Market Assessment

Surya Raghu
Advanced Fluidics LLC &
ET Cube International

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Motivation

University researchers come up with many good ideas and invention disclosures....

Challenge for the TTO is to see how to assess the market for the invention  Why?
OUTLINE

Market description: Technology Push and Market Pull

Market Estimation: Top-Down and Bottom-up Approach

Competition Analysis and Entry Barriers

Conclusions
Market Description: Technology Push

“Technology Push” – unknown competition

Paradigm shifts

“No need” is also a competition

“No Competition” is not an acceptable statement!
Market Description: Market Pull

Market Pull

The need/market is defined – this is good because the industry is well known for approaching for licensing

Most likely, there are already competing products in the market – your invention must be significantly better than the existing products.
Example: Inventions for Triaging

Market pull or Technology Push?

1. Virtual Projector Screen

2. CO$_2$ Sequestration Material

3. Meteor approach detection system

4. Micro Fuel-Cell to replace batteries

5. Cholesterol-reducing tea variety
Market Size and Characteristics

Market size: Estimating the markets

Entry barrier

Competition
Market Size Estimation

Top-Down and Bottom-Up Approach
Top-Down Market Estimation

EXAMPLE: Micro Fuel cells?

Total Market Size

Serviceable Market Size

Target Market

Market Share

Global Industry Analytics
(www.strategyr.com)

You can get industry reports on many industries
Bottom-Up Market Estimation

EXAMPLE - Virtual Projector Screen, Statin-Tea
- Typical for start-ups??
# AFSM Market Size Estimates

![Atrial Fibrillation Monitor](Image)

## Market

<table>
<thead>
<tr>
<th>Market</th>
<th>Item</th>
<th>Number in US</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home monitoring of AF patients</td>
<td>Total number of people with AF in the US</td>
<td>7,500,000</td>
</tr>
<tr>
<td>Professional ambulatory emergency medical equipment</td>
<td>Ambulances</td>
<td>40,000</td>
</tr>
<tr>
<td></td>
<td>Fire-dept. based vehicles</td>
<td>75,000</td>
</tr>
<tr>
<td></td>
<td>Police vehicles</td>
<td>260,000</td>
</tr>
<tr>
<td></td>
<td>First Responder sites</td>
<td>290,000</td>
</tr>
<tr>
<td></td>
<td>Registered Hospitals</td>
<td>5,708</td>
</tr>
<tr>
<td></td>
<td>Lifeboats</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>670,708</strong></td>
</tr>
</tbody>
</table>
AFSM Market Size Estimates

<table>
<thead>
<tr>
<th>Physician Statistics (All included under PCP)</th>
<th>Cardiologists in US</th>
<th>16,800</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PCPs in US</td>
<td>250,000</td>
</tr>
<tr>
<td></td>
<td>Allied medical sites</td>
<td>190,000</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>456,800</strong></td>
</tr>
</tbody>
</table>

| Non-professional emergency medical equipment   | Private Schools     | 33,740 |
|                                               | Public Schools      | 95,000 |
|                                               | Establishments with paid employees | 7,387,000 |
|                                               | Establishments in arts, entertainment, and recreation as of Q1, 2015 | 140,766 |
|                                               | Bus transportation services | |
|                                               | Airlines            | |
|                                               | **Total**           | **7,656,506** |
## Competition Analysis

<table>
<thead>
<tr>
<th>Company &amp; Website</th>
<th>Product &amp; Cost</th>
<th>Relative Performance</th>
<th>Market Size (% Share)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td></td>
<td></td>
<td>40%</td>
</tr>
<tr>
<td>B</td>
<td></td>
<td></td>
<td>15%</td>
</tr>
<tr>
<td>C</td>
<td></td>
<td></td>
<td>9%</td>
</tr>
</tbody>
</table>

To which company would you license your technology?
Entry Barrier

Competition

You
Summary

1. Market Pull and Technology Push

2. Top-down and Bottom-up market estimates

3. Entry Barriers and Marketing Strategy
THANK YOU
Market Assessment

Some of the top reasons that startup companies fail include:

The startup does not understand the market and where they should direct their focus

The startup does not clearly understand the difference between their customers and the decision makers

The startup does not understand how much their prospective customers are willing to pay for their ultimate solution

The startup underestimates the extent and level of their competition

https://research.ncsu.edu/otcnv/new-ventures/venture-development-process市场-assessment/