

Market Opportunity Analysis & Beachhead

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Stage 1 Foundational Webinars and Office Hours

- **1/17**- 'Embracing a Commercial Mindset & Program Overview' at 11 am (PT)
 - **Ray Owen & Ellen Chang**
 - Office hour on 1/23 at 9 am (PT)
 - **1/24** - 'Vision & Value Proposition: Establishing the Foundations of Commercialization' at 11 am
 - **Todd Basche & Roxanne Aragon**
 - Office hour on 1/30 at 9 am (PT)
 - **2/7** - '*Commercial Market Entry Strategies: Market Opportunity Analysis & Beachhead*' at 11 am
 - **Anil Kale & Serdar Turac**
 - Office hour on 2/13 at 9 am (PT)
 - **2/14** - 'Commercialization Funding Strategies' at 11 am (PT)
 - **Maren Cattonar & Mark Peterson**
 - Office hour on 2/20 at 9 am (PT)
- 2/23 - Applications Due
 - 3/15 - Notify Selected Companies
 - 4/2 - Stage 2 Kick-off (Hybrid Event)

Your Situation

- You have technology that the Navy finds interesting enough to invest in
- You believe/hope that there is a market for your technology outside of the Navy, but don't necessarily know how to find it
- Unless you plan to sell engineering services, you understand that servicing commercial customers requires a “product” rather than a “project” mindset (very different from servicing government customers)
- You understand that going commercial can have enormous financial upside, but the scale of the upside and how you capture it is very different if you chose to be a startup rather than a small business

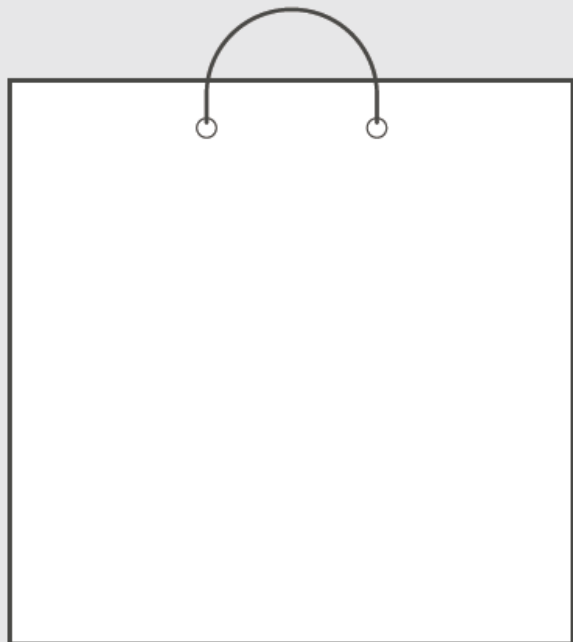
Today's Focus: Opportunity Analysis

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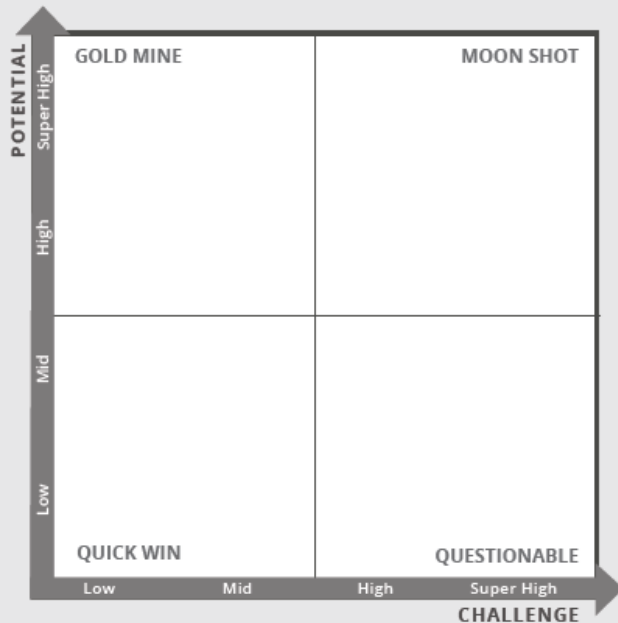
Today's Focus: Opportunity Prioritization

- Your product/tech is likely to have multiple use cases across multiple industries – pursuing all of them is a fool's errand
- Conducting a full market analysis for every use case is time consuming and has poor ROI – an opportunity prioritization framework that is light weight yet discerning will focus your efforts and improve ROI
- Once the primary (beach head) market has been identified, a full market analysis, including commercial value proposition and business model canvas, can be used to build the market entry strategy and plan

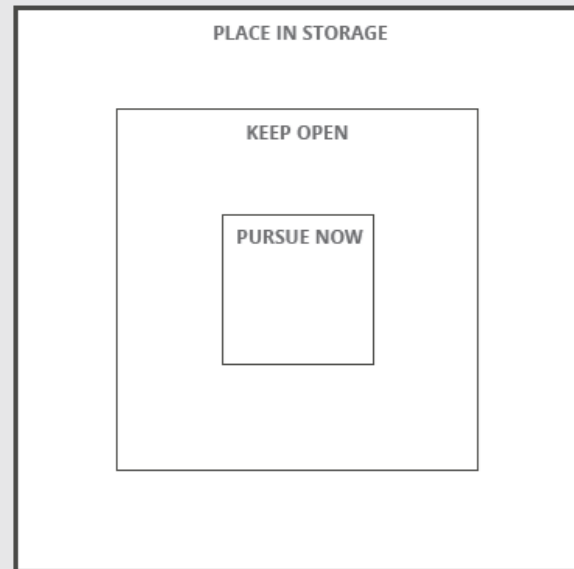
Opportunity Prioritization Framework



Define the Opportunity Set



Map Relative Attractiveness



Identify where to Focus

Step 1: Define the Opportunity Set (Use Cases)

- A. Describe what jobs your product helps get done
 - Describe 3-5 ways how your product could be used in 2 lines or less

- B. Describe might use your product, and why
 - Get specific about what roles, in what industries might use your product, and what value these roles might get out of using your product
 - For Navy tech, defense (e.g. L3, etc.), oil & gas, transportation and logistics, manufacturing and high tech are common target sectors

HackHunter locates WiFi and Bluetooth threats within inches, within minutes, and provides detailed threat data not otherwise available, all in real-time



We are creating a new market category -
Real-time Protocol Analysis



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HackHunter Platform = WiFi Glasses. See all WiFi in real-time

Insight analytics platform

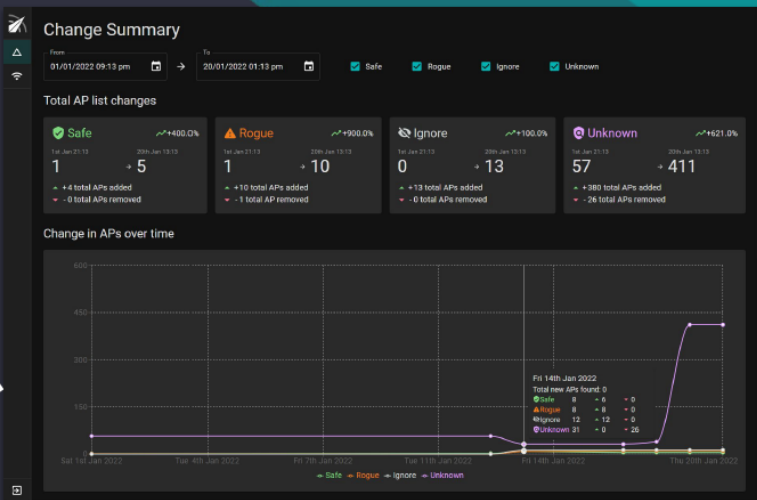
Node - Pursuit
WiFi tracker



Node - Vision continuous
monitoring sensors



Indoor



Node - Stealth on-person
(mobile phone integration)



Outdoor



Describe what jobs your product helps get done

<p>Hackhunter can locate & track wifi signals associated with a specific device, which could be used to track individuals (being served a warrant, as an example).</p>	<p>Hackhunter can detect & track malicious devices that are not supposed to be in an area, preventing unauthorized surveillance and exposure of sensitive data.</p>	<p>Hackhunter can identify anomalous behavior - abnormal communication patterns within an area that could indicate attempts at hacking, espionage, or other risky behavior.</p>
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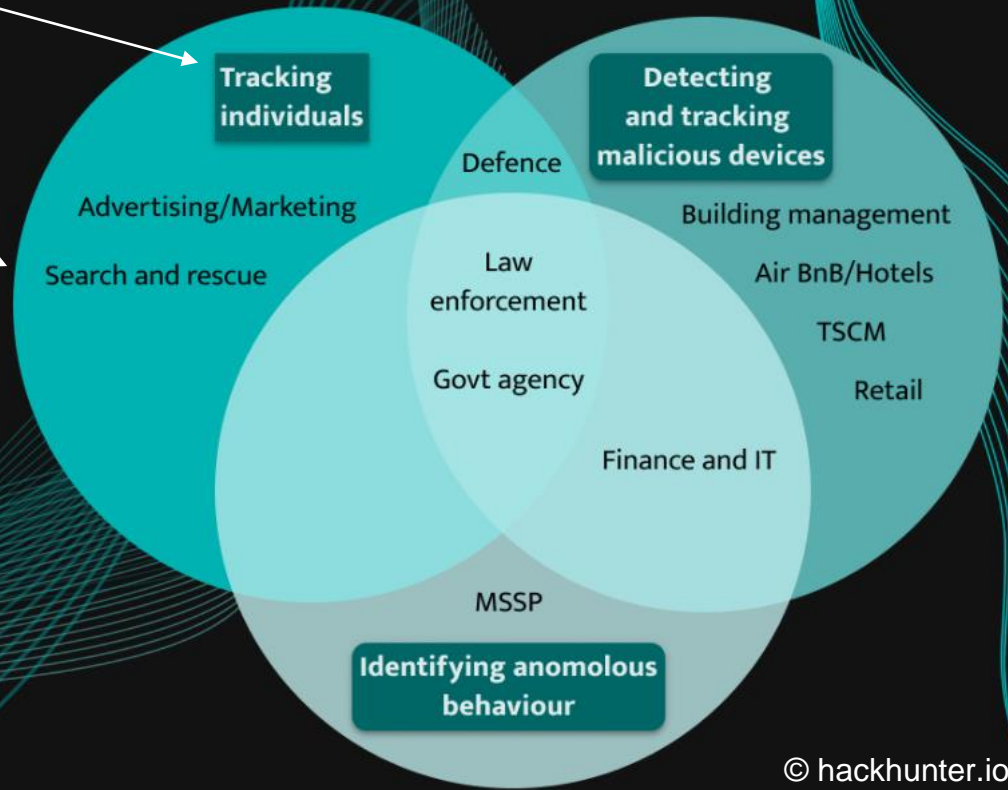
Describe who might use your product, and why

Law Enforcement	Defense	Finance & IT Companies	Retail
<p>Police officers could use the device while serving a warrant to ensure there are no “warning devices” (e.g. WiFi camera) that alert the person being served.</p>	<p>Warfighters could use the device to search and rescue a fallen comarade whose ATAK device is still active, or locate insurgent phones/drone controllers in the mission zone.</p>	<p>Physical and Cybersecurirty professionals could use the device to locate phones or laptops active in areas where they should not be present or transferring abnormal volumes of data</p>	<p>Physical security staff could use the device to locate wifi cameras, airtags or other devices illegally placed in bath rooms, changing rooms, etc.</p>

HackHunter Use Cases

What jobs the product helps get done

Who might use the product (Opportunities)



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Step 2: For each use case, answer 6 key questions

1. Is there a compelling reason to buy your product (are you filling an unmet need with an effective solution that is better than current solutions)?
2. How many are likely to use your product (market size & growth)?
3. Are customers willing to pay an economically viable price for your product, and stick with the product once they have purchased it?
4. Are there major obstacles to delivering the product to market (product development / sales / distribution difficulties, funding challenges)?
5. How long will it take for revenue to materialize (market maturity/sales cycle)?
6. Are there external risks to adoption (competitive threats, 3rd party dependencies, or other barriers to adoption)?

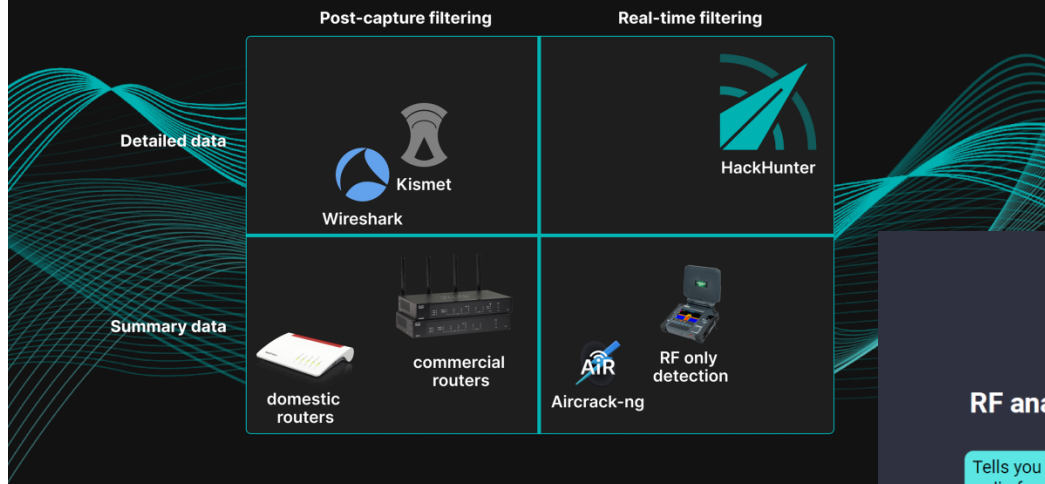
Opportunity: Law Enforcement (Q1)

1. Is there a compelling reason to buy your product (are you filling an unmet need with an effective solution that is better than current solutions)?


Tips on how to answer this question:

- Competitive Analysis – find other companies providing similar features, or helping similar jobs get done; download their white papers, collateral to identify key pains in the industry
- Market Analysis - search for industry pain points embedded within market reports and news (via Google / ChatGPT)

Competitors cannot offer detailed, real-time insights



Radio Frequency (RF) and Cell analysis are not good enough

RF analysis 

Tells you something is transmitting on a radio frequency

BUT

Cannot tell you anything about the source or locate it accurately

Cell analysis 

Worked well for 2G and 3G

BUT

4G and 5G require a truck load of expensive equipment, which makes covert operations impossible



Opportunity: Law Enforcement (Q1)

1. Is there a compelling reason to buy your product (are you filling an unmet need with an effective solution that is better than current solutions)?
 - A. Yes. Current solutions can only identify whether a transmitting device is present (but not where it is located) and need to process network or device logs offline to determine what the device is (e.g. Ring camera, iPhone, etc.). Hackhunter's proprietary hardware and software technology can both locate and identify the device in real-time, giving the police officer confidence that the person they are supposed to serve is present (via IMEI) and there are no devices (e.g. ring camera) operating that may warn the person being served (which dramatically increases the risk of a violent confrontation)

Compelling Reason To Buy (VH/H/M/L): H

Opportunity: Law Enforcement (Q2)

2. How many are likely to use your product (market size & growth)?

Tips on how to answer this question:

- Bottoms up – Google / ChatGPT search on number of people, locations, etc. where the product may be used. LinkedIn or other social media site counts of the size of the audience for roles that might use or purchase your product.
- Tops-down – “what is the size of the xyz market?”

Opportunity: Law Enforcement (Q2)

2. How many are likely to use your product (market size & growth)?

- A. There are 708k police officers in the US (<https://www.statista.com/statistics/191694/number-of-law-enforcement-officers-in-the-us/>), and 18,000 precincts (<https://usafacts.org/articles/police-departments-explained/>). There is unlikely to be more than one hackhunter device per precinct, and the number of precincts are not increasing.

Market Volume (VH/H/M/L): M

Note that the M will be relative compared to other opportunities – Federal Gov would be “L” because there are only ~7k federal buildings in ~2.2k locations (<https://www.gsa.gov/real-estate/gsa-properties>) while there are over 107k hotels and motels (<https://www.ibisworld.com/industry-statistics/number-of-businesses/hotels-motels-united-states/>) and ~6.3k department store locations (<https://www.vox.com/recode/21561046/death-rebirth-department-stores-retail-charts>).

Opportunity: Law Enforcement (Q3)

3. Are customers willing to pay an economically viable price for your product, and stick with the product once they have purchased it?

Tips on how to answer this question:

- Competitor pricing relative to your cost to produce and acquire
- Competitor impact/return on investment promotions (via white papers, product collateral downloaded when answering Q1)
- Target industry/sector margins and buying behavior (internet search)
- Online reviews, retention/loyalty statistics (internet search)

Opportunity: Law Enforcement (Q3)

3. Are customers willing to pay an economically viable price for your product, and stick with the product once they have purchased it?
 - A. Unlikely. The value to a local police department is the device's ability to help the serving officer avoid unnecessary confrontation (e.g. a shootout) and validate the presence of the person to be served. However, Local law enforcement budgets are pretty tight, and this problem (identifying malicious wifi or BT signals or tracking a person despite random MAC or other standard cybersecurity precautions) is not top of mind for most departments. Hackhunter standard product cost makes it a capex item but capex is more likely to be approved during a budget cycle than opex within these departments.

Economic Viability (VH/H/M/L): L

Opportunity: Law Enforcement (Q4)

4. Are there major obstacles to delivering the product to market (product development / sales / distribution difficulties, funding challenges)?

Tips on how to answer this question:

- Product roadmap and resources required vs. funds available
- Routes to market (what are competitors doing)
- Prevalence of Resellers and difficulties in engaging with them (internet search)
- Financing trends in your specific domain

Opportunity: Law Enforcement (Q4)

4. Are there major obstacles to delivering the product to market (product development / sales / distribution difficulties, funding challenges)?
 - A. No. The product is available, and departments have shown interest, though a cost-down could help facilitate sales. We have identified hundreds of resellers that sell similar products to the public sector (other TSCM products or wifi routers, as an example) and have already secured 9 resellers within 6 months of outreach. Funding for producing units for demos and customer purchase has been a concern, but not yet an issue with current volume of demand. However, funding for hardware startups is not easily available.

Implementation Obstacles (VH/H/M/L): M

Opportunity: Law Enforcement (Q5)

5. How long will it take for revenue to materialize (market maturity/sales cycle)?

Tips on how to answer this question:

- Product roadmap – how long before you will have a prototype? Confirm the prototype meets market desired cost and performance envelope?
- Market readiness –
- Sales cycle - benchmarks, anecdotes for your target industry (internet search)

Opportunity: Law Enforcement (Q5)

5. How long will it take for revenue to materialize (market maturity/sales cycle)?
 - A. 9-12 months for the first sale after a reseller has been signed. Departments that want this device typically want it immediately after an “unsavory incident” but are hard to convince otherwise. “unsavory incidents” are reasonably easy to track through public data sources in the US and resellers are instrumental in creating awareness about the solution and having the relationship to quickly make the sale happen when the issue is top of mind. That being said, the volume of “unsavory incidents” is quite low so it is likely to take some time for the pipeline to develop.

Time To Revenue (VH/H/M/L): H

Opportunity: Law Enforcement (Q6)

6. Are there external risks to adoption (competitive threats, 3rd party dependencies, or other barriers to adoption)?

Tips on how to answer this question:

- How fast are competitors improving their products (internet search, news clips analysis)?
- Are there any macroeconomic or supplier-specific constraints/business concerns materializing (news clips analysis)?
- Market trends analysis

Opportunity: Law Enforcement (Q6)

6. Are there external risks to adoption (competitive threats, 3rd party dependencies, or other barriers to adoption)?
 - A. There are no other solutions that combine frequency analysis and protocol analysis, especially for the price point (the alternative is a van full of equipment like you see in movies). There are some 3rd party dependencies related to potential chipset scarcity but this has not been an issue in recent quarters.

External Risks (VH/H/M/L): L

POTENTIAL



COMPELLING REASON TO BUY

Unmet need
Effective solution
Better than current solutions

Not unmet need, but product superior to other solutions



MARKET VOLUME

Current market size
Expected growth

Only 18,000 precincts, not all will adopt



ECONOMIC VIABILITY

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

Not a must-have device going up against many other competing budget priorities

OVERALL POTENTIAL



CHALLENGE



IMPLEMENTATION OBSTACLES

Product development difficulties
Sales and distribution difficulties
Funding challenges

product available & fits need; many resellers available



TIME TO REVENUE

Development time
Time between product and market
Length of sale cycle

Long, relationship driven sales cycle (faster with resellers)



EXTERNAL RISKS

Competitive threat
3rd party dependencies
Barriers to adoption

Unique solution for job being done, some risks related to chipsets but not recently

OVERALL CHALLENGE



POTENTIAL



COMPELLING REASON TO BUY

Unmet need
Effective solution
Better than current solutions

Can identify drone controllers or insurgent recording devices / phones in the field real-time



MARKET VOLUME

Current market size
Expected growth

In-field volumes may not be high but 1000's of govt. blds that could also use the solution



ECONOMIC VIABILITY

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

Top-of-mind issue in current conflicts and sig. \$ being spent for drone/phone tracking

OVERALL POTENTIAL



CHALLENGE



IMPLEMENTATION OBSTACLES

Product development difficulties
Sales and distribution difficulties
Funding challenges

product available & fits need; many resellers available



TIME TO REVENUE

Development time
Time between product and market
Length of sale cycle

CSOs and PORs are active, attaching to them will take some effort



EXTERNAL RISKS

Competitive threat
3rd party dependencies
Barriers to adoption

Unique solution for job being done, some risks related to chipsets but not recently

OVERALL CHALLENGE



POTENTIAL



COMPELLING REASON TO BUY

Unmet need
Effective solution
Better than current solutions

\$200 RF scanner is often enough, unclear if protocol analysis needed



MARKET VOLUME

Current market size
Expected growth

108k hotel locations, many more AirBnB locations with same problem



ECONOMIC VIABILITY

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

Hotel industry historically low margin and illegal recording devices not a burning issue

OVERALL POTENTIAL



CHALLENGE



IMPLEMENTATION OBSTACLES

Product development difficulties
Sales and distribution difficulties
Funding challenges

Cost down will require sig. dev \$; not a product that could typ. be sold by resellers



TIME TO REVENUE

Development time
Time between product and market
Length of sale cycle

Sig. dev time required for cost down product; Long, relationship driven sales cycle



EXTERNAL RISKS

Competitive threat
3rd party dependencies
Barriers to adoption

Assuming cost down, unique solution for job being done (locate devices by type)

OVERALL CHALLENGE



Opportunity Attractiveness Map



Step 3: Identify where to focus

1. Choose ONE opportunity to pursue now - ideally a high potential, low challenge opportunity.
2. Identify the extent to which the product and market requirements for other opportunities are related to your primary opportunity.
3. Keep opportunities that are highly related and require low effort to service open as growth opportunities - pursue now if resources are available.
4. Keep attractive markets that are related but do not share major risks with your primary market open as backups that you could pivot into if needed.

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.



Govt & Defense



TSCM



IT and Financial Services Cos.



Law Enforcement

Relatedness to your Primary Market Opportunity:

PRODUCT RELATEDNESS

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



MARKET RELATEDNESS

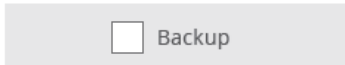
To what extent do the customers share: values and benefits, sales channels, word-of-mouth



Suitable as:

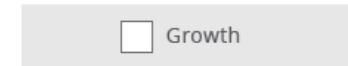
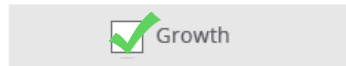
BACKUP OPTION

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



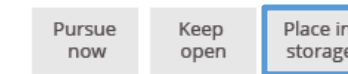
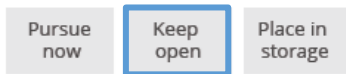
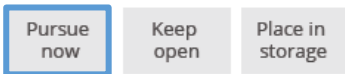
GROWTH OPTION

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



Next Steps

- Replace the example answers in this document with your own technology's use cases to identify your beach head market
- Email me your ppt pages by Monday, Feb 12, 8am pacific to get feedback during my office hours on Feb 13
- Contact me at akale@bmnt.com if you have further questions

Questions?