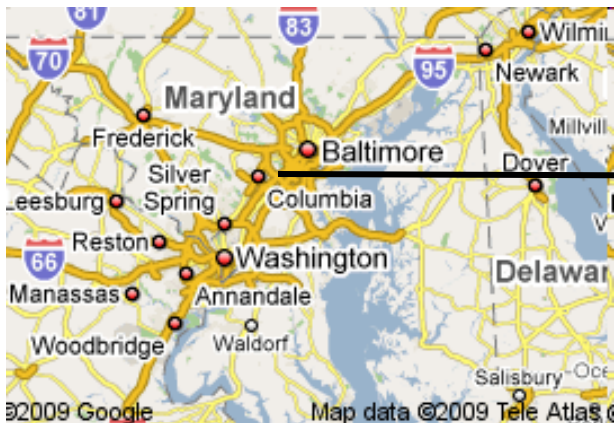


Market Assessment

Surya Raghu
Advanced Fluidics LLC &
ET Cube International

WIPO EIE Workshop II
Colombo, Sri Lanka
Sept. 17-21, 2018



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

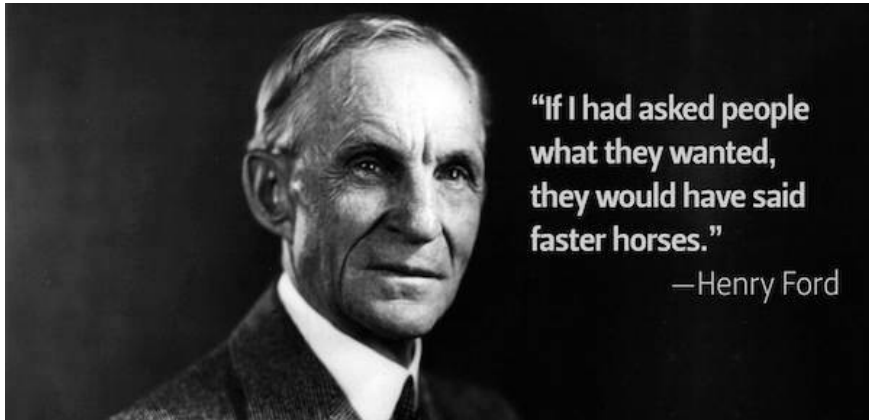
Market description: Technology Push and Market Pull

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

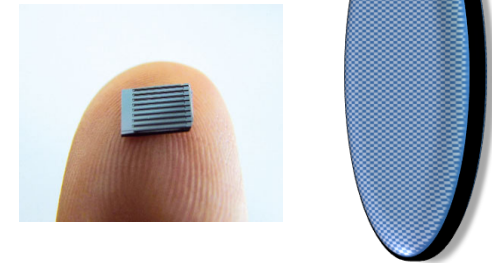
Market pull or Technology Push?

1. Virtual Projector Screen
2. CO₂ Sequestration Material
3. Meteor approach detection system
4. Micro Fuel-Cell to replace batteries
5. Cholesterol-reducing tea variety

1



2

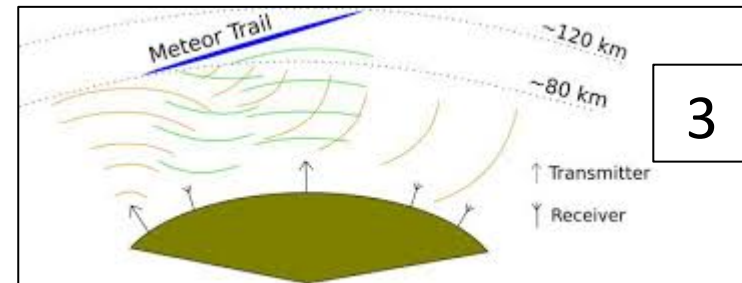


4

5



3



Market Size and Characteristics

Market size: Estimating the markets

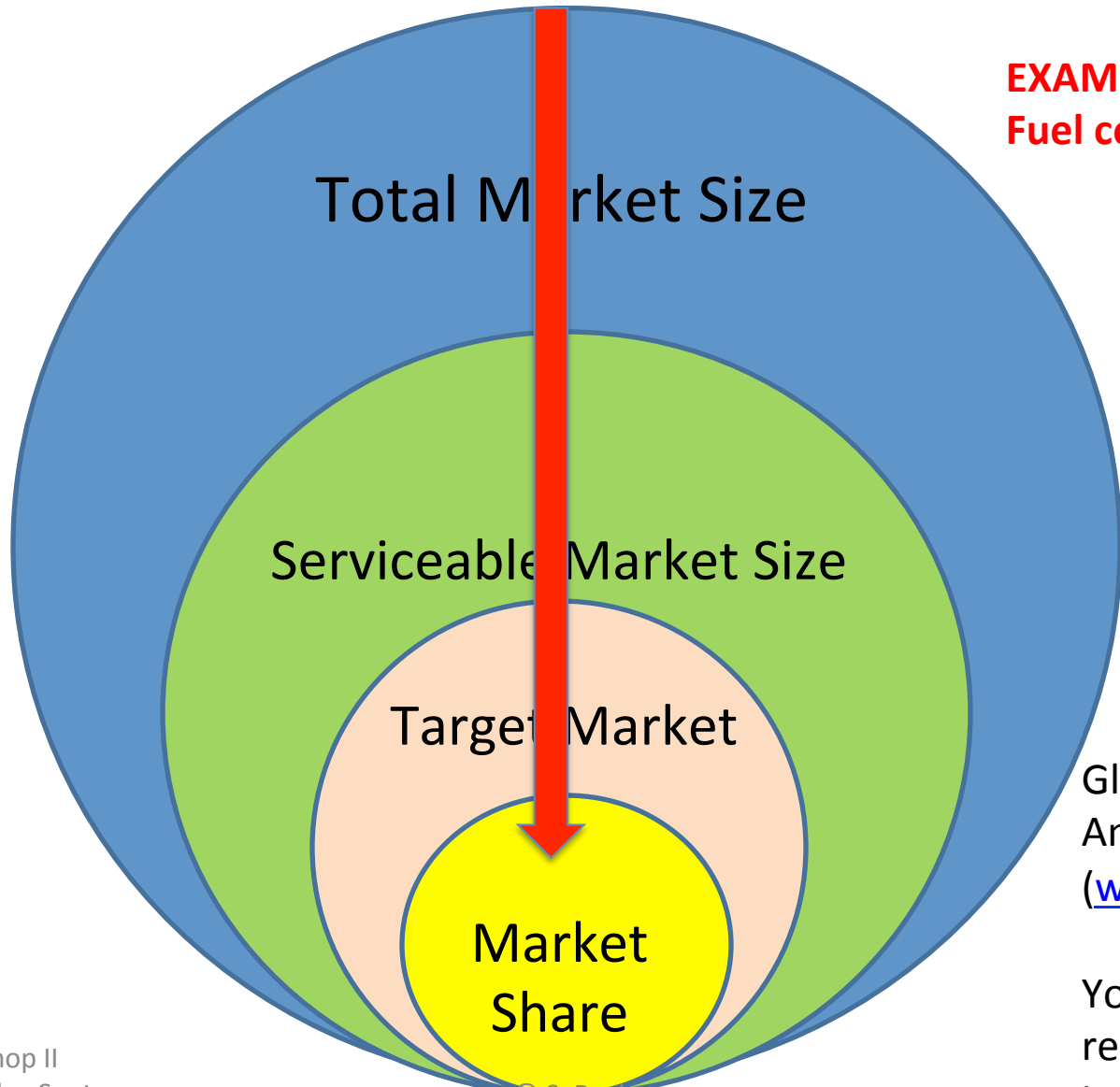
Entry barrier

Competition

Market Size Estimation

Top-Down and Bottom-Up Approach

Top-Down Market Estimation



EXAMPLE: Micro Fuel cells?

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??

5



1



AFSM Market Size Estimates



Atrial
Fibrillation
Monitor

Market	Item	Number in US
Home monitoring of AF patients	Total number of people with AF in the US	7,500,000
Professional ambulatory emergency medical equipment	Ambulances	40,000
	Fire-dept. based vehicles	75,000
	Police vehicles	260,000
	First Responder sites	290,000
	Registered Hospitals	5,708
	Lifeboats	
		Total

AFSM Market Size Estimates

Physician Statistics (All included under PCP)	Cardiologists in US	16,800
	PCPs in US	250,000
	Allied medical sites	190,000
	Total	456,800
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

Company & Website	Product & Cost	Relative Performance	Market Size (% Share)
A			40%
B			15%
C			9%

To which company would you license your technology?

Entry Barrier



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/market-assessment/>

Technology Mind-Map

