

You know, if a need, then a solution, and an opportunity

The second in a series of articles concerning invention conception and patent filing/prosecution strategy for small to large organizations from an inventor, engineer and product developer's perspective.

In the first article I talked about the reasons to file patent applications and file them as early as possible. I imagine the first comment is, "we have to have something valuable to file on first". Agreed, but thinking you have to wait until a product is ready for production can put you in second place or not even in the running. Thus, I need to show you a path for how to go about generating potentially valuable patentable subject matter.

Also, in the first article we discussed the number one need to grow your business is vision. It seems obvious but the vision needs to be more than just, higher volumes and margins. What drives higher volumes and larger margins? Value to the customer and the end user, who are not always one and the same.

We all have a vision of our future, but to make it a reality it needs to be first articulated & then activated.

Having worked in innovation and the product development process, I will focus on opportunity spaces. Opportunity spaces start with an articulation of the ideal benefit state for a market segment. They are composed of benefit paths populated with benefit delivery concepts along those paths. An opportunity space's theme requires an understanding of your customer's pain points and delighters. The benefit delivery concept is the core for a value proposition for the problems/situations to be resolved which will engage and resonate with customers and end users.

If you are already selling then you operate in an opportunity space and thus are likely to be able to glean insight from your sales force or trade partners on what customers are talking about.

Building product opportunity spaces engages you to articulate and refine focus on the benefits to be delivered. Each opportunity on the map will require a workable solution, which in turn leads us to the ensuing problems to be solved.

Questions that aid in the clarifying of **vision** for an opportunity space;

- 1. Answer the following questions about your Vision;
 - What market segments do you serve?
 - What market segments do you want to serve?
 - What is your organization's forte?



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2. Define an Ideal Perfect State

- o How do you want your product to be known in the market?
 - Create a visual image, sketch, collage of images, selfie video drama...
 - this helps you communicate the image to self and others
 - Add in pithy wording to accentuate the lofty goal, I.e.
 - o quiet guardian
 - o refreshingly unobstructive

Borrowing from KnowBrainer Tools

- What should people feel?
- What should people think?
- What should people do?
- How should a successful solution; LOOK/FEEL/SOUND/SMELL & TASTE?

3. Dive into Benefits

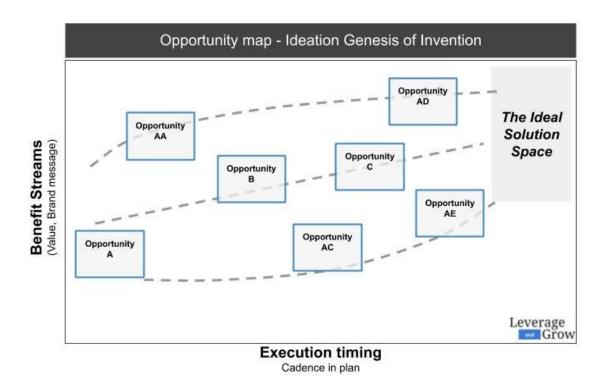
- What are the pain points and delighters most relevant in your opportunity space
 - What is needed, wanted or wished?
- What value could you provide?
 - List out benefits to deliver to your opportunity space
 - <u>In general</u>, speed, capacity, reliability, ergonomics, styling, utility, performance...
 - But, try to be as descriptive and concise as possible. Such as;
 - eliminates doubts about child safety.
 - o positively seals and protects
 - Gives peace of mind...
 - It doesn't matter <u>how</u> just keep thinking higher/better, purer, direct, elemental
 - If you start incremental, then grow by trying to outdo one another as a competition in ideation
 - As Deming implied
 - challenge in collaboration internally
 - fierce focus externally
- 4. Group common thoughts/benefits
 - o note differences in levels of benefit and effort to deliver
 - see what themes jump out
 - Benefit Delivery Concepts can be mapped as "Benefit paths" with ever increasing value with the next "thing".

As shown in the graph below, benefits of the same type can be assigned to a benefit path. It is a representative path for the growth of a specific or adjacent benefit in increasing measure or



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value and often is coupled with an estimate of cadence of introduction into the market to build a brand's equity. The higher level of benefit may cost more to provide but the increased customer value would allow for higher pricing/margins or provide greater market share. Of course without a defined solution there is much speculation as to complexity to deliver but seasoned development teams can usually offer some high level opinion.



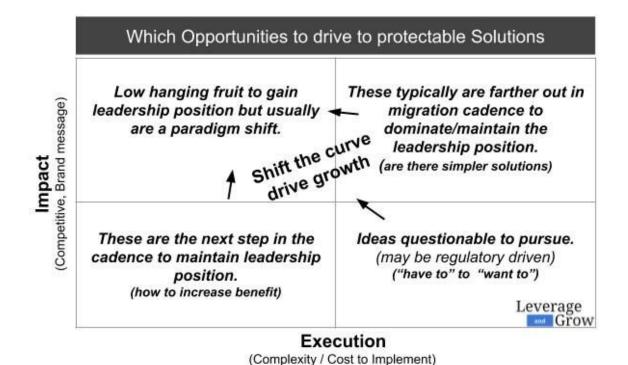
By plotting on the map you can visualize your future product innovations in terms of benefit level and development or investment timing. As each opportunity is essentially an opportunity to deliver a customer/user benefit expereince. You can develop a progression of products to stay ahead of competitive offerings and meet the natural progression for more feature rich products as your markets experience saturation and your organizational prowess grows.

Now that you have an opportunity map, the next step is to select which benefit concepts to drive to a solution and provide for marketable products or tradable assets. You start by again asking the questions in step 1 and what resonates with your marketing, technical and sales teams. Whether you use QFD, SWOT or Kano analysis, do not discount where your organization has passion. The Wright brothers were not the best equipped or most learned at their time but they had passion and resolve to try and learn from mistakes even when the answers seemed increasingly distant.



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I like to use the chart shown below. This chart aids the ranking discussion but with a focus on driving value. The chart is simple but the discussion requires thought and suggest to do once, let sit then re-evaluate.



Thus, we've gotten over the first innovation hill and hopefully this has you seeing what may be possible. I have included an example to give you a better flavor for the process thus far.

When complete with the benefit roadmap and high level concept ranking we can turn to the use of Invention Workshops to drive your organization's technical expertise through a thought process to generate enabled benefit delivery solutions.

I look forward to sharing my experiences in identifying problems and developing protectable solutions with you and your team. Contact us to discuss your business needs and issues. Together we will work out a plan on how best to help you.

The next article; Invention Workshops, A Cross of Technology Push with Customer Pull.

Sincerely,

Steve Kuehl LeverageandGrow.com



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An quick example

You are a personal care products company - facial cleansers, lotions, make-up, wipes, ... You want to help combat colds and flu while working with the elderly & vulnerable.

Benefit Ideation Ultimate mask - too good not to wear regardless

- 1. Clear people can see and read your face
- 2. Cool fresh air coming in all the time, not pressed against face/cheeks & chin
- 3. Enhanced communication Amplifies speech and hearing, projects my voice
- 4. Stylish easy to change style
- 5. Enhances breathing provides rhythm to breath in nose and out the mouth
- 6. Easy to eat or drink with inplace
- 7. Kills germs and viruses continuously, always sanitary
- 8. Filters out pollutants, pollen, smoke, dust
- 9. Like putting on glasses or inserting mouthpiece for sports
- 10. Enhances sight filters glare and improves focus (reader lens)
- 11. Wispy light feeling
- 12. Sun block, good for tanning too
- 13. Enhances your look, filters out skin imperfections, provides slimming look
- 14. Easy to clean
- 15. Scratch resistant, peels away layers for surface refresh
- 16. Changes with lighting like glasses, anti glare
- 17. Custom fit to face or easy to fit any face shape/size
- 18. Kid friendly, not scary but fun
- 19. Anti snoring, comfortable to sleep with on
- 20. Use instead of safety glasses, Impact resistant eye cover
- 21. Anti fog up when in cold environment, Anti sweat when exercising
- 22. Sneeze shield won't show snot spray
- 23. Bad breath shield, filters out odors both ways

<u>Potential Streams</u> From this list we could pull the following Potential Benefit streams for focus or perhaps your brand is already known for specific benefits such as personal enhancement or comfort feel.

- 1. Protection/basic functionality
- 2. Comfort /Ease of use
- 3. Personal Enhancement

Once a stream is identified, place the benefit concepts that resonate most with customers or the brand and populate onto the graph, thinking in terms of; execution difficulty, cadence, benefit level.

I.e. Potential Benefit Delivery Concepts - Comfort

- 1. Air intake/discharge easy, no odor or heat build-up,
- 2. Fumble free to put on / take off
- 3. Feels like it is not there, face feels unconcealed



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Use the roadmap to communicate market segment potential and generate support. Use the roadmap to visually communicate and then rank which benefits to pursue solutions for 1st, 2nd and so forth using the invention workshop to drive solutions. See the next blog for details on invention workshop utilization.

Benefit Roadmap for the Ultimate Face Mask Kills germs/ Easy to eat/ virus drink with Protection Protection/basic functionality nhancement **Benefit Stream** like it is not Block germs there, & virus **Fumble free** unconcealed Comfort /Ease of use Personalized Air intake/ enhancements discharge easy People can Personal Enhancement stylish

Cadence of <u>next thing</u> to Market

CEROS ES Soule

Samples of Current State of the Art

1	First Ranking of Concepts to Drive to Solution	
	stylish	like it is not there, unconcealed
Market Impact	Kills germs/ virus	Personalized enhancements see You
	Air intake/ Fumble free discharge easy on/off	
	Block germs & virus	Easy to eat/ drink with

Complexity/Cost to Implement

From the ranking chart the lower quadrant might be best for having development to provide solutions ASAP to get into the market. First focus for an invention workshop might be on styling and then continuous sanitization (kills germs/virus). Once complete then look to put resources for a workshop on "unconcealed comfort or personal enhancement". This is a living document, expect updates as you learn more about the consumer preference.

Again, this is my simple example and hopefully we won't need masks in the near future.