PROBLEMS WORTH SOLVING

DISRUPTOR'S HANDBOOK #35

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INTRODUCTION

This handbook is for innovators seeking to bring their focus, capabilities and expertise to bear on a particular problem. It steers away from "ideas thinking" and focuses on "problems worth solving".

One of the challenges of most innovation projects is that they are founded on an 'idea'.

Or worse. A **BIG** idea.

How many times have you heard an executive ask, "what's the big idea?" or "what's our BHAG" – a big, hairy, audacious goal?

When it comes to innovation, ideas are like dragons. Or unicorns. Rarely seen but often discussed – holding a mythical and powerful hold over our imagination.

This handbook covers:

→ The 4 dimensions of a problem
→ How to use the "5 Whys" technique
→ Prioritising problems by creating problem statements
→ Problems worth solving within the Hackathon process

During the medieval period, dragons were drawn on maps to designate uncharted waters. The text, "here be dragons" appears on the Hunt-Lenox Globe (1503-07) but the power of the suggestion in those three words has haunted every adventure or innovation project since.

From Christopher Columbus to the Apollo space missions – right through to my first paid web development project, dragons were waiting at every turn. There is always a hidden danger in discovery. And always a challenge that can threaten our dearly loved project, reputation or even our lives.

And the risk that comes with innovation is nothing to be sneezed at. While the startup mantra of 'fail fast' sounds whimsical, it carries with it a hard reality. Failure hurts. It is embarrassing. And for the founder and the team, it can take years to recover.

Founder of 99dresses, Nikki Durkin has shared the brutal reality of startup failure here:

"I've survived being stabbed in the back by cofounders, investment rounds falling through, massive technology fuckups that brought sales to a halt, visa problems, lack of money, lack of traction, lack of a team, hiring the wrong people, firing people I didn't want to fire, lack of product-market fit, and everything else in between. And yet I failed. I won many battles but I lost the war."

When it comes to corporate or enterprise innovation, project failure can also have disastrous consequences. Not only for the business but for the instigator, the sponsor and the wider project team.

The owner of a failed project may be fired and find their hard-won reputation ruined. While not burdened with the financial weight of a startup founder, the enterprise innovator may never work at the same level again.

"

Everyone has a plan, until they get punched in the face.

Mike Tyson

While not an absolute panacea by any means, focusing on 'problems worth solving', will go a long way to helping avoid a 'career limiting outcome'.

How do you do this?

There are a range of techniques that we use or have developed specifically to focus your attention and action. These are explored in this handbook.

And keeping in mind that we are creating marketing-led innovation, it will come as no surprise that there is a significant effort related to communication and articulation.

Buckle up, it's time to get started.

THE FOUR DIMENSIONS OF A PROBLEM

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Most organisations can identify their own problems readily.

To understand a problem worth solving you must follow it to its source. Keep escalating your research within the company hierarchy to understand when the language describing the problem changes. For example, is the problem described the same way by the front line staff as well as management? Is the same language used by executives and the Board?

Seek out the inflection AND the connection points to join the dots. And then determine where the problem belongs – and whether a solution will sustain, expand or transform the business.

A 'problem is worth solving' when it is:

→ Intractable
→ Has forced a failure
→ Has an owner
→ Has a budget impact

INTRACTABLE PROBLEMS

When we are looking for problems worth solving, we are really asking for a prioritised problem. We are looking for a problem that is difficult to deal with – stubborn or unyielding. It is a problem that stands out above all others and demands our attention.

The problem worth solving should be your nemesis. When seeking to define a problem worth solving, listen for the audible gasp when it is described. Listen for the grunt of acknowledgement.

And listen also for the fatalistic tone. A problem worth solving has often conquered many before you. Again, like the dragon, look for the rusted armour of previously slain knights. There should be visible scars.

PREVIOUS FAILURES

These previous failures are not just indicators of problems worth solving. They can prove vital opportunities for the innovator to learn. Are there project documents or specifications? Is there a case study? Or better yet, a budget?

By knowing the history of the previous failures, you can be better prepared. It also helps you avoid previous traps and mistakes. For the innovator has no time for reinventing the wheel. Your task is to look to and create the future. And previous failures are the shoulders of giants that you can use to your advantage. Seek out the war stories. Listen for the truth. Do a root cause analysis.

Grapple with the scales of the dragon.

Seek out the war stories. Speak to people involved. Learn what they learned. Don't make the same mistakes.

FIND A PROBLEM OWNER

In enterprise innovation, a problem owner is often your 'project sponsor'. They are the people who feel the pain of the problem. It is likely that the problem impacts their business performance – and in some cases, their professional KPIs. This also means that the "problem" carries with it a financial burden.

When it comes to problems worth solving, problem owners are vital because you need someone to fund your innovation project. The problem owner then effectively becomes an 'investor' in your project – and by default, has a 'vested interest' in your project's success.

The challenge is to focus on a single, articulated problem. We'll discuss techniques for doing so, later in the handbook.

There are some questions that you can ask to determine whether someone is a 'problem owner, including:

➔ Is there a problem that keeps you awake at night?
➔ If you could solve one thing, what would it be?
➔ What is the single largest impact on your business uniti's KPIs?
➔ What have you tried and failed and would like to try again?
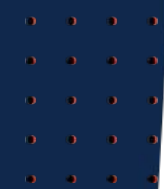
BUDGET IMPACT

As mentioned earlier, when a problem impacts a budget then you can immediately create a business case around a solution.

This is the 'worth' part of the 'problems worth solving. After all, not all problems have a financial impact. When you can solve a problem that has a financial impact, then you effectively create your first customer. And where there is one customer with a budget and a challenge, there will be another. Hone in on that budget and the value that can be unleashed in a solution.

USING THE FIVE WHYS TECHNIQUE

Famously developed by Sakichi Toyoda and used by the Toyota Motor Corporation, the five whys helps you explore the cause and effect relationships of a problem.

Root cause analysis is an important tool in the innovators kit bag. It is both simple and effective and creates an iterative and reflective loop that allows a facilitator to delve into the origins of a problem.

Five Whys

Symptom: The car won't start.

Why (1): The battery is flat
Why (2): The alternator is faulty
Why (3): The fanbelt is loose
Why (4): The fanbelt is old
Why (5): The car should have been serviced and wasn't.

This approach is particularly effective because it challenges defensive positions often associated with accepted practices. For the innovator, breaking down these practices helps you articulate the real challenge, trace the problem to a (senior) business owner and garner supporters in the process.

But the process also requires persistence. It is easy to stop at two or three "whys".
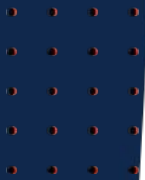
Your challenge is to press on. Be persistent. Find the root cause.

The five whys is a useful technique in that it also focuses your attention on the problem – not the solution. Often when trying to describe a problem, people will explain the solution. That's not your concern here. You need to keep pressing the "why" button. You need to dig beneath the surface to discovery the reason why the problem is, in fact, worth solving.

PRIORITISING PROBLEMS

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Problems really are not problems if they are not clearly articulated. The challenge is to clear the air around the problem so that it can be seen in all its brutal glory. To do this we create 'problem statements.

Creating problem statements works in a very similar way to our Key Themes and Messages handbook. In fact, problem statements are key messages in reverse.

But a problem statement is not just a simple explanation of a business problem. It's essential to frame the problem so that it can be attacked, wrestled and ultimately solved.

Problem Statements

Defining a problem statement helps you focus and prioritise your challenges in such a way that they can be readily solved using our innovative 'distributed R&D processes'.

PROBLEM STATEMENTS

THE PROBLEM

Describe the problem in 30 words or less. The briefer, the better.

THE OPPORTUNITY

Explain the opportunity that comes with solving the problem. Paint a word picture to evoke the "desired state" outcome once the problem is solved.

EXPERTISE AND KNOW-HOW

What expertise and knowledge resides within the organisation that can be leveraged to solve the challenge? Who knows it and how can you access it?

INSIGHT

What data, technology and analysis is available to yield an actionable insight?

CONTEXT

What is the context and why is it important to the company and industry? Is it indicative of a broader challenge? Who is attacking similar problems in parallel industries?

A problem statement should have the following elements:

➔   The problem
➔   The opportunity
➔   Expertise and
      know-how
➔   Insight
➔   Context

PROBLEMS WORTH SOLVING AND HACKATHONS

Once you have a series of problems worth solving, you can mobilise your teams or innovation communities to solve them.

This is 'distributed R&D' – hackathons, design jams and pitch fests. The short, sharp and focused events produce minimum viable products and services that can then be incubated through our 'Innovation Garage' process.

Problem Statements

Defining a problem statement helps you focus and prioritise your challenges in such a way that they can be readily solved using our innovative 'distributed R&D processes'.

The vast majority of hackathons are ideas based. Over a concentrated period of time – often 24-48 hours – teams work collaboratively to produce working demonstrations of new technologies or services designed to streamline existing practices.

And while this can be a great learning experience for participants, it often results in plenty of outputs but not outcomes.

Our approach is to focus on outcomes over outputs. And that means articulating problems worth solving. This way participants in a hackathon style event will have the focus, support and insight that enables them to produce a potentially commercial outcome.

This has a win-win element to it. For the participants, there is the potential for future work, contracts or commercial business. And for the organisation hosting the hackathon, it solves problems that have not yet been solved in any other way.

TAKING IT FURTHER

These rapid prototyping exercises are great as an icebreaker activity at workshops and hackathons.

For more specific design thinking and design sprint support, check out our workshop series.

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RAPID PROTOTYPING EXERCISES
DISRUPTOR'S HANDBOOK #43

5 DAY SOCIAL SPRINT
DISRUPTOR'S HANDBOOK #41

CREATIVE AND DESIGN THINKING
DISRUPTOR'S HANDBOOK #45

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"*Helping you unlock innovation for changing times.*"