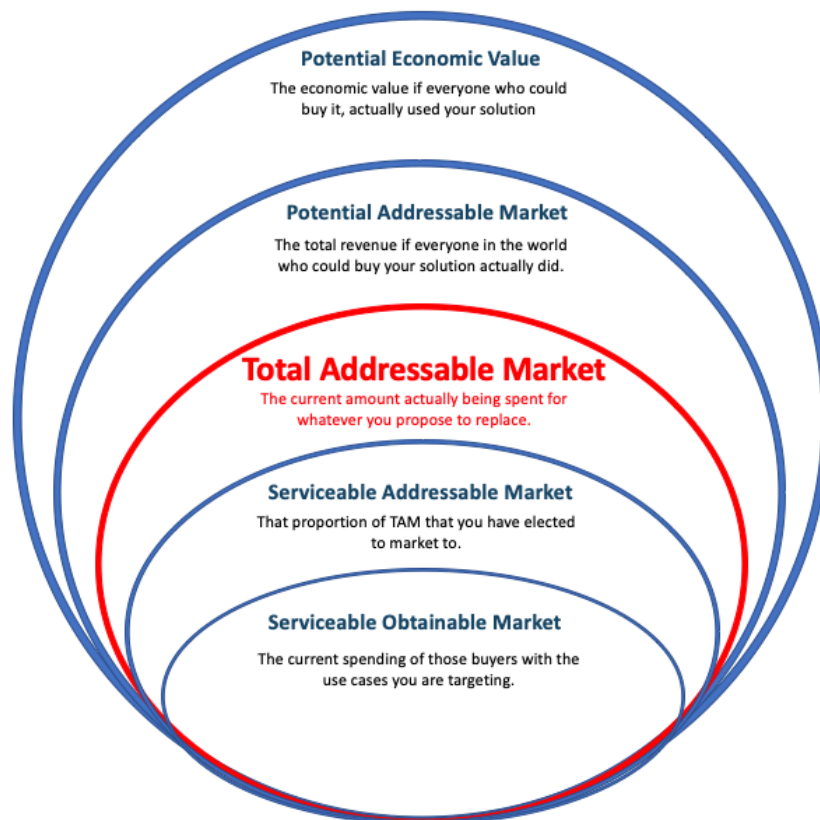


Total Addressable Market

and how to figure it out



Introduction

Total Addressable Market or TAM is a difficult concept to define and is frequently misused. There are actually multiple parts to the concept:

- Potential Economic Value (PEV)

The first concept is that of the aggregated potential value of the solution or potential economic value. This is a measure of the value proposition.

- Potential Addressable Market (PAM)

Potential Addressable Market or PAM includes people or companies who are or are not currently buying equivalent products but who could be.

- Total Addressable Market (TAM)

TAM is the most important concept and it equals the current amount actually being spent for whatever you propose to replace.

- Serviceable Addressable Market (SAM)

In addition to TAM, there is the concept of SOM or Serviceable Addressable Market. This is the portion of the market that you can actually serve and reach with your business.

- Serviceable Obtainable Market (SOM)

Then there is SOM, the amount currently being spent by those buyers whose use case matches your current target market.

All of these concepts are defined slightly differently depending on who does the defining. The following exhibit shows the relationship between these items:



Startups frequently confuse PAM with TAM, making their market seem larger than it really is. When market research reports present TAM, they present the current value of revenue earned by companies in the market. When entrepreneurs calculate TAM, they frequently determine this by multiplying the number of individuals in a market by the average amount paid by those who purchase.

Potential Economic Value

Let's look at the Customer Relationship Management (CRM) market as way to examine these concepts. There are a number of ways to measure the economic effect of the CRM Market.

- The total cost of customer relationship management including salaries whether an employee is using CRM software or not.
- The total savings from using CRM software
- The amount that could be spent if everyone used CRM software

In the following sections we have examined each of these.

From a macro perspective, all companies with customers have to engage in activities to manage customer relationships. Those activities are performed by people who have salaries and for whom there are expenses which are required to support them. They also use tools to be able to manage customers, some of which are dedicated CRM tools but many just use Excel. Let's look at the structure of industry in the US and make up an example of the economic impact of customer relationship management. (All of the following examples are for the US alone.) In this example, the total cost per user per year will include salaries, overhead and software used in the customer relationship management function.

Exhibit 2
Customer Relationship Management Function Costs (US)

Number of Employees	Firms	Users per firm	Users	Total cost per user per year	Total Function Costs
0-4	12,493,536	0.1	1,249,354	80,000	99,948,288,000
5-9	1,829,875	1	1,829,875	90,000	164,688,750,000
10-100	1,418,305	5	7,091,525	100,000	709,152,500,000
100-1000	147,057	100	14,705,700	110,000	1,617,627,000,000
1000 +	23,553	500	11,776,500	120,000	1,413,180,000,000
	15,912,326		36,652,954		4,004,596,538,000

Some people would then say that CRM is a \$577 billion market. There is a natural desire to define these costs all together as PAM or even as TAM but neither would be correct. This is simply the economic costs of customer relationship management.

This example was for a B2B market. A similar method could be used to measure the total consumer market for eating and food. In that case one would add the cost of food to the cost of equipment and finally add on the value of the amount of time spent planning, shopping for food and cooking.

In a health market for instance, one could measure the cost of treating cancer as the costs of drugs, surgery, and the value of time spent by individuals undergoing cancer treatment.

None of these accurately measures PAM but instead measures the theoretical costs to the economy of engaging in some activity.

Total Potential Savings

The next item which companies will often want to determine is the total amount that could be saved using CRM software. This is often claimed to be the market potential of a solution but in reality, is only the aggregated potential value of the solution or economic value. This is a measure of the value proposition. To compute the value of savings if everyone used CRM software, one would multiply the Total Function Costs from the chart in Exhibit 2 by the percentage of time that could be saved using software for CRM. Exhibit 3 is an example of this calculation:

Exhibit 3
The Value of CRM Software (US)

Number of Employees	Total Function Costs	Potential Time savings	Total Potential savings
0-4	99,948,288,000	5%	4,997,414,400
5-9	164,688,750,000	5%	8,234,437,500
10-100	709,152,500,000	10%	70,915,250,000

100-1000	1,617,627,000,000	15%	242,644,050,000
1000 +	1,413,180,000,000	20%	282,636,000,000
	4,004,596,538,000		609,427,151,900

A similar method could be used to measure the value to be gained from saving time by eating pre-packaged food. In that case one would multiply the total cost of buying and preparing food by the percentage of time saved by eating prepackaged food.

In a health market, one could measure value of curing cancer by multiplying the amount earned over the remaining lifetime of cancer patients if their lives were to be saved

None of these measures PAM or TAM but instead measures the theoretical value to the economy of engaging in some activity.

Potential Addressable Market

So far, we have established that PAM is not a calculation of function costs, or of the value of the solution your company has developed. Simply, it is the amount that would be spent if everyone in your target market were to purchase your solution expressed on an annual basis for spending.

Let's go back to calculating PAM for CRM software. Let's say that when sold as a service (SaaS) the annual price per user starts at \$1,000 and increases based on functionality. That would create a market in the US as shown in Exhibit 4.

Exhibit 4
Potential Addressable Market (US)

Number of Employees	Firms	Users per firm	Users	Price per User per Year	Potential Addressable Market
0-4	12,493,536	0.1	1,249,354	1,000	1,249,353,600
5-9	1,829,875	1	1,829,875	1,200	2,195,850,000
10-100	1,418,305	5	7,091,525	1,500	10,637,287,500
100-1000	147,057	100	14,705,700	1,750	25,734,975,000
1000 +	23,553	500	11,776,500	2,000	23,553,000,000
	15,912,326		36,652,954		63,370,466,100

Let's take a look at a healthcare example to illustrate this point further. Let's say you have a problem with carpal tunnel syndrome, which causes pain, tingling and numbness in your hand and arm. This has been causing you to be less effective at work and so you've developed an innovative wrist splint which completely eliminates the problem and allows you to get on with your daily work. You've decided to try to develop it as a product to market for others and you've started to look at the market for wrist splints.

Data on the net shows that carpal tunnel syndrome is experienced by 2.7% to 5.8% of adults. If you're particularly optimistic, you might determine that your potential addressable market is, being conservative, 3% of the total adult population. That would be 177 million people and let's say your wrist splint cost \$100 then the PAM would be

\$17 billion. But not so fast as that is not an annual number, it is a lifetime number. To get an annual number you need to compute the annual incidence of the condition.

Looking at further data one can determine that the mean annual crude incidence is 329 cases per 100,000 person years. Thus, in an adult population of 5.9 billion people, there would be 19.4 million annual diagnoses of carpal tunnel syndrome and at \$100 per splint, you could calculate your PAM as \$1.9 billion. But all of these people are not going to buy splints. In fact, the only ones who will buy splints are the ones where there is a distinct benefit to doing so.

A good indication of the number of people who might need a brace can be calculated based upon worker claims for assistance. The Bureau of Labor Statistics and the Occupational Safety & Health Administration reports that there are approximately 900,000 cases each year involving carpal tunnel syndrome. On average, this causes 31 days missed per incident while the average for repetitive injures is 23 days, and all other injures are at 9 days. If this is the number used to calculate PAM, then the market in the US for wrist splints for carpal tunnel syndrome would be \$90 million and worldwide it would be \$1.9 billion. The fact that we have arrived at the same number in two different ways would give us confidence about PAM. But this doesn't help address TAM.

Total Potential Revenue

Some individuals calculate the total potential revenue from a solution if everyone in a market were to purchase the solution. This overestimates PAM as it represents lifetime purchases, not annual ones. Say for instance that instead of selling CRM as a service (SaaS) one were to install hardware and software on premise as they did in the dark ages. In that case, to calculate its Potential Revenue one would calculate the number of firms that exist in the US and multiply by the price per system. The following chart shows how this would be done.

Exhibit 5
Total Potential Revenue (US)

Number of Employees	Firms	Price per firm	Total Potential Revenue
0-4	12,493,536	2,000	24,987,072,000

5-9	1,829,875	4,000	7,319,500,000
10-100	1,418,305	10,000	14,183,050,000
100-1000	147,057	500,000	73,528,500,000
1000 +	23,553	1,000,000	23,553,000,000
	15,912,326		143,571,122,000

This method is flawed because a firm doesn't need to purchase one of these systems every year but every five years let's say so the resultant calculation is not an annual one.

This type of calculation is frequently used in calculating market size in health care markets. Say for instance that there are 10 million people living with essential tremor (shaky hands) in the US and your company has developed a medical device that a patient can wear to dampen essential tremor. If your device costs \$500 then you might be tempted to say that the market is 10 million people times \$500 or \$5 billion. This would be incorrect though, even for measuring PAM. These people only need to buy one of these devices every five years so as in Exhibit 5, the market is grossly over-exaggerated by a factor of five. In addition, you would not have measured the number of people who are diagnosed with essential tremor on an annual basis.

Pam, just like TAM, is measured on an annual basis so in the CRM and essential tremor examples, you would need to divide the calculation by 4 perhaps to get PAM.

Total Addressable Market

To illustrate TAM let's look at Salesforce as an example of TAM inside the CRM market. When they went public in December of 2003, they had \$51 million in revenue and identified their TAM at \$7.1 billion using a report from IDC (a market research company). Meanwhile, IDC was claiming that the current market was growing at 8.9% a year, expected to reach \$11.4 billion by 2008. Thus, IDC calculated and Salesforce claimed a market size based upon current market sales. Today, salesforce has 19.5% market share of a market that grew over 15% annually to reach \$48.2 billion in 2018.

In economics, the concept of a market is defined by the exchange of money for goods and services, not what the potential would be if everyone possible came to buy these goods and services. What I think is happening is that people are confusing the term "Available" in the definition of TAM with the term "Potential". The market that is available is only comprised of those people who are actually spending and only to the amount they actually spend. It isn't supposed to account for all of those that might spend in the future but don't now. Furthermore, the definition of TAM refers to "market demand" which means that we can't count those individuals or firms in a market that aren't current demanding the product, only those who are and they would be represented by the amount of money they spend.

Apple is another good example of the concept of TAM. When they started in 1977, the market for personal computers was about 150 thousand units per year growing at 100% annually. At \$600 for a TRS-80 which was the dominant computer at the time, the total market for computers was \$90 million. This wouldn't seem like much of a market in terms of size but at 100% growth, that would be a TAM of \$92 billion in 10 years. This was pretty close to what happened as computer sales in the US alone in 1987 were 8,340,000 units for \$23.5 billion dollars. Apple revenue in 1987 was \$2.6 billion. The TAM for Apple was not defined as the revenue that would result if everyone bought a computer but the total value of computers sold then or at some point in the future.

A look at Amazon's market is another illustration of this concept. They operate a number of businesses from physical stores to online stores, third party sales and web services. Their online stores account for revenue of \$77 billion annually for goods that they resell and \$106 billion of goods they sell on their platform for others. Of goods that they sell directly they have a 15% share of the US ecommerce market of \$522 billion.

But there is also the total retail market which equaled \$6 trillion in 2018. After excluding cars, car parts, gasoline, restaurant, and bar sales which Amazon does not address, the market size for retail is \$3.6 trillion or about 6% of the addressable retail space.

So how do you measure Amazon's TAM?

- Is it \$6 trillion because that is the value of retail?
- Is it \$3.6 trillion because that is the portion of retail that they address?
- Is it \$522 billion because that is the value of ecommerce sales?

For Amazon, the \$6 trillion total retail market is inappropriate for a TAM because \$2.4 trillion of that market is not addressable by them now and they have no plans to address it in the future. The \$522 billion ecommerce market is also not the right number because Amazon is actively trying to get customers in the \$3.6 trillion retail market that is left to convert to ecommerce (and succeeding.) Amazon is competing with physical stores and other ecommerce vendors for customers so the value of sales made by these other vendors is included in Amazon's TAM.

Your TAM is your revenue plus the current revenue of your competition

Forward TAM

Each of these market measurements has implications on your firm's strategy. The most important thing to understand is how big your firm could be in let's say 10 years. The first 10 years of a firm's existence is the period where rapid growth is possible. This is the period when you might want to obtain venture capital and potentially exit with an IPO. If you want to do this then your market must be big enough to support a company that grows rapidly to a size that supports an IPO and generates an adequate level of returns for VC investors. For this reason, you will want to look at what the TAM will be in 10 years.

What really isn't important but is thought of as such is what the TAM is today. Over time, what is important is what that TAM will be 10 years from starting a firm and how much of that TAM a startup will be able to convert into revenue. The CRM market in 2003 was \$7.1 billion growing at 8.9%. Using that growth rate, one would predict a market of \$30 billion by the year 2020, substantially below that which exists today. But it is in the right order of magnitude. A company starting out in 2003 and achieving 1% of the market in 2013 (more on that later) would record revenue of \$166 million, more

than enough to go public. And that is the purpose of TAM, to figure out if the market is large enough to warrant a VC investment, one that will enable a successful firm to go public in about 10 years.

Your strategy as a firm will depend directly on how big the potential market for your solution is. With a big enough solution, you can raise venture capital and eventually go public. With a very small TAM, you wouldn't want to raise VC money but you might consider bootstrapping. In between these two levels is the hard part. There are financing options available for these companies from banks, angels, growth equity and private equity suppliers and government sources. But the strategy for the firm will be entirely different depending on the TAM. This is why it is so important to understand TAM as the first step in starting the firm.

Why is a Big TAM Important?

The bigger the TAM, the faster a company will grow, thus making it more attractive to investors. Take a look at three software companies that went public around 10 years after they were founded.

Exhibit 5
Uber Dropbox and Xactly

Company	Total Addressable Market (\$B)	Revenue (\$M)	% of Market
Uber	\$2,500	\$14,147	0.45%
Dropbox	50	1,107	2.21%
Xactly	7	61	0.87%

Each of these companies managed to obtain a relatively small part of their TAM but Uber, with a much bigger TAM, had a much bigger growth rate and ended up with much higher revenue. It takes about 30 years to reach saturation of a market for a new technology no matter what the size of the market. A larger market will have greater growth rate.

Back to our Healthcare Example

Let's go back and look at the TAM for wrist braces. The global orthopedic braces and supports market size was valued at over USD 4.9 billion in 2018 and is expected to witness a CAGR of 6.4% over the forecast period. This market includes back & hip braces, knee braces, upper extremity braces, lower extremity braces, elbow braces, foot & ankle braces, wrist braces, shoulder braces, and other. The largest market share was for lower extremity braces and knee braces are growing at the fastest rate. While segmented data is not readily available without the purchase of a report, it would be safe to say that the wrist portion of this market does not exceed \$490 million. Furthermore, wrist braces are required for two different conditions, arthritis and carpal tunnel. On this basis the market for wrist braces might be half of that or close to \$250 million. And this is what a firm should show as TAM. We have gone from a PAM of \$1.9 billion to a TAM of \$250 million.

It is important to understand the difference between these two numbers. There are lots of very good reasons why people with carpal tunnel may not decide to use a brace:

- They may not know the brace is an option.
- The problem may not be big enough to warrant a brace.
- A brace may not help them in their situation.
- They may not be able to afford a brace (this may be particularly true in less developed countries).
- They may not want the stigma of having to wear a brace.

There is also a temptation to say that the market is actually larger than \$250 million a year. For instance, it could be claimed that from an economic perspective, companies are losing considerable amount of productivity from downtime for the 31 days that someone is unable to work. 900,000 cases for 31 days at \$150 per day in lost productivity is \$4.2 billion dollars in the US alone. But even though this may be happening, companies aren't buying braces and the amount spent on them is only \$250 million a year. The difference results from the many reasons why a brace is not an appropriate solution. It results from carpal tunnel use cases that do not warrant a brace so using an economic measure to estimate TAM doesn't reflect the specific uses cases that need a brace.

One might also be tempted to say that money could be saved on surgery and prescriptions by using a brace. There are 230,000 carpal tunnel outpatient surgeries

performed annually in the United States and if surgery and medications relating to them cost \$10,000 each then someone might try to make a case that TAM is \$2.3 billion in the US. Once again, the issue of use cases applies as not all of these surgeries have a use case that results in the need to purchase a brace.

Fundamentally, a TAM first exists only to the extent that the product you are bringing into the market reduces the expenditure on something else. Secondly one can see growth in the market by a certain percentage annually if the solution presented meet use cases that that are currently not served. However, that is the future and current TAM is only the amount spent right now for substitute products.

Effectively, your TAM is equal to your revenue plus the current revenue of your competition.

One reason I've gone on with this concept so extensively is that I made this mistake once myself and lived to regret it. At Synamics, in the early days when we were selling interactive voice response systems, we estimated the need for them based upon the number of Nortel switches sold in Canada that had a certain class of software that indicated the presence of a call centre. Unfortunately, what we didn't realize was that this software was included in a pricing bundle for some people who needed the functionality without actually having a call centre. The actual number of call centres we could find in the long run was one tenth of the number of switches with that software option. The second problem in estimation was determining that the market was equal to the number of applicable switches times the price of the IVR solution. We didn't discount for the time required for the diffusion of innovation, and the issue of crossing the chasm. As a result, the market was in reality maybe 1% of what we estimated.

I also ran into this problem in working with a firm that sold asset maintenance management software to mining companies. You could calculate PAM easily by the number of mines multiplied by the annual cost per mine of this software. It was huge. You could also estimate the savings in maintenance and breakdown costs that could accrue from the use of this software and it was huge as well. But what it came down to was that only mines above a certain size needed the software, everyone else used Excel. New clients would purchase if the mine was expanding as economies of scale resulted from the use of the software. But fundamentally, TAM was small and it was very hard to get clients to switch from Excel to their software. They could only really count on

revenue from companies switching from another software vendor to them. TAM was limited to the dollar value of annual purchases of exactly this software.

There are three ways to figure out TAM:

1. Top Down
2. Bottom Up
3. Using Value Theory

The third way to estimate TAM is to use Value Theory. It estimates the amount of value that can be added and how a startup will be able to capture that value. As this is a fairly complex way to arrive at TAM and is subject to many guesses, it is better left to companies with a track method of being able to estimate value delivered to actual customers later in a company's life cycle. For that reason, it will not be discussed here. However, we shall go through the other two methods.

Top Down Approach to Measuring TAM

Using a top down approach, a company claiming a horizontal market potential will claim as their 10-year TAM, the current market increased or decreased by the current growth rate. A company targeting one or more vertical segments of a market should only claim that portion of the total market they are targeting. Amounts for TAM can be obtained from any number of market intelligence vendors and high-level numbers are typically available on the internet. One must be careful in using these numbers to make sure

1. That the report is not calculating PAM. A good report will break down the revenue by firm for the top firms in the market.
2. That what you are selling lines up directly with what they are measuring. For instance, the TAM for a software product may include a high level of professional services. If you aren't offering those professional services then it would not be appropriate to include it in TAM.

Going back to the CRM example, we know that the current TAM is \$48 billion worldwide and approximately \$15 billion in the US alone. If you are selling a horizontal solution to small businesses then you would have to reduce the current TAM to represent that portion purchased by small businesses. If you have a vertical solution, your TAM would reflect only the vertical for whom you have developed product.

Bottom Up Approach to Measuring TAM

The bottom up approach is preferred but it can result in anomalies, particularly if the company doesn't have a full understanding of its use cases or buyer personas. Let's use CRM again as an example and say that a company is targeting the entire industry in the US. To calculate TAM from PAM, we would adjust the total number of potential buyers by the rate of penetration for that software within different firms.

Exhibit 6
Total Addressable Market

Number of Employees	Potential Addressable Market	Penetration Rate	Total Addressable Market
0-4	1,249,353,600	1%	12,493,536
5-9	2,195,850,000	5%	109,792,500
10-100	10,637,287,500	15%	1,595,593,125
100-1000	25,734,975,000	25%	6,433,743,750
1000 +	23,553,000,000	35%	8,243,550,000
	63,370,466,100		16,395,172,911

A company could find the penetration rate by doing primary market research and calculating the percentage of research respondents who used CRM software. In this example we measured a TAM of \$16 billion using a bottom up approach and \$15 billion using a top down approach. This is about one quarter of the PAM that we measured previously in Exhibit 4.

Service Addressable Market

The next concept to measure is the Service Addressable Market. SAM is what proportion of the market fits you or the portion you can serve and reach with your business. This means how many can you reach with your sales channels. This might mean a segmentation of the market into verticals as your sales channels are built this way. It could be segmentation of the market by size or by location.

Let's say that you have developed a horizontal CRM application and that your first segmentation exercise has shown that real estate agents represent the best potential initial buyer. All of the data here can be obtained on the net in minutes. Ideally this would be done based upon experience in the market from selling to these companies but it can also be done using market research and calling prospective buyers. One would use the same method as we did to calculate TAM in order to calculate sales to real estate agents. One way to do this would be to do actual market research on the real estate segment.

- One would determine the rate of uptake of the technology overall. According to the net, 5% of firms use no CRM and 72% use manual methods. This is for all firms so that one would expect smaller firms to show even less penetration. This leaves 23% actually needing a CRM solution. Since uptake is higher the bigger the firm, this percentage would be applied differently to each size of firm.

Another approach would be to use secondary market research reports to determine what percentage of CRM sales are to real estate agents.

- Since real estate agents represent 18% of buyers of CRM then this number would be applied to calculate the SAM.

The net result is a healthy SAM of \$2.9 billion annually in the US. Another way to start this is to look at the number of real estate agents in the US.

This illustrates two different approaches to a bottom up analysis. The trick is to do the analysis a number of different ways and then do some market research to figure out which is the most accurate.

Your SAM is your Initial Market Segment

Service Obtainable Market

This is your initial target market. Your SOM represents those customers who have use cases or buyer personas that you have established as your initial target market. (This concept is sometimes confused with Share of Market.) For instance, if you are selling CRM software to real estate agents and you are targeting buyers of high-priced houses, then your SOM will be calculated based upon those buyers.

SOM is the subset of your SAM that you will realistically get to use your product.

Putting this into Practice

Many companies confuse Potential Addressable Market with Total Addressable Market, thinking that their market is larger than it really is. Don't forget that PAM is the number arrived at by multiplying all potential buyers by the amount they could buy. TAM is the amount **actually being spent** now by those buyers and this is the revenue base you will attack and try to displace in building your revenue. This is important because the average firm only manages to get revenue equal to .75% of TAM when they go public. Companies that think Pam is TAM will often end up entering markets that won't support the growth necessary for success later on or even start businesses where there is actually no current market.

The first thing a startup needs to do is to figure out how big the potential for their solution is. Figuring this out will enable them to pick a path to commercialization that involves or doesn't involve funders of different types. If they want to create a Unicorn, it will give guidance on increasing the scope of their solution to be able to have a TAM big enough to support just such a mythical beast. Using the techniques shown here and continually calculating TAM as the company matures will enable the firm to guide its growth and decisions about market penetration. The following is a eight-step process that is aligned with the steps outlined previously:

1. Calculate PEV in terms of economic cost by defining the economic cost to the market you are in.
2. Determine a Value Based PAM by defining the total value you could potentially produce annually.
3. Separate annual from lifetime PAM if you have a product that is purchased and paid for once but used for multiple years by calculating PAM on an annual, not a lifetime basis.
4. Finally calculate PAM as the total sales that could be made to all potential purchases in your market.
5. Obtain some market research reports and calculate TAM top down for your firm.

6. Do some market research to determine current spending by your target market and use that to calculate the Total Addressable Market on a bottom up basis for your firm.
7. Do some more market research to determine current spending by the segment of the target market you can service and use that to calculate the Service Addressable Market for your firm.
8. Do some market research or obtain some secondary data to determine SOM.

About the Narwhal Project

The Narwhal Project works for technology companies at the intersection of strategy, marketing and finance to help them analyze strategic options, adopt and document a strategy, and raise funding. We help entrepreneurs figure out the best markets to serve, how to differentiate effectively, ensure product market fit, improve unit economics and raise capital.

The Narwhal Project was also established to conduct research in order to discover the underlying factors that are essential to create world-class technology companies. Our objective is to understand how companies can accelerate their growth and adopt best practices in technology commercialization.

Charles Plant

Charles Plant, the founder of the Narwhal Project, is a serial entrepreneur, financial strategist, and innovation economist. He was co-founder and CEO for 15 years of Synamics, a telecommunications software firm. He has been co-founder of four, Board Chair at four and CFO of eight emerging technology companies. He has worked on financing and M&A transactions totalling over \$400 million in investment banking, on the management committee and CFO of three venture capital firms, and as an advisor at a number of incubators. Charles has also served as an advisor to national, provincial and city governments on innovation policy and written over 40 research papers and one book and has another on the way. As an educator, Charles spent seven years on the faculty of York's Schulich School of Business teaching in the MBA program and has taught innovation and entrepreneurship at the University of Toronto. He has an MBA in marketing, is a CPA/CA and is currently pursuing a PhD in Economics.

Marielle Voksepp

Marielle is an experienced leader, operator and educator who's work with startups and early-stage entrepreneurs spans 10 years. She has designed and delivered numerous entrepreneurship programs and advises leading entrepreneurial support organizations across Canada on program strategy and operations including MaRS Discovery District, Futurpreneur Canada and the University of Calgary's Hunter Hub for Entrepreneurial Thinking. Marielle led the design and launch of the IFH Impact Accelerator, the first impact-focused fintech accelerator in Canada. She is also an investor in real estate and early-stage technologies. Marielle has a BSc and BEd and is currently working on a master's degree from UofT.