



PIONEER+ Workshop Series: Consulting on the Start-up Entrepreneurship Process

Market Opportunity Navigator

1. Introduction Market Opportunity Navigator

2. Step 1: Market Opportunity Set

3. Step 2: Attractiveness Map

4. Step 3: Agile Focus Dashboard

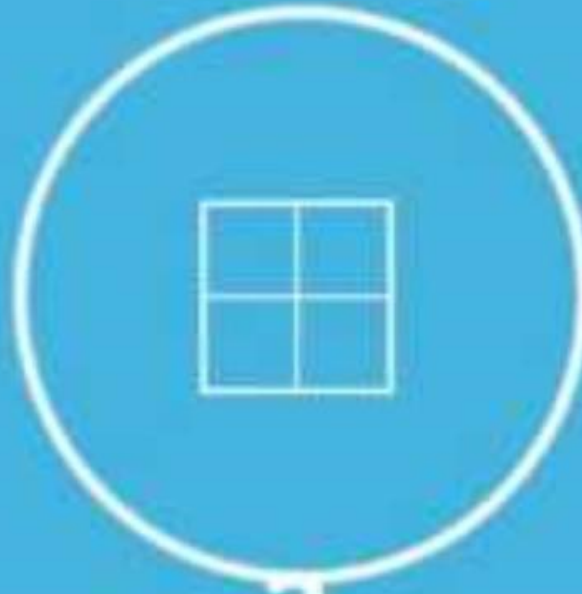
5. Example: Flyability

6. Task

**Which market do you choose for a technology
that you have developed?**



1



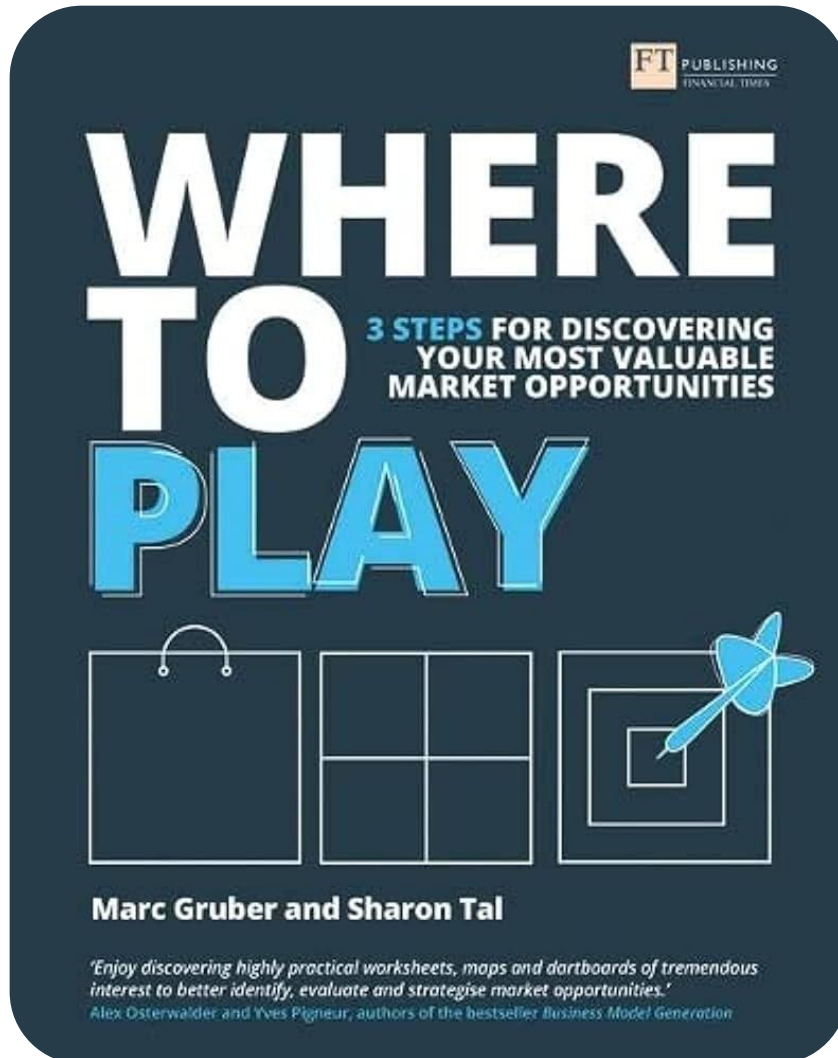
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<https://www.youtube.com/watch?v=aUZimZ83liQ>

Market Opportunity Navigator



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Look Before You Leap: Market Opportunity Identification in Emerging Technology Firms

Marc Gruber

College of Management of Technology, Ecole Polytechnique Fédérale de Lausanne,
CH-1015 Lausanne, Switzerland, marc.gruber@epfl.ch

Ian C. MacMillan, James D. Thompson

The Wharton School, University of Pennsylvania, Philadelphia, Pennsylvania 19104
{macmilli@wharton.upenn.edu, jamesth@wharton.upenn.edu}

Entrepreneurs play a fundamental role in bringing new technologies to market. Because technologies are often configurable to serve a variety of different markets, it is possible for entrepreneurs to identify multiple market opportunities *prior* to the first market entry of their emerging firms, and if they elect to do so, to therefore have a choice of which market to enter first. The empirical results presented in this paper offer three new insights regarding this important early-stage choice in new firm creation. First, they reveal that serial entrepreneurs have learned through prior start-up experience to generate a “choice set” of alternative market opportunities before deciding which one to pursue in their new firm creation. Second, the analysis indicates that entrepreneurs who identify a “choice set” of market opportunities prior to first entry derive performance benefits by doing so. Third, the positive relationship between the number of market opportunities identified prior to first entry and new firm performance is nonlinear and subject to decreasing marginal return. The research literature has yet to acknowledge the notion of multiple opportunity identification prior to entry, and the related idea of selecting the most favorable market opportunity for the creation of a new technology firm.

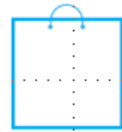
Key words: market opportunities; serial entrepreneurs; technological commercialization; new firm creation

History: Accepted by Scott Shane, technological innovation, product development, and entrepreneurship; received June 3, 2007. This paper was with the authors 1 month and 1 week for 1 revision. Published online in *Articles in Advance* July 10, 2008.

Market Opportunity Navigator

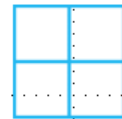
The Market Opportunity Navigator

An easy-to-use business tool that addresses these 3 questions:



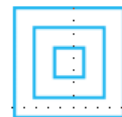
Market Opportunity Set

Assessing the venture's unique abilities and identifying valuable market opportunities stemming from these abilities



Attractiveness Map

Evaluating potential market opportunities in a comprehensive manner, to reveal the most attractive options

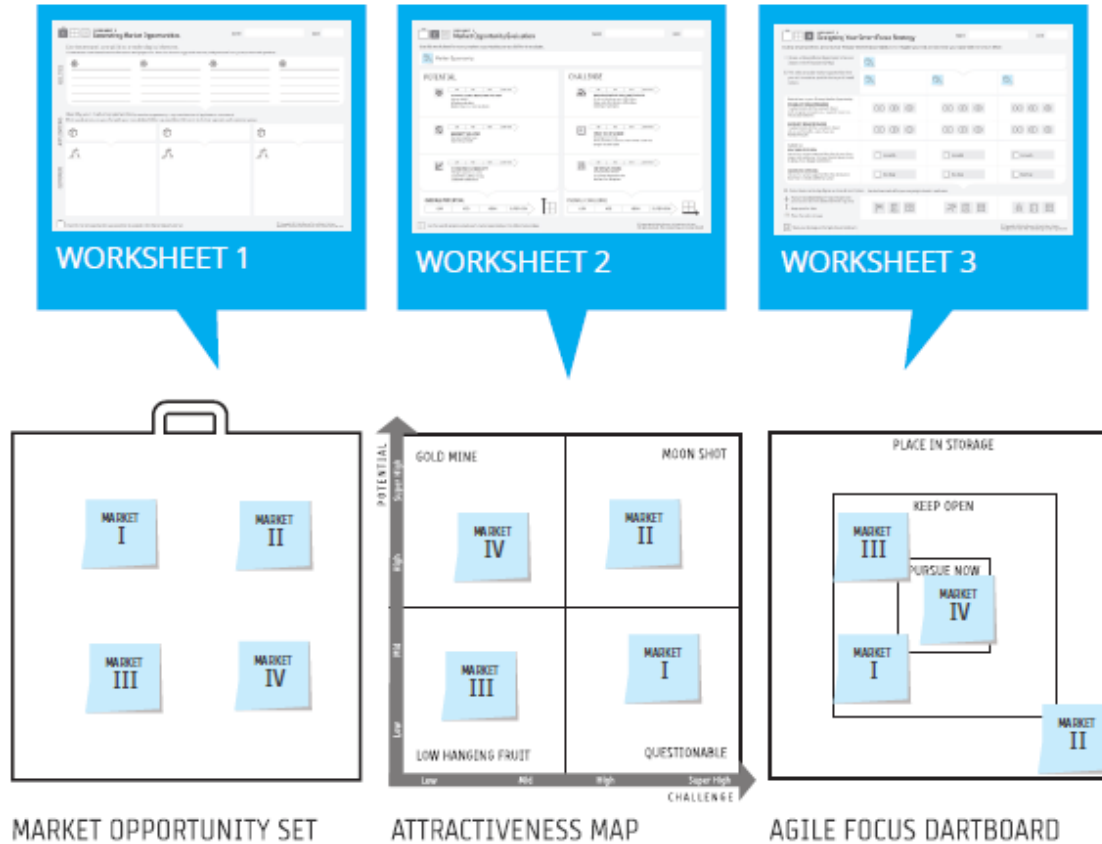


Agile Focus Strategy

Building a smart portfolio around the chosen market opportunity, in order to consciously avoid lock-in and remain agile

Working with the Market Opportunity Navigator

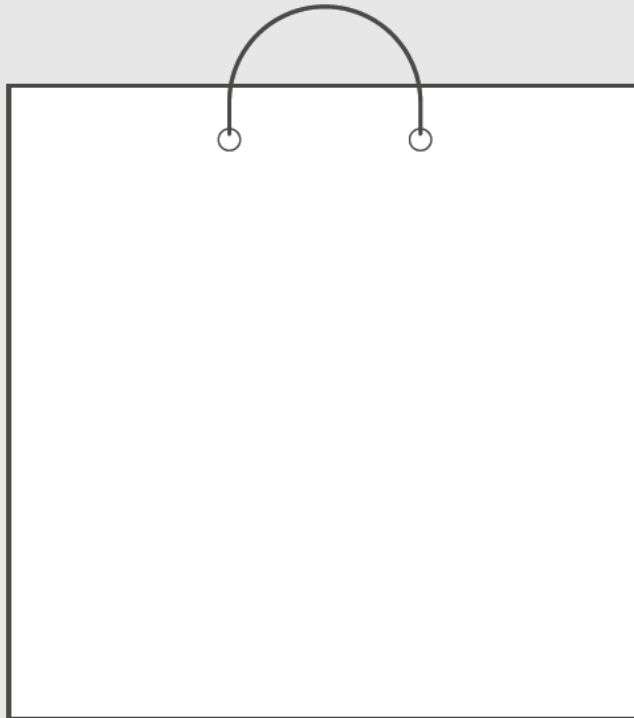
- 3 dedicated worksheets that lead to the 3 important outcomes:



THE MARKET OPPORTUNITY NAVIGATOR

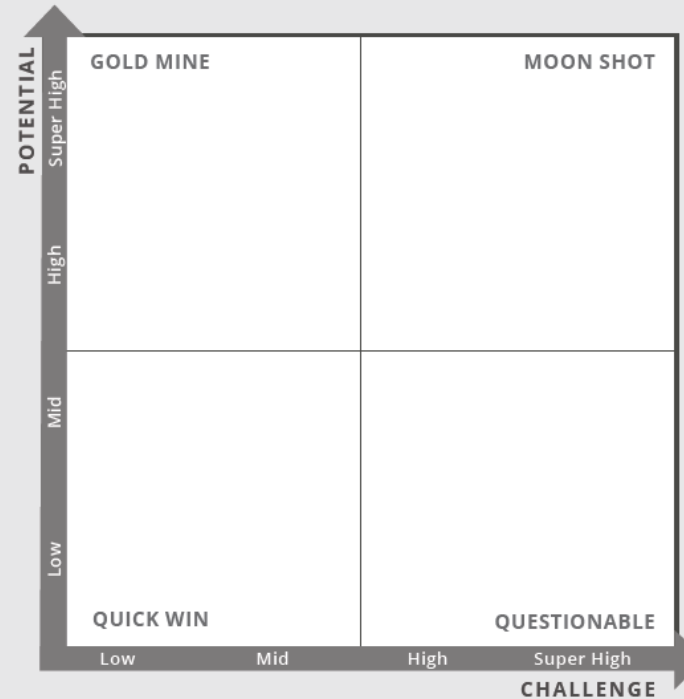
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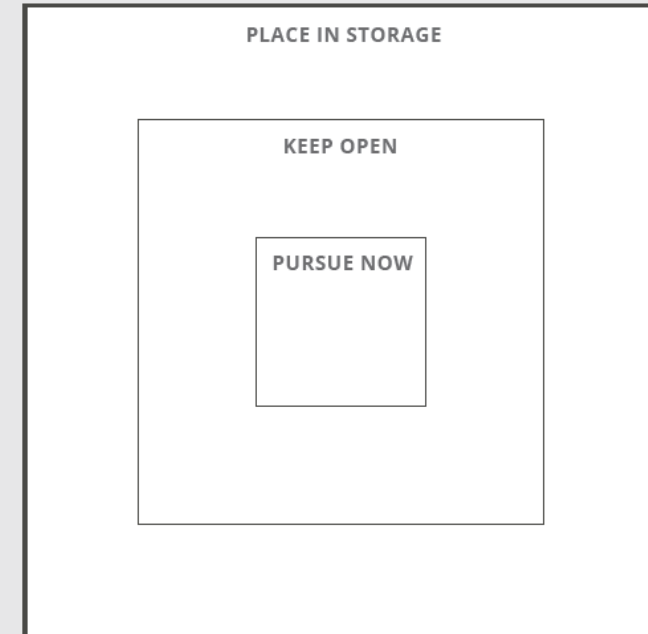
MARKET OPPORTUNITY SET

- 1 Use Worksheet 1 to identify potential market opportunities, and place them in the set



ATTRACTIVENESS MAP

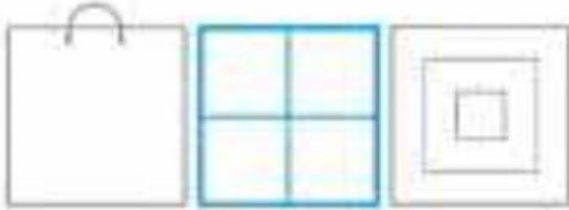
- 2 Use Worksheet 2 to evaluate the attractiveness of each market opportunity, and place each one on the map



AGILE FOCUS DARTBOARD

- 3 Use Worksheet 3 to design your Agile Focus strategy, and mark it on the dartboard

Step 2: Attractiveness Map



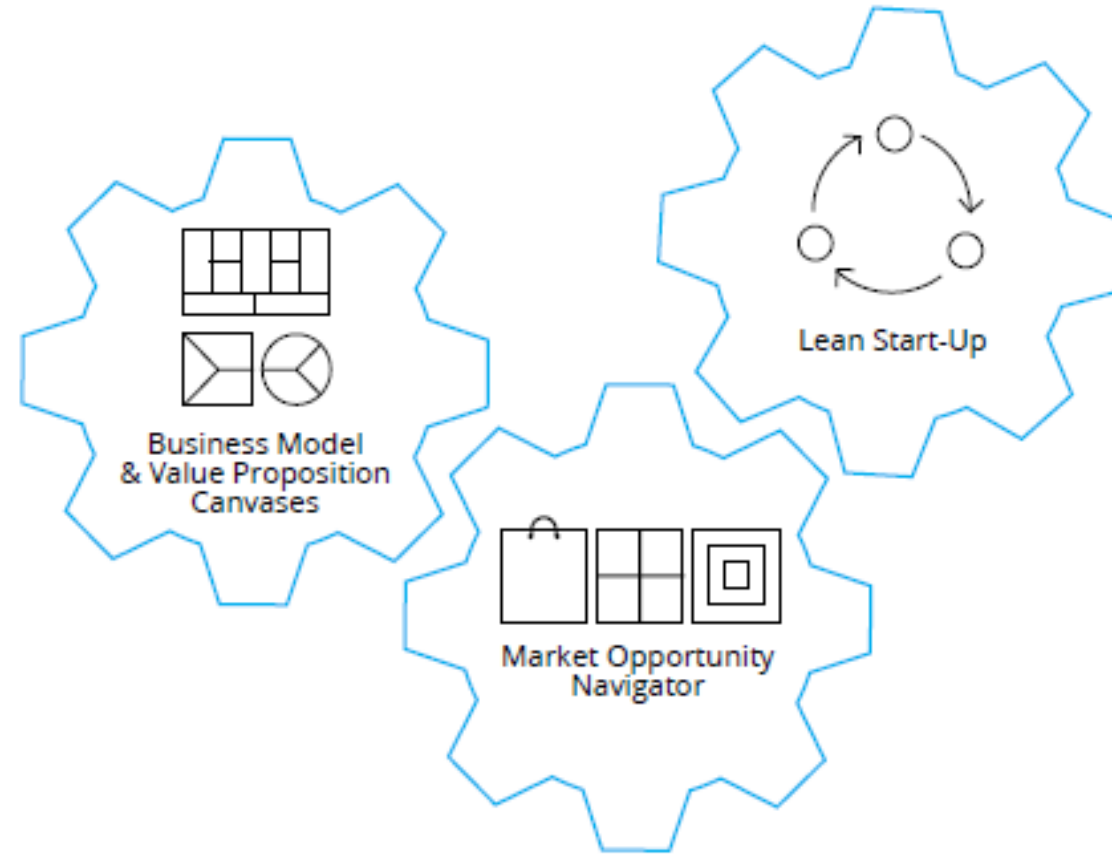
Visually depict the evaluation of your market opportunities - based on their Potential and their Challenge - so you can better grasp their upsides and downsides, and compare them with each other.

Make an informed choice that relies less on intuition and suffers less from biases.



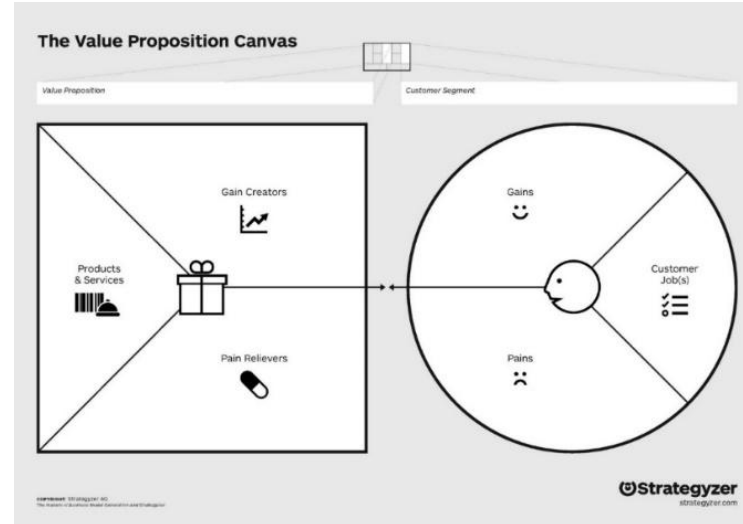
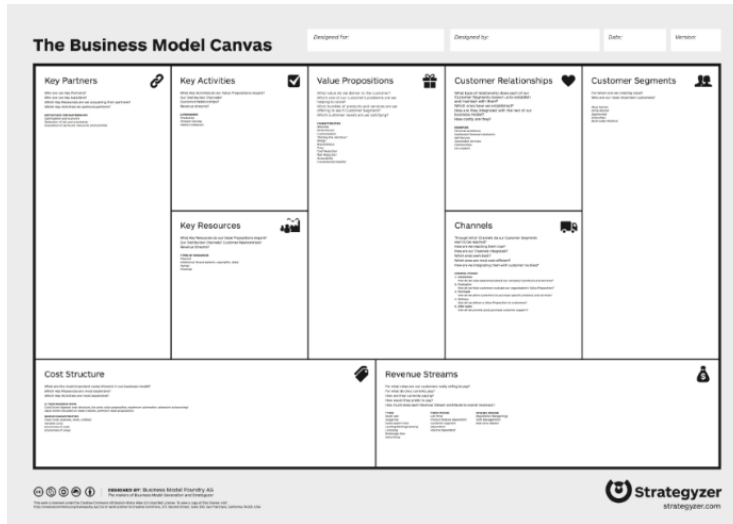
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Using the Navigator with other business tools



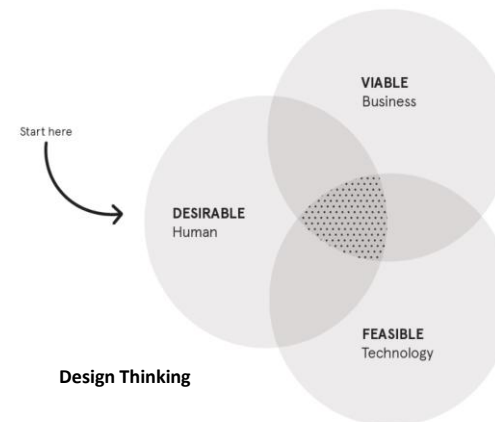
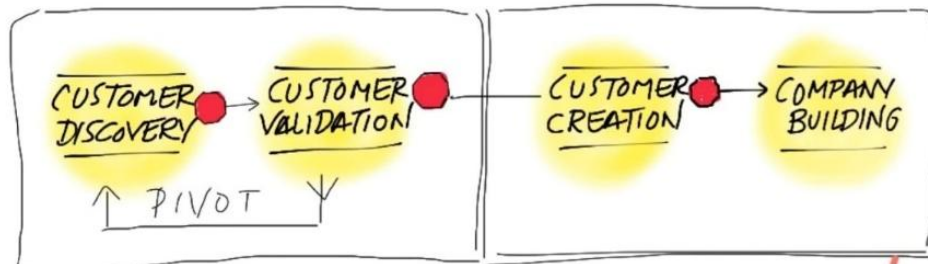
A powerful "Suite of Tools" that clearly lays out the planning and validation processes, as you strive to find your promising path!

The search for a scalable business model

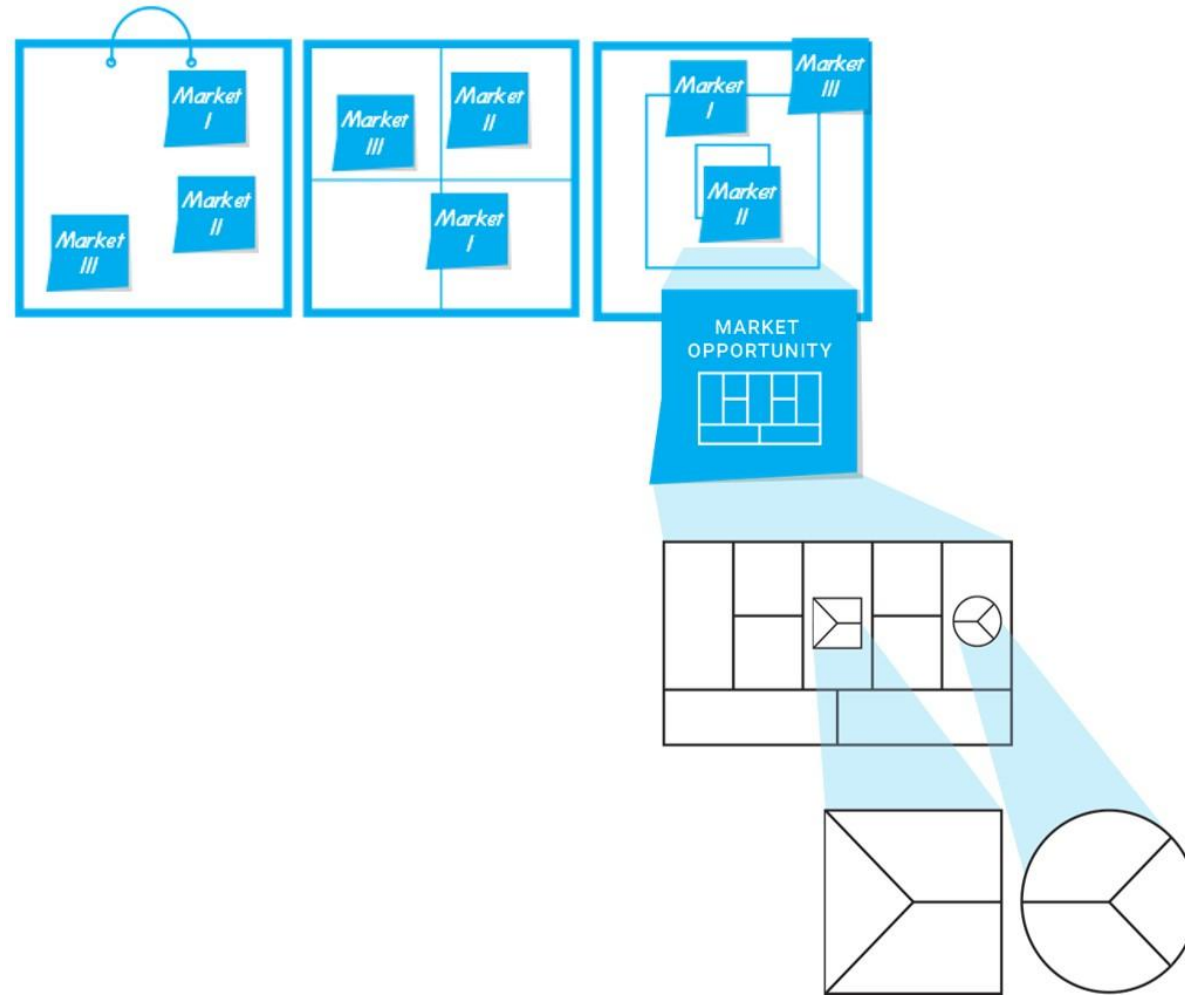


These tools tell you *how to rapidly find product/market fit inside a market.*

However, they don't help you figure out *where to start the search* for your new business.



How the business tools work together



Three key questions for choosing where to play

I

- Which market opportunities exist for us?

II

- What are the most attractive market opportunities for us?

III

- What market opportunities should we focus on?

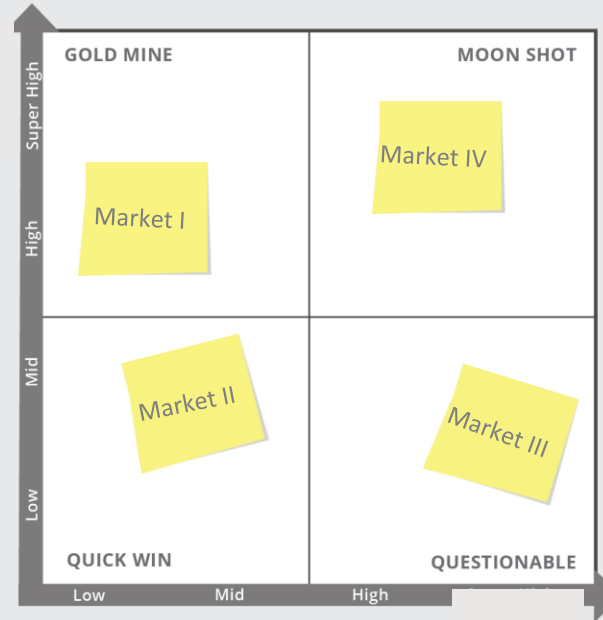
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NAME DATE



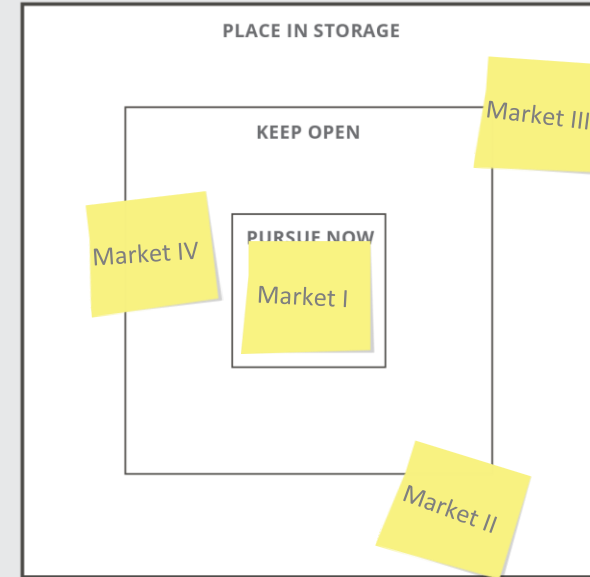
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AGILE FOCUS DARTBOARD

- 3 Use Worksheet 3 to design your Agile Focus strategy, and mark it on the dartboard



market opportunity = any combination of application + customer
Use sticky-notes™ to represent each market opportunity

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-

Step 1: Market Opportunity Set



- Having options at hand not only gives you the power of choosing, but also the power of staying agile.

Options are a real asset for your firm!



Generating your Market Opportunity Set

Step 1

Decouple your unique abilities or core technological elements from any (envisioned) product. List what these elements can accomplish (their functions) and their main properties.

This exercise is important for developing your **cognitive flexibility**

Step 2

Search for different possible applications that these unique abilities can establish, and who may need these different applications.

Be open, think unconstrained, search broadly, generate variety



1 Use Worksheet 1 to identify potential market opportunities, and place them in the set



1 WORKSHEET 1 GENERATE YOUR MARKET OPPORTUNITY SET

List the venture's core abilities or technological elements

Characterize them based on their functions and properties. Describe them in a general manner, independent from your (envisioned) product.

ABILITIES







			
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Resource/capabilities-based view

Identify your market opportunities

Which applications can you offer with your core abilities? Which customers may need them? Zoom in to further segment each customer group.

APPLICATIONS

Market-/customer-based view

CUSTOMERS

 application +  customer =  market opportunity

Place the market opportunities that you would like to evaluate in the Market Opportunity Set.





application

+



customer

=



market opportunity



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Step 2: Attractiveness Map



Systematically evaluate and visually depict the assessment of your market opportunities, so you can better grasp their upsides and downsides, compare them and prioritize.

Combine the 1000 pieces of your puzzle into one clear image

Evaluating market opportunity attractiveness

An attractive market opportunity is one that will likely produce significant value for you and that poses relatively few challenges in capturing that value!

- **Potential**- how BIG is this opportunity? Is it at all worth pursuing? And if so- how much value can we create if we choose this path?
- **Challenge**- which obstacles lie ahead of us if we decide to pursue this option? What are our main risks? How difficult will it be to overcome them and conquer this opportunity?

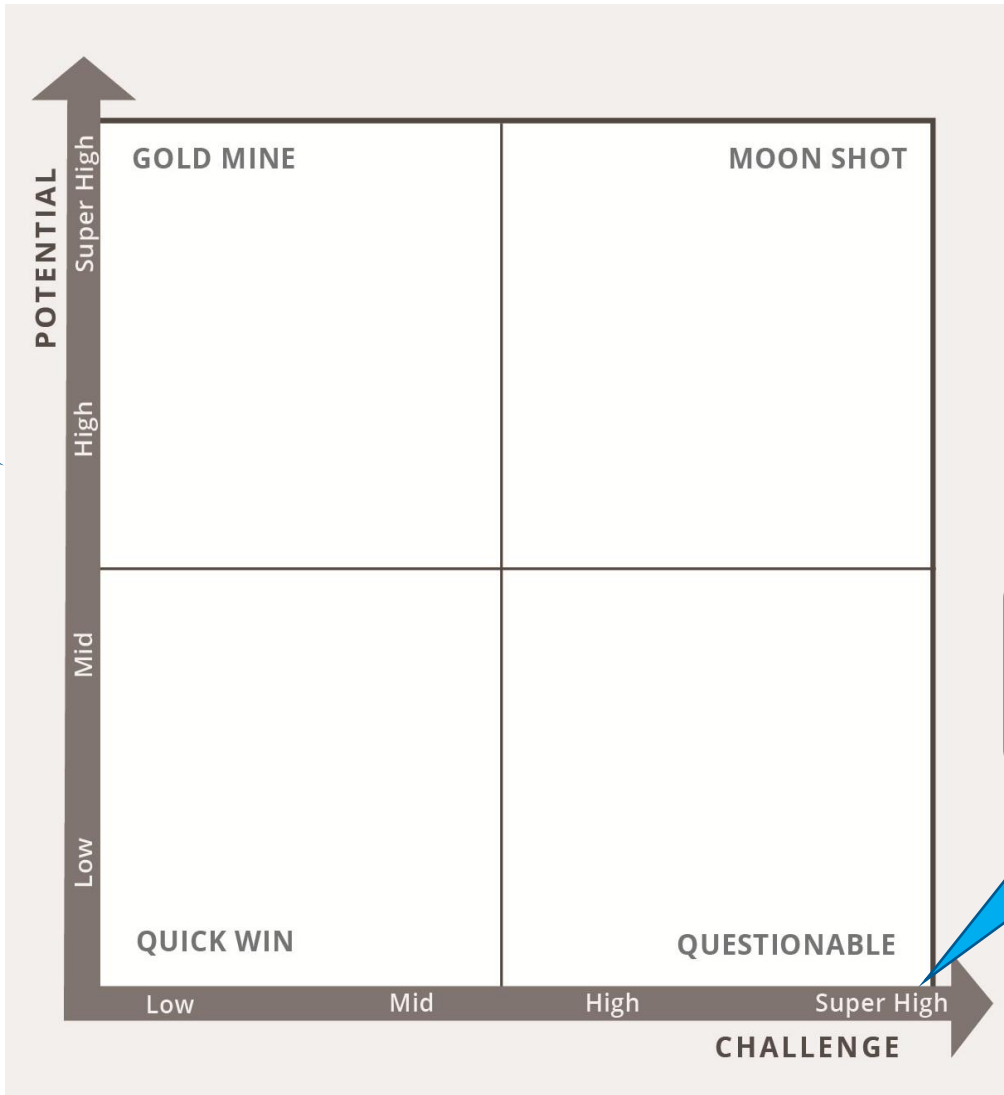


Use Worksheet 2 to evaluate each market opportunity, and locate it on the Attractiveness Map



What is an attractive market opportunity?

What shapes the potential of an opportunity?



What shapes the challenge of an opportunity?



EVALUATE MARKET OPPORTUNITY ATTRACTIVENESS

NAME

DATE

Use this worksheet for every market opportunity you would like to evaluate.



Market Opportunity:

POTENTIAL



COMPELLING REASON TO BUY

- Unmet need
- Effective solution
- Better than current solutions



MARKET VOLUME

- Current market size
- Expected growth



ECONOMIC VIABILITY

- Margins (value vs. cost)
- Customers' ability to pay
- Customer stickiness

CHALLENGE



IMPLEMENTATION OBSTACLES

- Product development difficulties
- Sales and distribution difficulties
- Funding challenges



TIME TO REVENUE

- Development time
- Time between product and market readiness
- Length of sale cycle



EXTERNAL RISKS

- Competitive threat
- 3rd party dependencies
- Barriers to adoption

OVERALL POTENTIAL



OVERALL CHALLENGE



Use the overall ratings to situate each market opportunity on the Attractiveness Map.



Remember: this is not hard science

Scoring your market opportunities is both *a learning* and *a validation process*.

Generate your key assumptions and set your key action items for validating them.

The overall goal is not scoring- in itself, but understanding the main upsides and downsides of your options!

Where to impact – Worksheet on Social/Environmental Impact

- **1. Problem Severity:** Are you trying to address an important and painful problem? To estimate this factor, you will need to understand if this is really an unresolved social/environmental concern, does it bear significant detrimental consequences, and how big is this problem.
- **2. Pertinent solution:** Is your solution suited to address social/environmental challenges and to be adopted by your beneficiaries? To estimate this factor, you will need to understand how effective and efficient is your solution, is it better than existing alternatives, and does it avoid secondary harm or negative effects.
- **3. Impact reach:** Can you achieve a broad & long-lasting impact? To estimate this factor, you will need to understand how easy it will be to measure and report impact, how enduring and how scalable is your solution.
- **4. Rating overall impact:** Once you consider these 3 factors, you can estimate the overall social/environmental impact of the market opportunities.

Now, you can add the impact level by **drawing hearts on each sticky note** on the attractiveness map.



EVALUATE MARKET OPPORTUNITY ATTRACTIVENESS

NAME

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Market Opportunity:

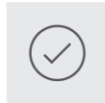
SOCIAL/ENVIRONMENTAL IMPACT



PROBLEM SEVERITY

Unresolved social/environmental concern
Significant detrimental consequences
Extent of the problem (affected people/areas)

LOW	MID	HIGH	SUPER HIGH
-----	-----	------	------------



PERTINENT SOLUTION

Effective & efficient (simple, reliable, self-sufficient)
Better than existing alternatives
Avoids secondary harm/negative effects

LOW	MID	HIGH	SUPER HIGH
-----	-----	------	------------



IMPACT REACH

Ease of measuring and reporting impact
Enduring effect
Possibility to scale solution

LOW	MID	HIGH	SUPER HIGH
-----	-----	------	------------

OVERALL IMPACT

♥	♥ ♥	♥ ♥ ♥	♥ ♥ ♥ ♥
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Mark the overall impact rating on the relevant sticky-note in the Attractiveness Map



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Step 3: Agile Focus Dartboard



The **Agile Focus Strategy** defines the market opportunity that you will pursue now, and the opportunities that you will keep open for backup or future growth.

Bake agility into the DNA of your venture



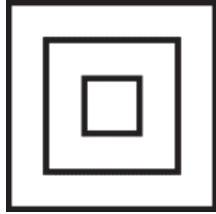
Designing your Agile Focus Strategy

- 1) Choose your **Primary Market Opportunity**
- 2) Find potential **Backup** and **Growth Options**, based on their attractiveness and relatedness to your Primary Market Opportunity.
- 3) Keep at least one Backup Option and one Growth Option open.

A **Backup Option** allows you to change direction over time.
It answers the question: **If we are *not* successful- what shall we do next?**

A **Growth Option** allows you to create additional value over time.
It answers the question: **If we are *successful*- what shall we do next?**

 3 Use Worksheet 3 to design your Agile Focus strategy, and mark it on the dashboard



Having foresight on your backup and growth options has significant implications for how you build and design your venture. It influences the way you:

- Develop your technology
- File your patents
- Recruit your employees
- Choose your stakeholders
- Build your company culture
- Pick your brand name
- Design your marketing materials





DESIGN YOUR AGILE FOCUS STRATEGY

NAME

DATE

Build a smart portfolio around your Primary Market Opportunity to mitigate your risk and increase your value.

- I. Choose a Primary Market Opportunity to focus on (based on the Attractiveness Map).



- II. Pick other attractive market opportunities from your set to examine possible Backup and Growth Options.



Relatedness to your Primary Market Opportunity:

PRODUCT RELATEDNESS

To what extent do the products share: technological competences, required resources, necessary networks



MARKET RELATEDNESS

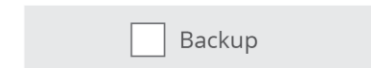
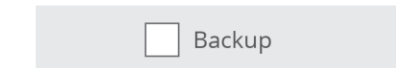
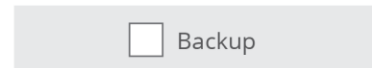
To what extent do the customers share: values and benefits, sales channels, word-of-mouth



Suitable as:

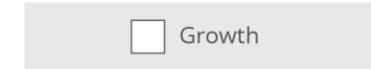
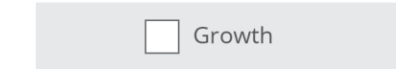
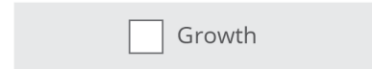
BACKUP OPTION

Attractive market opportunities that do not share major risks with your Primary Market Opportunity to allow for a change in direction



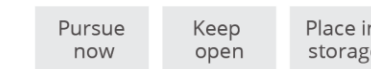
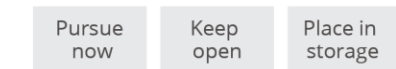
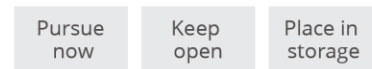
GROWTH OPTION

Attractive market opportunities that allow your business to create additional value



- III. Design your Agile Focus Strategy:

- Keep at least one Backup and one Growth Option open
- Decide if any option is worth pursuing now
- Place the rest in storage



Mark your strategy on the Agile Focus Dartboard.



Your main take-aways

- ✓ Market opportunity choice is critical- look before you leap!
- ✓ Don't focus too quickly, take your time to make a careful decision
- ✓ Agile focus is not merely a strategy, it's a mind-set: develop your cognitive flexibility and be open to adaptation and change
- ✓ A 'perfect' market opportunity rarely exists. Shape your opportunities to become as attractive as possible

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Safe drones for operating indoors, in complex and confined spaces, and in contact with people



<https://www.flyability.com/elios/>

Where should they start building their business?

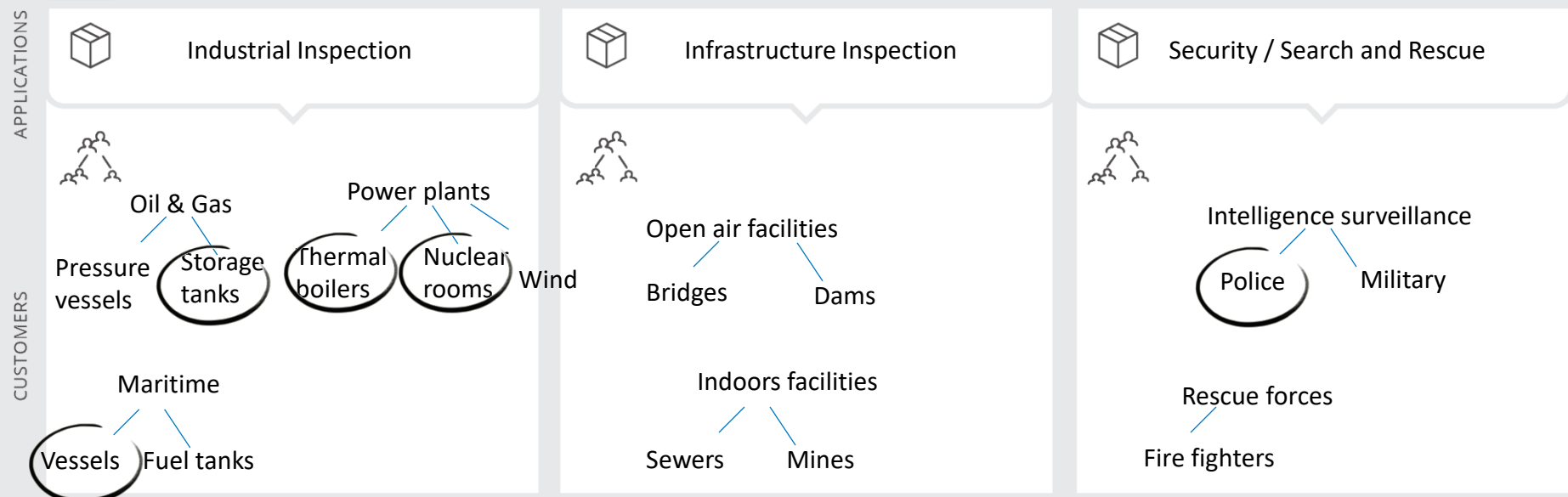
List the venture's core abilities or technological elements

Characterize them based on their functions and properties. Describe them in a general manner, independent from your (envisioned) product.

	Unique Accessibility	Aviation Abilities	Imagery System	
ABILITIES	Collision tolerance (humans/ walls)	On-site video piloting	HD recording	
	Decoupled & light protection cage	Dark/ smoked/ dusty environments	Thermal recording	
	Roles on any surface	Limited flight duration	Real time video streaming	
	Operates in a range of temperatures & pressures		Remotely adjustable	
			Post mission analysis	

Identify your market opportunities

Which applications can you offer with your core abilities? Which customers may need them? Zoom in to further segment each customer group.



application + customer = market opportunity

Place the market opportunities that you would like to evaluate in the Market Opportunity Set.

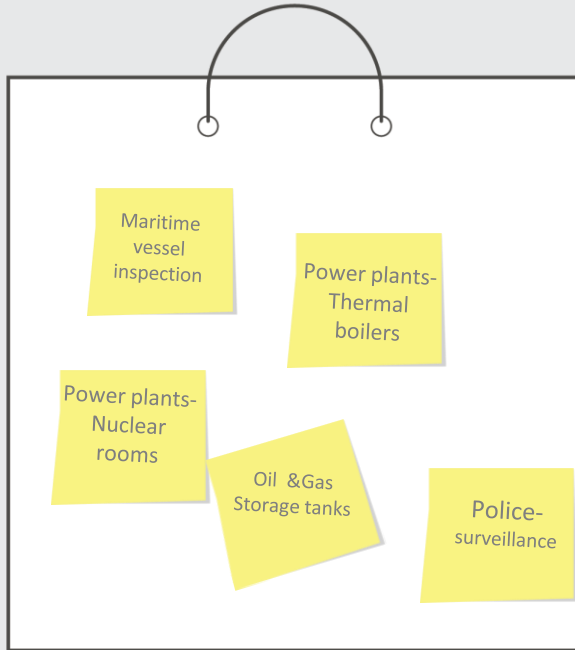
THE MARKET OPPORTUNITY NAVIGATOR

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FlyAbility

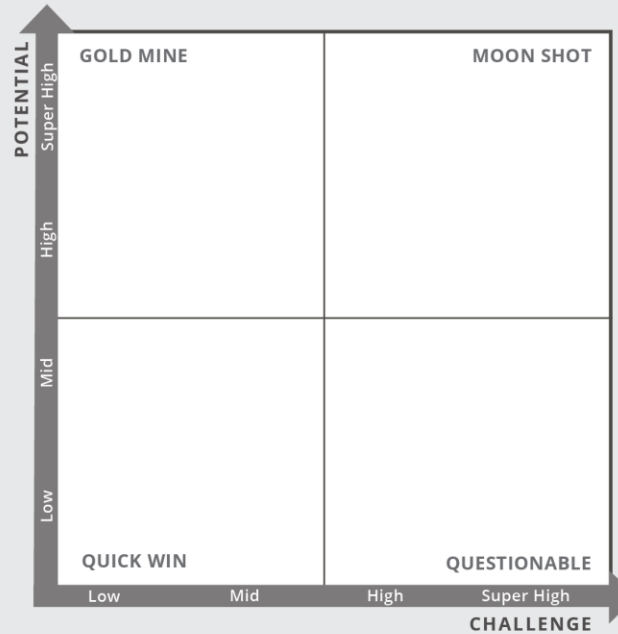
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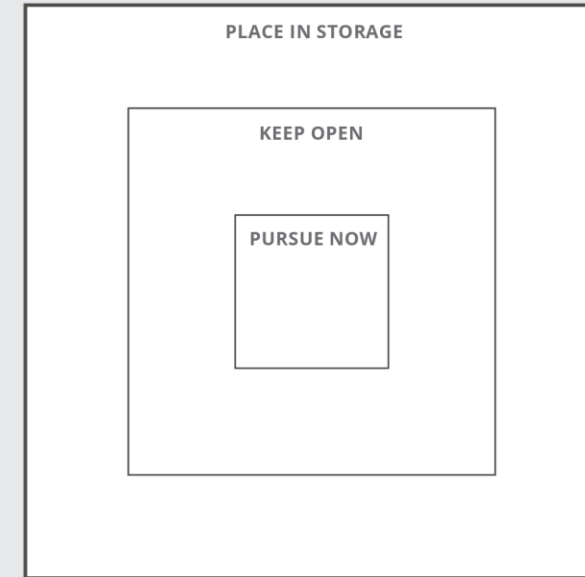
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EVALUATE MARKET OPPORTUNITY ATTRACTIVENESS

NAME

FlyAbility

DATE

2015

Use this worksheet for every market opportunity you would like to evaluate.



Market Opportunity: Power plants – thermal boilers

POTENTIAL



COMPELLING REASON TO BUY

- Unmet need
- Effective solution
- Better than current solutions



MARKET VOLUME

- Current market size
- Expected growth



ECONOMIC VIABILITY

- Margins (value vs. cost)
- Customers' ability to pay
- Customer stickiness

CHALLENGE



IMPLEMENTATION OBSTACLES

- Product development difficulties
- Sales and distribution difficulties
- Funding challenges



TIME TO REVENUE

- Development time
- Time between product and market readiness
- Length of sale cycle



EXTERNAL RISKS

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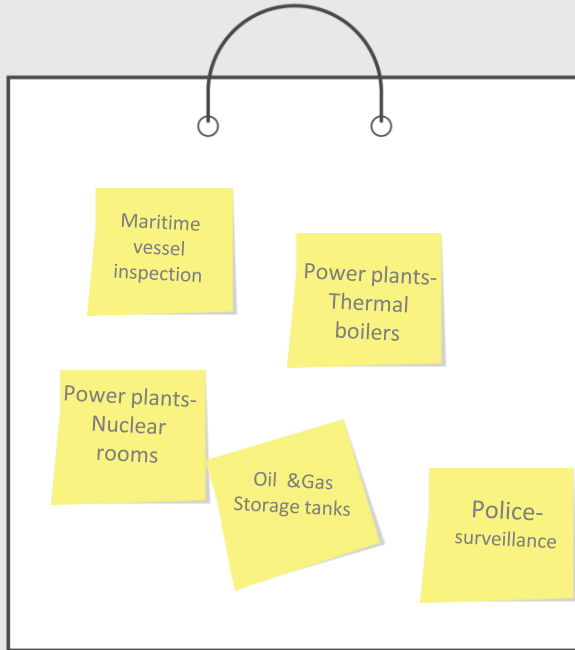
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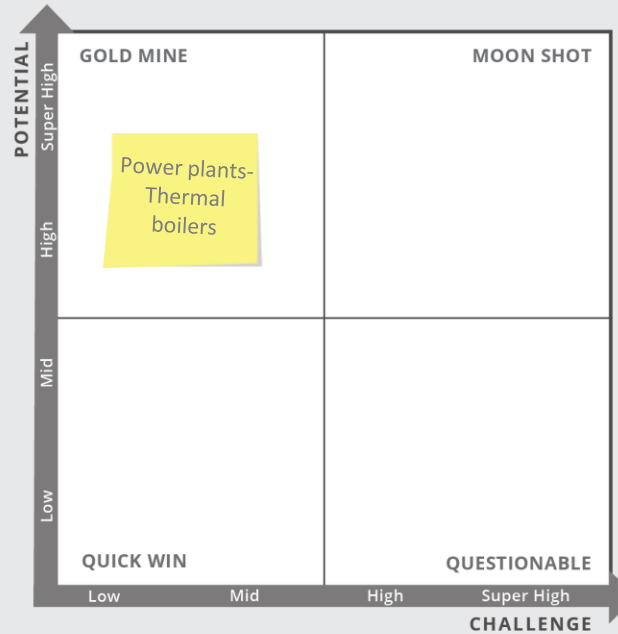
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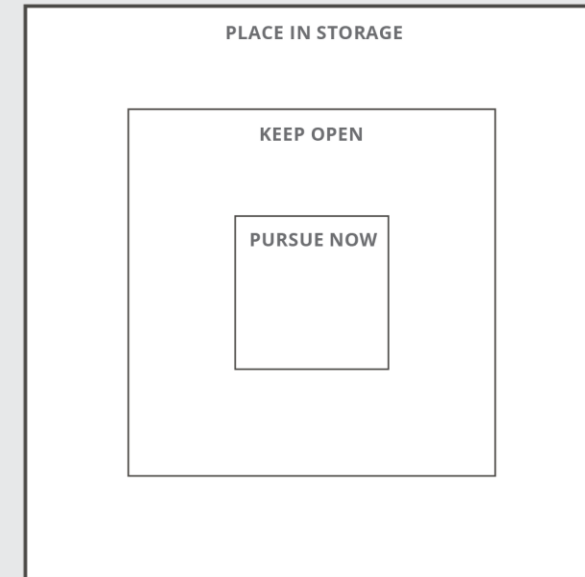
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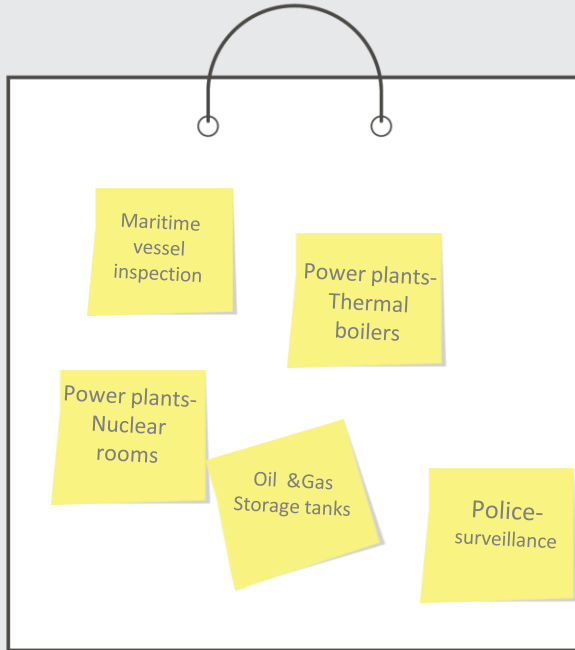
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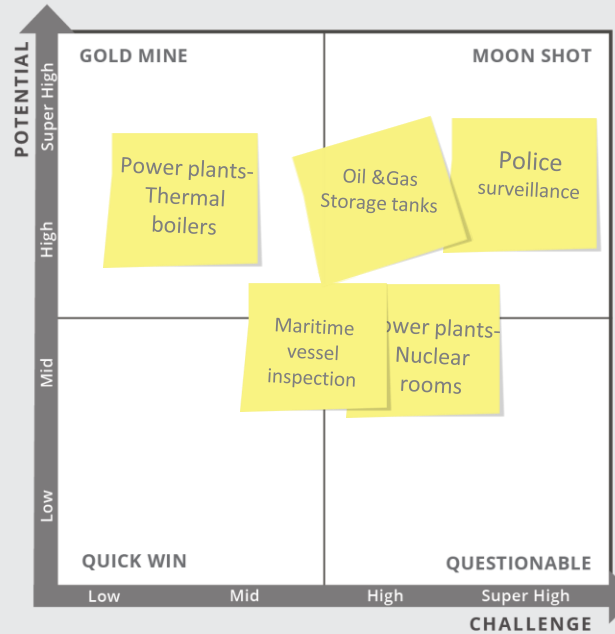
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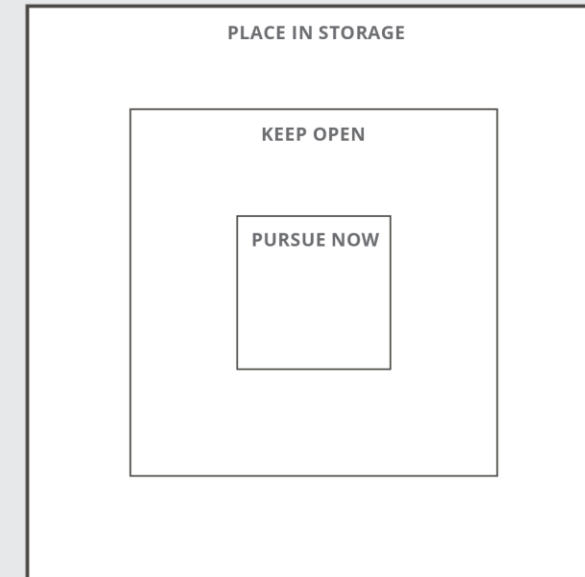
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I. Choose a Primary Market Opportunity to focus on (based on the Attractiveness Map).



Power plants – thermal boilers

II. Pick other attractive market opportunities from your set to examine possible Backup and Growth Options.



Oil & Gas Storage tanks



Maritime vessel inspection



Police surveillance

Relatedness to your Primary Market Opportunity:

PRODUCT RELATEDNESS

To what extent do the products share: technological competences, required resources, necessary networks



MARKET RELATEDNESS

To what extent do the customers share: values and benefits, sales channels, word-of-mouth



Suitable as:

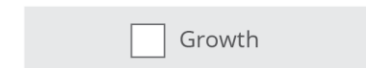
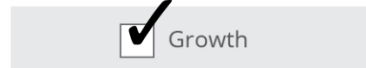
BACKUP OPTION

Attractive market opportunities that do not share major risks with your Primary Market Opportunity to allow for a change in direction



GROWTH OPTION

Attractive market opportunities that allow your business to create additional value



III. Design your Agile Focus Strategy:

- Keep at least one Backup and one Growth Option open
- Decide if any option is worth pursuing now
- Place the rest in storage



Mark your strategy on the Agile Focus Dartboard.



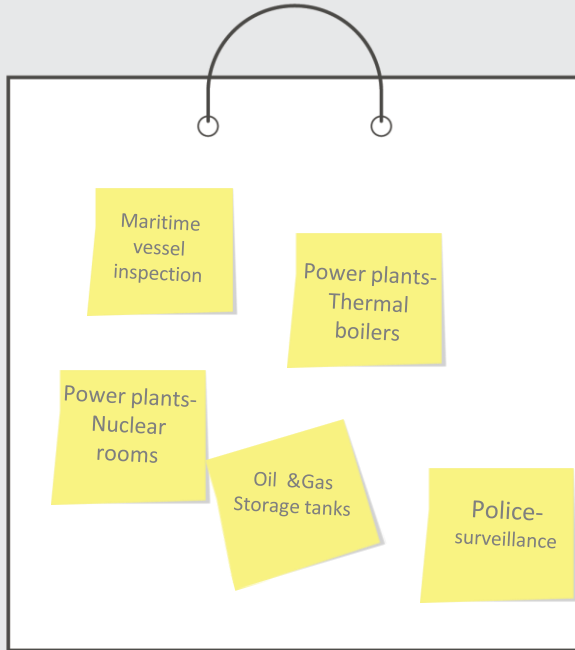
THE MARKET OPPORTUNITY NAVIGATOR

NAME

FlyAbility

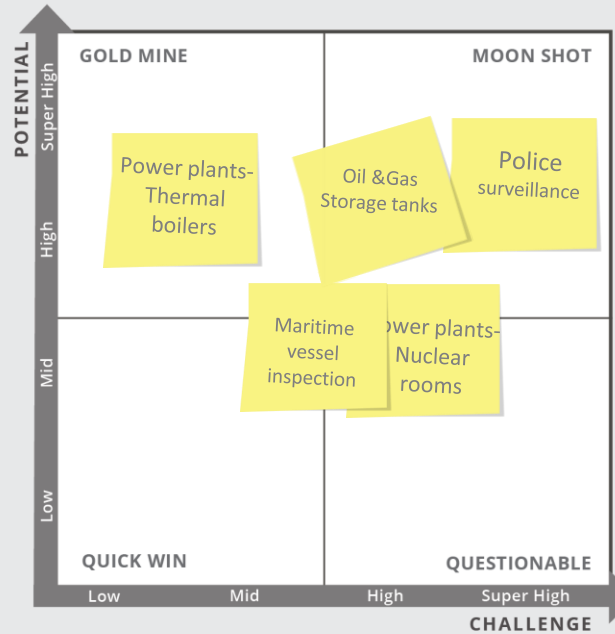
DATE

2015



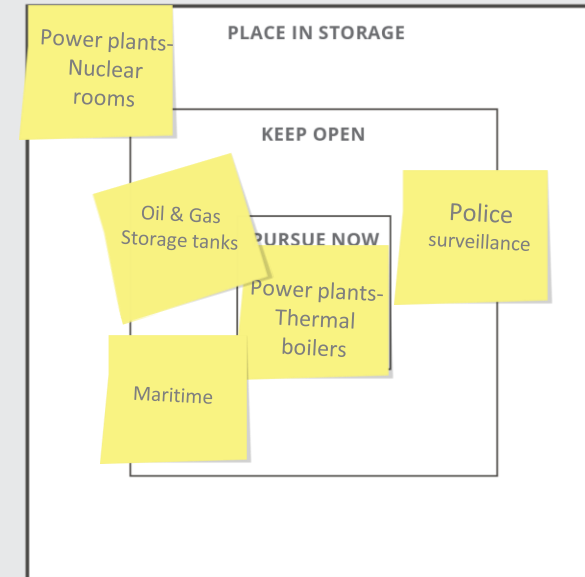
MARKET OPPORTUNITY SET

- 1 Use Worksheet 1 to identify potential market opportunities, and place them in the set



ATTRACTIVENESS MAP

- 2 Use Worksheet 2 to evaluate the attractiveness of each market opportunity, and place each one on the map



AGILE FOCUS DARTBOARD

- 3 Use Worksheet 3 to design your Agile Focus strategy, and mark it on the dartboard



market opportunity = any combination of application + customer
Use sticky-notes™ to represent each market opportunity

1. Introduction Market Opportunity Navigator
 2. Step 1: Market Opportunity Set
 3. Step 2: Attractiveness Map
 4. Step 3: Agile Focus Dashboard
 5. Example: Flyability
 - 6. Task**
-

Task

- Now try to fill out the Market Opportunity Navigator for a firm in your technology/industry
- Use the prepared worksheets and sticky notes
- Shortly present your results to the other groups