

So what? who cares? why you?[®]

The Inventor's
Commercialization Toolkit

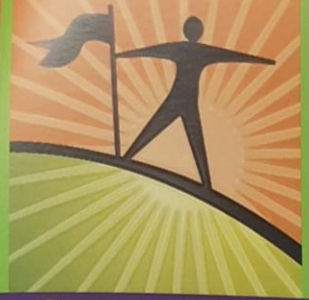
Turn Your Good Idea
Into a Great Opportunity

For Scientists, Researchers, Engineers,
and Technology Entrepreneurs

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**So what?
who cares?
why you?™**

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Table of Contents

INTRODUCTION	3
The Polite Nod	3
The Language of Business	4
So what? who cares? why you?™: the Spadework	5
What You'll Find Inside	6
How to Use This Book	7
Before You Begin	8

So what?

CHAPTER 1: What's Your Idea?	9
From Lab to Life	11
Your Idea on a Napkin	12
Concrete Language	12
Tell Me More	15

CHAPTER 2: What's the Problem?	21
What's the Real Problem?	23
What Makes a Problem "Real"?	24
Real Pain Statements	26
Spell Out the Opportunity	27

CHAPTER 3: Where Does Your Idea Fit?	33
What's Your Category?	37
Draw Your Category Map	42
Define Your Category Strategy	43

Who cares?

CHAPTER 4: Who's Your Customer?	49
Markets, Segments, and Lead Customers	53
Schools of Customers	54
Casting for Customers	56

Table of Contents

Chapter 5: What's Your Path to Market?	71
Your Plan of Attack	74
Relationships: Your Ecosystem Partners	75
The Route: Channels of Distribution	78

Chapter 6: Where's the Money?	83
Defining Your Business Model	86
Give Your Business Model a Backbone	88
A Model for Licensing	90
Test Drive Your Model	92
Back-Pocket Metrics	92

Why you?

Chapter 7: What's Your Competitive Edge?	95
Competitive Positioning	98
Are You a Penguin or Pink Flamingo?	98
Who's Your Competition?	100
Define Your Competitive Edge	102
What's Your "Unlike" Statement?	105

Chapter 8: Who's on the Team?	113
Your Team DNA	116
Can You Execute?	119
Your Network	120

Chapter 9: What's Your Story?	125
Your Storyboard	128
The Platform	129
Know Your Audience	130
The Investor Package	131

Chapter 10: Now What?	139
------------------------------------	-----

So what?

CHAPTER
2

Chapter 2

What's the Problem?

The best ideas don't always win, and winning ideas aren't always the most technically proficient. So what makes an idea compelling? Investors look for ideas that solve real, burning problems. In this chapter you'll learn what makes a problem real and what makes an idea really compelling.





Content

- What's the Real Problem?
- What Makes a Problem "Real"?
- Real Pain Statements
- Spell Out the Opportunity

What's the Problem?

CHAPTER
2

For a new idea to be commercially viable, someone in the market must have a compelling problem for which the idea presents a solution. "Compelling" means that it

is a problem that is not currently being solved; or, if it is currently being solved, it is not being solved effectively. Business

problems are compelling to investors when they are expressed with an element of pain – real "bleeding from the neck" pain. This is not the time for a soft and subtle approach.

A problem captures the attention of an audience when it is described in its raw form.

Conveying the shock value of the problem can grab your audience and engage them in learning more about your idea. They'll be curious to know your proposal to address the problem that you describe.

In this chapter, you will be introduced to tools and techniques that will help you transform your idea into a compelling statement about the real business problem and the pain it addresses.

What's the Real Problem?

Real problems are the ones the customer is constantly struggling with, or problems you anticipate will become real in the future.

They are not what you assume to be the problems; you must make certain you are creating solutions for problems that really exist. The best type of problem to be addressing is the type that keeps the customer up at night –

that "real burning problem." You want to describe the issues and challenges that the customer is facing using sharp, visual, cutting words. This will help your investor to put themselves in the customer's shoes.

Sometimes, people will confuse real business problems with opportunity and use these phrases interchangeably. It is not wise to do this.

What's the Real Problem? (continued)

Focus first on problems, describing the issues and challenges the customer faces in a typical day. Whether your customer is a municipal hospital, a police force, a corporation, or an organization looking to license your idea, you need to put yourself in the customer's shoes to describe the burning problem. Once you've done this, then move on to talk about how you'll turn that real burning problem into an opportunity for your idea.

The best way to articulate the problem is by talking about the customer's issues and motivations. Avoid the temptation to provide product details or technical specifications – you'll only get The Polite Nod.

What Makes a Problem "Real"?

A problem becomes "REAL" only when the target customer:

1. Sees the problem as a burning one,
2. Realizes that a viable solution can be delivered; and,
3. Has money (or control over the budget) to solve the problem.

Let's look closer at each of these...

1. Burning pain – the customer must feel an urgency to solve the problem. This does not necessarily mean the customer will make a purchase in the near future, it simply means that he or she recognizes a problem exists and feels some discomfort in living with that problem. If your idea is revolutionary, you will need to consider when the customer will be ready to adopt your idea to resolve the pain.

2. Viable solution – the concept you are proposing must fit into the customer's existing systems and processes. You cannot expect the customer to make major infrastructure changes to accommodate your idea. To be viable, your idea must integrate easily into the customer's environment.

3. Purchasing power – without this, your target audience isn't really a customer. The customer must be willing – and have the power – to spend money to solve the problem.

quick Tip

These three conditions are relevant whether you're planning to license your idea or to start a company. If your plan is to license your idea, then think of the receptor as your customer and apply these same conditions.

Examples of Real-World Problems

Real problems don't have to be life and death problems – they just need to be “real” painful for the target customer. Here are some examples of real problems:

Converting garbage into energy-rich fuel – Plasco Energy Group describes the problem it solves by referring to “waste mountains” in today's municipal landfills and the serious environmental challenges these represent. Plasco's solution to convert solid garbage into energy-rich fuel becomes very compelling. (www.plascoenergygroup.com)

Data security – Identity and corporate data theft schemes, such as skimming, phishing, hacking and other malicious attacks, are a real and growing problem for companies like banks and airlines, as well as for online buyers and sellers. The pain here is the loss of millions of dollars by companies due to fraud and the loss of customer confidence. Companies like Entrust and RSA Security have developed solutions to address this problem. (www.entrust.com, www.rsasecurity.com)

DNA testing kits – Until recently, DNA collection was a costly and time-consuming exercise, requiring blood to be taken for each sample. This made large sampling cost prohibitive. DNA Genotek has addressed this problem with the creation of a DNA testing kit that uses saliva. Donors spit into a vial and twist the cap shut, thereby releasing a solution to preserve and purify the sample. It's a simple, cost-effective way to collect large amounts of DNA without taking blood samples. This solves a real problem for the thousands of health researchers worldwide who are investigating the genetic causes of human diseases. (www.dnagenotek.com)

RFID tags (radio frequency ID tags) – If you own a dog or cat, then you've heard of micro-chipping: implanting under the skin a small RFID tag that contains the owner's information and can be scanned to identify the animal if lost or stolen. The future of tracking pets, inventory, patients, and products that go through self-service checkouts opens up new avenues for companies both to make money and also to reduce costs. RFID is solving problems today for companies including The Procter and Gamble Company, Esso, Target, and a host of others. (www.sirit.com, www.intermec.com)

Email access in a mobile world – As professionals become increasingly mobile, they struggle with how to stay in touch with their clients and colleagues when they're on the road. Research in Motion (RIM), maker of the ubiquitous BlackBerry, solves this burning problem with email access anywhere, anytime. (www.blackberry.com)

“The test of an innovation is do customers want it and will they pay for it.”

– Peter F. Drucker

Examples of Some “Not-So-Real” Problems

Here are a few illustrations of examples that could be considered lacking in the “real burning problem” category. Remember, it’s not the quality of the science that is being evaluated at this stage, but rather, whether the problem cries out to be solved.

Dental implants that stimulate saliva flow – This high-tech remedy for dry mouth is developed by a dentist and engineer. The implant is made in the shape of a tooth crown and is equipped with electrodes that stimulate the lingual nerve to jump-start saliva flow. But what is the burning customer problem and pain that would stimulate a buyer to purchase the product? Do enough buyers exist to make a business out of this idea?

Recycled anesthetic gases – At a recent venture fair, I listened to an entrepreneur pitch this idea. To describe the problem, the inventor quoted this statistic: “97% of anesthetic gases escape out into the atmosphere versus being consumed by patients.” 97% certainly conveys a lot of waste – but do hospitals care enough about the problem to pay for a solution? The investors at the venture fair didn’t think so. Hospitals have more urgent problems to solve that will reduce their costs in more significant ways.

Reality fusion – This idea would allow humans to interact with computers using natural movements. (For example, by moving your arms and hands, you could interact with a computer video game). The idea has had limited success with the target audience of producers of software for children – perhaps other target buyers with more burning problems should be considered.

Does the problem cry out?
Evaluate the real burning need.

Real Pain Statements

Connecting with your audience often requires some shock value.

You need to grab their attention, but must do so with a statement that is grounded in fact and makes a personal connection with the market and the customer. This is called a pain statement and you need to anchor your idea around one.

Pain statements have an element of hurt, are directly expressed, and typically have a third-party statistic or fact to back them up. Notice that there is no mention of a solution yet – just the raw, direct facts about the pain you will address. Take a look at the pain statements that follow to see what I mean by shock value.

Statements of Real Pain

- “Across the USA, 1 in 3 children in kindergarten to grade 12 reads 2 grade levels below average.”
National Centre for Education, 2003 study, as quoted by a literacy software company.
- “70% of transplants are rejected in 3 years. There are currently no effective treatments to halt these rejections.” As told by a biotech firm conducting research to develop drugs to address the problem.
- “By age 65, one in nine people will experience vision loss that cannot be corrected. By age 80, that figure increases to one in four. As medical advances continue to lengthen our lives, vision disorders will become increasingly common.”
Ottawa Health Research Institute (OHRI) describing the context for research by Canadian vision scientists.
- “According to UNICEF, 4,000 children die each day from a lack of clean water. The lack of clean water is arguably the world’s largest public health crisis.”
As stated by a company that develops water purification systems.
- “For every \$1.00 that IT departments spend on hardware and software, they spend \$9.00 on support and maintenance. \$3.00 of that \$9.00 goes to routine maintenance.”
As explained by an entrepreneur developing automated IT troubleshooting software.

Spell Out the Opportunity

With the real problem clearly defined and your idea wrapped up in concrete language, it’s time to weave these two things together to spell out your opportunity.

The opportunity is the flip side of the problem – it is what you see as the way to make money solving the problem. As we have seen by example, not every idea is a money-maker just because it’s a good idea – and that’s why articulating the problem and pain is a necessary first step.

At this stage, simply state what the opportunity is. Consider things like:

- What gap exists that your idea can fill?
- Are you able to deliver an entirely new type of solution?
- Are you combining two well-known solutions together to create something better?
- Specifically, what are you proposing to do?

The Opportunity = How you will make money while solving the burning problem.



CASE IN POINT: SPELL OUT THE OPPORTUNITY

Here are some examples to illustrate how problems and pains are woven together to describe an opportunity:

Case #1: MatrixView Limited

www.matrixview.com

MatrixView is an innovator in a revolutionary approach to compressing, transmitting and archiving data. Here's how the problem they address was articulated in a recent interview. I have paraphrased it here:

A midsize hospital gets 60 requests every hour for MRIs and echocardiograms. At 10 MB apiece, these enormous images can quickly cripple a network. Traditional methods of compressing JPEG images omits details, which is not acceptable in medical diagnosis. So, MatrixView has invented a data compression algorithm to shrink images by 15-300%.

A market segment they will target is mid-size hospitals, for whom the problem is most painful. There are other potential segments being considered in the US\$9 billion digital imaging market as well. One is the digital camera market, which could embed the technology into cameras to allow greater picture storage capacity.

Source: *Business 2.0*, October 2005:
"Honey I Shrank the JPEG."

Case #2: CML Emergency Services Inc.

www.cml.com

CML Emergency Services is a company in the growing market of wireless communications. CML addresses the painful problem that emergency call centers have of not being able to track calls that do not originate from a fixed phone line. CML translates what they do into a very compelling pain statement expressed from the customer's point of view:

"Public safety is top of mind in communities around the world. CML delivers systems and services that make communities safer. Our business is providing systems that enable emergency service responders to save lives."

Note: As this book went to print, CML had been successfully acquired for a healthy sum of money.

Case #3: Magasec Inc.

www.magasec.com

Magasec provides inventory management and monitoring systems for HAZMAT – hazardous materials like dynamite, toxic wastes, and others. The problem is that today, HAZMAT monitoring is done manually with paper-based systems and is open to misinterpretation, misrepresentation, and error – and it's a felony to inaccurately report HAZMAT inventories. In addition, as of 2005, strict regulations are being enforced regarding the inventory and monitoring of explosives, which makes the pain more acute.

A real, burning problem exists here and the market opportunity cuts across all players in the industry, from explosives manufacturers to distributors to end-user sites like construction companies.

In summary, take care to identify the customer problem you can address, then describe this problem in terms of the pain the customer is experiencing. Express the problem with the same passion that your customers would, by walking in their shoes. Enter into the customer's mindset – even role-play a bit – to get to the heart of the issue.



Now Over To You!

Using **Worksheets 2(A) and 2(B)**, describe the real problem your idea addresses and exactly who has this problem. Make a statement about the pain this problem causes. Then, translate this into an opportunity statement using **Worksheet 2(C)**.

DO ...

- Focus on the real problem that the target customers have – a problem they will be willing to pay money to solve.
- Make the problem cry out. Your Pain Statement needs to stop your audience in its tracks.
- Make your scenarios as customer-focused as possible. Try to walk in the customer's shoes to articulate your idea from his or her perspective.
- State the opportunity, but don't dive in to all the details. Come up with a short paragraph that says how you will exploit the problem and pain that you've identified.



DON'T ...

- Talk in technical terms. Instead, describe the pain and the problem in the customer's language.
- Forget to consider the impact of your idea on the customer's current infrastructure.
- Be afraid to experiment. It will take several edits to make your opportunity statement clear and compelling.



Visit the ToolShed for checklists and templates to define your real problem and pain statement, as well as extra copies of the Worksheets. The ToolShed is online at www.wendykennedy.com

Worksheet 2(B)

Your Pain Statement

Craft your **pain statement** here.
Remember, it's a statement, so one sentence is ideal, two is the maximum.

Tips:

1. Look for a reliable statistic that will stop the audience in its tracks.
Refer back to the example pain statements in this chapter.
2. Don't be afraid to experiment. Write down several pain statements.
It takes practice and some refining to land on the statement that works best.

Worksheet 2(C)

State the Opportunity

Write one sentence to **articulate your opportunity**.
That's it – nothing more. We will go in to more detail about the opportunity later.

Tips:

1. Refer back to Chapter 1, "What's Your Idea?", and draw from the worksheets you used to describe your idea.
2. Refer to your pain statement. What is the real customer pain that you address?
3. What is the best way to address the customer's problem with what you have created?
How will you exploit it to make money?
