

# **Idea Validation: Market Size, Demand, Landscape**

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# Market size and growth, market shares

## Questions to ask before calculating market size:

- What is the current market size and growth rate?
  - Unit volume, dollar volume
  - Market shares of top competitors, if established
- What are the pricing trends?
- What are the relevant segmentations?
- How are customer needs evolving?

## Sources:

- Data from publicly available sources, research reports, etc.
- Data established internally from surveys
- Estimates based on markets for closely related products

# Sizing Markets – Another 80/20 rule Example

## Market sizing can be done either:

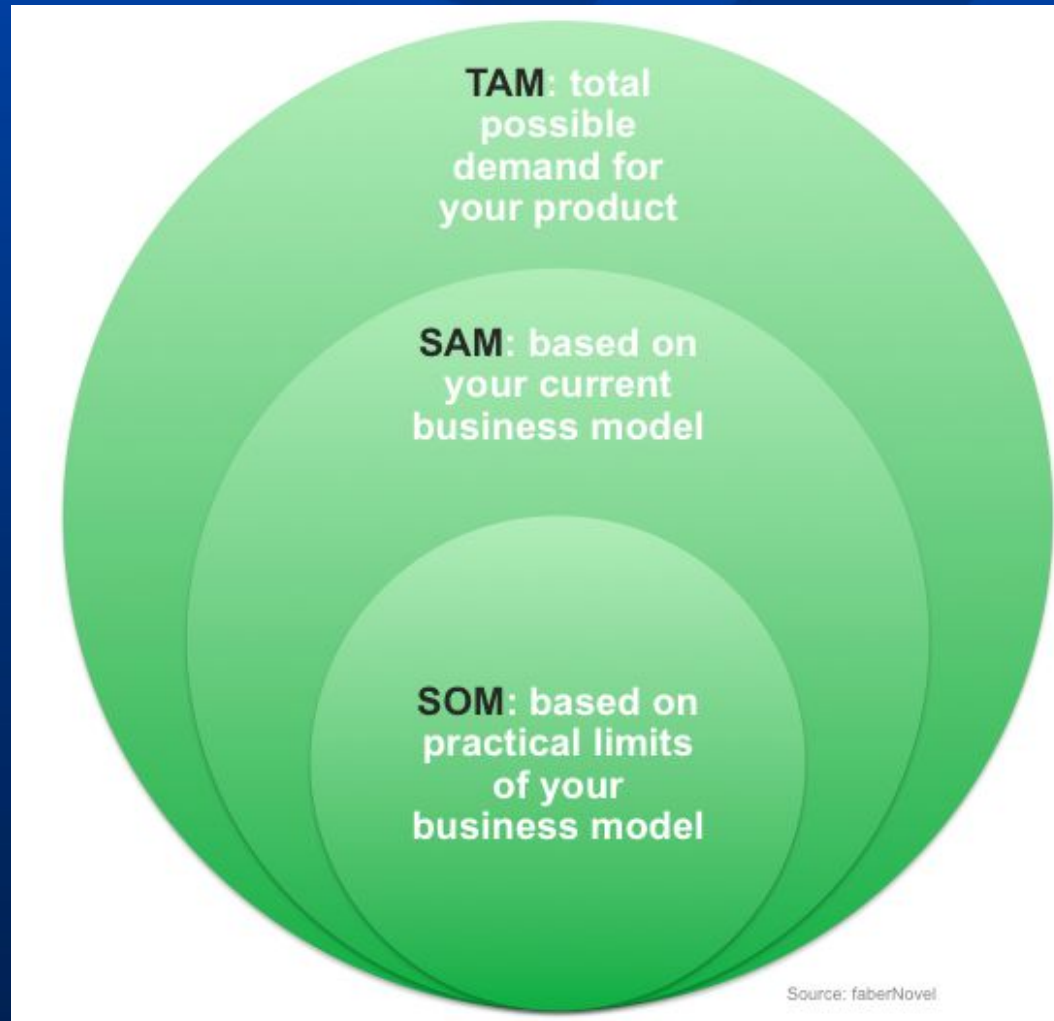
- Quick and easy
- Deliberately with great detail

## Choosing the correct methodology depends on the situation

- Are you giving an input to a much large analysis and the market size is not the key factor?
- Is it early in a discussion and need only be a ball park?
- Are you intending to attract capital and need to have a firm number for diligence?
- Are you responsible for the launch of a new product, or the acquisition of a new company that brings performance expectations?

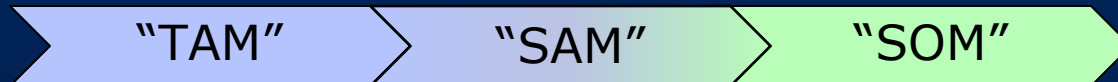
Try to find a way wherein 20% of the effort generates 80% of the answer

# TAM vs SAM vs SOM



# Two General Approaches: Top Down and Bottom-Up

Top Down	Bottom Up
<p>Typically works well for <b>markets that already exist</b></p> <p>Typically best for summary, or to sell an idea</p> <p>Begins with the highest level of aggregation of information about the market</p> <ul style="list-style-type: none"><li>• Known product sales in dollars or units</li></ul> <p>Often simply asserts a "percentage of" aspirational goal</p>	<p>Typically better for <b>new markets and new products</b></p> <p>Typically best for attracting investors or planning product launch</p> <p>Begins with detailed understanding of market in terms of users and their segmentation</p> <ul style="list-style-type: none"><li>• Reasons for adopting/ not adopting figure prominently</li></ul> <p>Usually involves building a complex model</p>



# Data Sources for Market Size

- Market Reports (as NVD Deptt for access)
  - Frost & Sullivan
  - IBIS
  - BCC
- Current Industrial Reports (US Census Bureau)
- Trade Associations, Conferences
- Data.gov
- Pew Research Data
- Websites like Economist, Barrons
- Use advanced Google search syntax

# TAM: TOP DOWN

## Often used as a hook

Typically a BIG number because inventors believe that is what investors want to hear

- What is the magic number?
- What is the magic approach?

*"VCs must hear it is a one billion dollar market or more..."*

*"There are 1.34Bn people in China, and all we have to do is reach 1% of them, buying our \$20 product to have revenues of \$250M in three years."*

## Reality is that the Top Down approach is rarely suitable for making an investment

An investor would much prefer to hear:

- How you are going to dominate, taking 80 – 90% of a small market
  - maybe a \$300M to \$400M market) due to a well thought out strategy with seasoned talent,
- Rather than taking a gamble taking a sliver of a market you neither understand nor have prior experience in.

# TAM- What not to do

**Example: You have developed a new drug for Parkinson's treatment**

## **TAM would be like:**

"According to the Parkinson's Action Network, drugs commonly used to treat Parkinson's disease cost between \$1,000 and \$6,000 per year per patient."

"The number of people in the United States with Parkinson's disease is estimated to be between 500,000 and one million"

"Drug therapy for Parkinson's disease costs more than \$6 billion a year."

**The TAM Question:**  
What is the  
Total Achievable Sales Amount  
incorporating  
**all** market players together?



# One step Better: the SAM Question

SAM: Served/ Serviceable Available Market (Focus on your own technology/ services)

## The SAM Question:

What share can the market leader achieve in sales? In your particular product class?



### EXAMPLE for Parkinson Drug Market:

Orion has 27% market share,  
Of the \$1Bn agonist segment,  
Of the \$4Bn US Parkinson's drug market.  
Which equates to a SAM Serviceable Available Market of \$270M

Very helpful if you know that Orion is your closest competitor

# The SOM Question: What can I achieve in 2011 selling to the market?

SOM: Serviceable Obtainable Market

(What realistic market share can be obtained by us, considering competition, countries, our sales/distribution channels and other market influences? )

If the top competitor in an industry, after many years has attained 27% market share, what can you anticipate after 1, 3, 5 years of launch?

Cuts to the market here are estimates, but can be confirmed by primary research with

- Disease affinity groups, and/or
- Doctors/nurses, and/or
- Patients

US patients with Parkinsons	750,000
Percent of patients on agonists	60%
	450,000
Percent of patients with poor symptom control	30%
Percent seeking change	70%
	94,500
Percent not contraindicated for pump	80%
Percent willing to try pump	80%
	60,480
Estimated annual cost of drug and pump	\$2,000
	\$120,960,000

# SAM VS SOM

Available vs Obtainable Market

SOM: portion of SAM that you can capture.

Take into account

- Competitors
- Market Influences
- your marketing plan and the identified distribution channels
- SOM indicates the short term sales potential, SOM / SAM the target market share, and TAM the potential at scale.

## **EXAMPLE:**

- TAM = \$2bn
- SAM = \$100m
- SOM = \$5m within 2 years and \$12m within 4 years

# Example

**TAM Question: What is the Total Achievable Sales Amount of LED Living Color lamps incorporating all market players together?**

**TAM:** From my market research and reports which I have read, I found out that the total number of LED Living Color Lamps being sold in 2014 in Europe will be approximately 1 Million pieces.

**SAM Question: What can I achieve in in maximum sales?**

**SAM:** Philips has the highest market share of the LED Living Color lamps with 800.000 units a year. The remaining 200.000 units are being sold by other brands.

My SAM (Servable Available Market) is 80% of the total market of 1 Million LED Living Colors lamps.

**SOM Question: What can I (as company XYZ) achieve in 2014 selling to Philips?**

**SOM:** My strategy as OEM manufacturer is to focus and work together with the Top Market Player, in this case Philips only. As I am a new supplier to Philips, they agree to test me out and ask me to produce only 200.000 pieces of the 800.000 that they expect to sell in 2014.

The remaining 600.000 units are being produced by their current suppliers.

In this case my SOM (Serviceable and Obtainable Market) will be 200.000 pieces (a share of 25%) of the 800.000 pieces from Philips. This SOM is my realistic and reachable target for 2014.

# Other considerations for SAM,SOM

## Units vs. Revenue (and average selling price or ASP)

- It is OK to estimate the market size in units, but eventually your audience needs to hear dollars
- Have a basis for you ASP and multiply through

## Market penetration must allow for ramp up

- Transformational change like horse to car, or typewriter to word processor still take 13 years
- Never assume huge revenues in 4 years. At best, you get to 15% penetration

## Regulatory approvals dictate when/where

- **EPA, FDA, UL certifications**
- While time to market through the FDA is an issue in the US
- UK has the NICE commission which may essentially ban products as not cost-effective

## Growth rates:

- Market growth can be fast, in-line, slow, or even negative
- Know which grow rate applies
- Have back-up to justify

# Summary

## First rule of market sizing:

- Do your homework: TAM SAM SOM
  - there is no excuse for not doing it
  - if you are getting an audience with a funder, it is likely because they already have an interest and are knowledgeable in the area

## Second rule:

- Make explicit your assumptions
- Have good justification for what values you have chosen

## Third rule:

- Wherever possible, triangulate with other data

## Last rule:

- Remember, the only thing you can be certain of is that the number you land on is probably wrong
- Do not get over invested in it: listen, learn, adapt

# Thanks