supplier. When it is from an external supplier, it is logical to consider whether you should create a company to be a better supplier to the workplace. Ask why no one is apparently dealing with these instances of repeated failure. Maybe the failure is not important enough to care about. Or maybe there is an internal institutional barrier interfering with its solution.

Look for any source of either **high cost, or rapidly rising cost**. Notice what cost containment measures are being taken to control or reduce it. Ask what else has been done, or why more is not being done. Again, if the cost is arising from an outside source, this may be a start-up opportunity.

Look for the problems your **employer’s customers** have with what they are buying. Ask the customers if you have, or can get access, to them. Ask everyone at work about what they know or think they know about the customers. If you hear employees blame the customers for product failure, you may be near treasure. You can of course have customer conversations when you have left your workplace.

Look for **efficiency** opportunities. But take this step only after you have done all of the above. Even though you should look for opportunities to improve processes or methods to increase productivity, to make the system “better”, better is hard to sell to an employer or customer. While you will look for general or systemic improvements to add to your understanding of the environment of the workplace, this is not **likely** the most effective way to quickly accelerate your career or launch a successful start-up. It is almost always easier to sell a solution to an acutely felt problem, or one that is acutely felt when pointed out. This is especially the case when you are young without an established reputation.

**Listen carefully** because there is still a lot you do not know. You are trying to become better informed, to be so well informed about specific opportunities that this knowledge base is your competitive advantage. You are not trying to look like a young know-it-all. If you give that impression, you will shut down your own communication networks. Remember, however, that you are not necessarily expecting someone else to identify a killer problem for you; you are trying to find the information that shows you what problem is important and what problem is more important than others. But notice that if you ask why, and someone in authority says that “this is how we have always done it” you may be near treasure.
Look for problems of strategic importance, meaning that they are responsible for a cascade of secondary problems. Solve the strategic problem, and you simultaneously solve the secondary problems.

Having identified problems with or without media guidance, search the news media again for updated information or new insight.

**Shared Workplace Experiences**

Discuss your workplace experiences with those of fellow students to identify important problems. The above framework may serve to shape those discussions. Focus your review based on problems you may have previously identified from the business news media or other sources.

Why focus on the workplace experiences of others?

**The Waterloo Advantage**

If you are prepared to share workplace experiences with fellow students, you are able to access intimately and in nearly real time the workplaces and problems of potentially more than 4,000 employers, covering the widest range of industries, technologies and marketplaces. No other university student on earth can access such a rich environment in which to search for the treasure of unsolved killer problems. Other students read business case studies; you live them.

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**Challenges to Problem Identification**

**Warning!**

A common mistake when trying to implement the above search for killer problems is the tendency to try to think of a solution as soon as you identify a problem. First, this slows you down. Second, you then face two alternatives. If you cannot immediately think of a solution, you delete the problem from consideration and move on. Or if you think of a solution, there is a strong temptation to immediately advocate the solution to the problem or launch a venture, whether the problem is important or not. You are therefore running the risk that you have missed identifying a much more important problem. By contrast, you are identifying many problems, and ranking them by their degree of urgency and interest to you. Then, and then only, do you select a problem and start your search for a solution.
Passion
If you are looking for important problems in domains that are inherently interesting to you, the above process is challenging but satisfying. If you have no particular interest in anything about a problem domain, the above process will be extremely difficult.

Isn’t there a danger that if I spend time looking for lots of problems instead of solving a problem I find quickly put me at a disadvantage compared to someone else who takes action more quickly?

Yes: That danger exists; it is counter-balanced by the greater likelihood of future success.

Next Steps
Having generated a large number of important problems, it is then necessary to select several of the best ones for you to conduct further research on. Which criteria would you use to choose?

1. Which one is most inherently interesting to you?
2. Which one might use skills and experience you already have?
3. Which one is most important to a set of defined customers or donors?
4. Which one is most important to a set of defined customers or donors who have the means to pay for a solution?
5. Which one might have the easiest available solution?

What is an effective way to detect an important problem that might have a relatively easier to find solution?

Find Who Is Mistaken about What and Why?

While conducting the above investigations, be mindful of the fact that problems persist because those most involved may be making a mistake – a mistake of fact about the situation, an unfounded, untested assumption about the situation, an absence of information or an unwillingness to act. For example, some people will not describe a major cost centre as a big problem because they assume there is nothing to be done about it, and they then stop thinking about it. There is often mistaken or absent information because of discipline bias. For example, technically professionals are often ill at ease and ill-informed about marketing since it is about human behavior; arts oriented individuals are often uncomfortable with numbers and technology; accountants can often see only numbers. Those blind sides may be your opportunity if you can bridge the discipline gap yourself. Notice too that advances in technology make things that were previously impossible merely very difficult. But many do not
notice the change. The more you understand about why the problem arose and persists, the more you can have confidence you could fix it.

**Employee Initiative or Independent Venture?**

Of the problems you select for further research, you will also decide whether it is best solved within an existing organization, or in your own independent venture. You might decide to use one problem with your employers and another one as the basis on your own venture.

**However,** there is great advantage to an employee by merely drawing an employer’s attention to important problems facing the organization. This is *itself* an essential skill of a stellar employee. There is no necessary need to have a solution when you speak about the problem.