Estimating Market Potential: Is There a Market?

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Part 1. What the Agent Needs to Know

Your clients have decided the price they want, the geographic location of the market, their possible customers, and who and where the competition is. Next, they must calculate the portion of the market they can reasonably expect to capture. Market potential is an estimate of the amount of money your clients can expect to make from the product or service they plan to market. Their estimate will only be as good as the information they use and the assumptions they make. There are seven steps to estimating market potential (they have already completed the first four steps).

1. Define the market segment (target market).
2. Define the geographic boundaries of the market.
3. Define the competition.
4. Define the market size.
5. Estimate market share.
6. Determine the average annual consumption.
7. Estimate an average selling price.

Step 5, estimating the market share or potential, will allow your clients to determine if their markets will support their businesses by covering their costs and paying them a salary. Generally, the market potential is the highest estimated net revenue that they will realize from their enterprise. In the second meeting, you covered estimating a price. When they estimate market potential and use the price they calculated, they will see if they have covered their costs. One way for your clients to use their market potential analysis is to change their assumptions and see if they can still cover their costs. They can either lower their expectations of the number of people who will buy from them, or they can raise their prices. Writing down the assumptions they use to estimate their market potential and the changes they make to those assumptions is essential.

The market potential is the number of potential buyers, an average selling price and an estimate of usage for a specific period of time. The general formula for this estimation is simple:

\[
MP = N \times MS \times P \times Q
\]

Where:
- \( MP \) = market potential
- \( N \) = total number of potential consumers
- \( MS \) = market share—percent of consumers buying from you
- \( P \) = average selling price
- \( Q \) = average annual consumption

To illustrate the concepts discussed, we use the agritourism example of a farmer wanting to add a corn maze and educational tour.

Define the market segment

Your clients have identified the target market of the customers who are most likely to buy from them. The target market was generally described using demographic variables: gender, age, education and income. The market is also described using psychographic variables: lifestyle, interests and belief system variables. A client might have more than one target market. The most important piece of information from identifying the market is how many potential customers fit the target market description based on the variables a client chooses:
Estimating Market Potential: Is There a Market?

Define the market size

Once a client has defined the market area, target market and total number of people in that market, he calculates the number of potential customers for the business. The total market will typically be adjusted downward to consider those who will not buy from your client. From the total people in the target market, the client estimates the percentage of consumers who would use the products or services.

Example—Agritourism

Assume the farm is already an agritourism operation. Your client wants to offer a corn maze as well as something educational. The client decides to target children in kindergarten through third grade. The target market area is Wake County, which has 45,700 children between 5 and 9 years of age. Therefore, \( N \) (number of potential customers) = 45,700. They found this number in the 2000 U.S. Census.

However, not all children under 9 will visit any agricultural facility. The client’s next step is to adjust the 45,700 to get a more accurate estimate of the actual market potential. A survey of elementary school teachers showed that 60 percent of kindergarten through third-grade teachers are willing and able to take an agriculturally related field trip.

As a result, the 45,700 kindergarten through third graders needs to be multiplied by 60 percent. This calculation results in an adjusted market potential of 27,420 potential students.

\[
\text{Number of Potential Consumers} = 45,700 \times 0.60 = 27,420
\]

Define the geographic boundaries of their market

Your clients have defined their market areas by geography, ring analysis or radius, trade area or drive-time. Most likely, they used geography, the simplest form of defining a market area. It defines the market area by using landmarks or some jurisdictional boundary, such as

- neighborhoods (based on U.S. Census block data)
- zip codes
- city or county boundaries
- Metropolitan Statistical Areas (MSA) state (multi-state) borders

Define their competition

The next piece a client needs is information about the competition. Continuing the agritourism example, your client finds out who the competitors are in the market and what they are offering.

Example—Agritourism

Assume your client finds three other farms with corn mazes. One has a petting zoo and pumpkin cannon included in the admission price. The other two farms offer the corn maze as one of several activities, including pick-your-own pumpkins and apples, hay rides and a haunted house—each priced separately. Your client decides to offer the corn maze and an educational tour of the farm. Each participant will get a small bag of apples at the end of the tour. The tour includes a hay-ride around the farm with stops at various picture signs that point out production practices used and crops grown.

Determine the average annual consumption.

Next, your clients determine how often their target market segment would use their product or service. This figure will have a significant impact on the estimated market potential. For instance, is a product purchased frequently, occasionally or infrequently? Obviously, the more frequently the product is purchased, the larger the market potential. An abundant amount of consumption information is available from the government as well as industry trade associations. For example, the USDA
collects volumes of disappearance (consumption) data for many commodities and converts it into per-capita annual usage (consumption) estimates.

The quantity of product your clients are selling would vary based on the product being sold. For example, if a client sells honey, the same customer may buy it five times in a season. If, however, a client is selling hayrides, most customers will buy only one in a season.

**Example—Agritourism**
The client offers educational hay rides and a corn maze and assumes that students would come only once with their classes. If the client offers the same package on weekends or for special events like birthday parties, some students might come two or three times.

Usage would be how often these school groups will take an agriculturally based field trip within a school year. The survey of elementary school teachers indicated that each teacher plans to take only one agriculturally based field trip this year. Therefore, use “1” as the estimate of use:

\[
Q \text{ (quantity used)} = 1
\]

**Calculations for Estimating Market Share**
Market share is the percentage of a market (either in number of units sold or revenue) accounted for by each business. It provides important insight into how much of the total potential market a client might capture. If the market share is not large enough to support the business, the client has a problem. Also, if the number of units needed for the business to break even financially is known, the client can determine what share of the market must be captured to achieve this break-even point. Your clients need to be careful not to estimate an unrealistic market share. The result could spell financial problems.

Estimating market share is difficult because of the lack of information. Some trade associations or market research publications and stories will supply some basic market share information, but finding directly applicable information for each client’s business may be impossible. Your clients should estimate various scenarios based on what information they have. Remind your clients to write down the assumptions they use so that they can go back later and revise based on new information.

**Example—Agritourism**
Assume three existing agritourism operations are in a client’s market area. What percent of the total market might your client be able to acquire? Because data on agritourism in the area are not collected, your client won’t be able to come up with an accurate number. However, for planning purposes, you can “guesstimate” a market share. In this example, it is the number of units sold—the number of students going on the farm tour—that is being calculated.

First, your client assumes that each of the competing farms in the market area has an equal share of the potential market, or 33.3 percent of the 45,700 children between ages 5 and 9. Next, the client assumes that if he enters this market, he will take an equal part of each existing operation’s business. The goal is to capture 25 percent of the total potential market. To calculate the market share for each of the competitors, use this formula:

\[
\text{Market share} = \frac{100\%}{\text{number of competing businesses}}
\]

\[
\text{Market share} = \frac{100}{3}
\]

\[
\text{Market share} = 33.3\% \text{ for each of the existing agritourism businesses}
\]

To assume your client will get 25.0 percent of the market (assuming they divide the existing market evenly four ways) is probably unrealistic since the business is new, and the competitors have existing customer bases. Your client can easily change the assumptions. For example, he assumes that he can capture 3.3 percent from each of the three existing operations. The client would then have 10 percent of the total potential market.

Using the total population of 45,700, your client estimates that only 60% of those children would probably be able to go on a field trip. When completing the calculation, the client finds only about 27,420 (45,700 × 0.60 = 27,420) would actually go on an agricultural field trip. Your client decides to use this lower number (27,420) and 10 percent for the market share for the first year. Your client finds he will have about 2,742 (27,420 × 0.10 = 2,742) children. This market potential number potential will help your client determine if the plan is feasible.
Your client has the following information to use in calculating the market potential for an agritourism operation:

N  Total number of consumers (based on Wake County census): 45,700

MS  Market share (based on teacher survey results times the client's estimate of how much of the market can be captured from the competition): 0.06*

P  Average selling price (based on cost of production): $8.00

Q  Average annual consumption (number of visits per student based on teachers’ survey): 1

MP = N × MS × P × Q
MP = 45,700 × 0.06 × $8.00 × 1
MP = $21,963

*To calculate the percent of consumers buying from a client, multiply the percentage of consumers who are potential customers by the percentage of the market the client expects to capture from competitors. In the example, this calculation would be 0.6 × 0.1 = 0.06

Any market potential estimate is only as good as the assumptions a client makes and the data used. Your clients are better off estimating on the low side and setting their prices to cover their costs. If an estimate of market potential is low, the client will show a profit above his or her costs. If, however, the estimate is too high, your client may find it difficult to pay the bills at the end of the season.
### Part 2. Market Potential Worksheet

Ask your clients to complete this worksheet at home.

1. Total number of people within the target market area

2. Consumption (How often is the product consumed, and how much of the product is consumed?)

3. Competition (number of competitors)

4. Calculate the market share:

<table>
<thead>
<tr>
<th>How many people matching your demographics live within the defined market area?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Market Area</strong></td>
</tr>
<tr>
<td>-----------------</td>
</tr>
<tr>
<td>County 1</td>
</tr>
<tr>
<td>County 2</td>
</tr>
<tr>
<td>Total number of people</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>How much of the product is consumed by your target customers?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Market Area</strong></td>
</tr>
<tr>
<td>-----------------</td>
</tr>
<tr>
<td>1. Market area 1</td>
</tr>
<tr>
<td>2. Market area 2</td>
</tr>
<tr>
<td>Total all market areas</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Who is your competition?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Competitor</strong></td>
</tr>
<tr>
<td>-----------------</td>
</tr>
<tr>
<td>Competitor 1</td>
</tr>
<tr>
<td>Competitor 2</td>
</tr>
</tbody>
</table>
Estimating Market Potential: Is There a Market?

### What percent of total potential customers go to the competition?

<table>
<thead>
<tr>
<th>Competitor</th>
<th>Number of customers</th>
<th>Percentage of market</th>
<th>Market share (customers × percentage)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competitor 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Competitor 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total all competitors</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7. Total the information:

### Numbers you need to estimate your market potential:

<table>
<thead>
<tr>
<th>Item</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of potential customers (N)</td>
<td></td>
</tr>
<tr>
<td>Total consumption (Q)</td>
<td></td>
</tr>
<tr>
<td>Total market share (MS)</td>
<td></td>
</tr>
<tr>
<td>Your price per customer (P)</td>
<td></td>
</tr>
</tbody>
</table>

Estimating Market Potential: 

\[ MP = N \times MS \times P \times Q \]

Where:
- \( MP \) = market potential
- \( N \) = total number customers
- \( MS \) = market share
- \( P \) = average selling price
- \( Q \) = average annual consumption (usage, number of times individual would attend)

Your numbers

\[ MP = N \times MS \times P \times Q \]

\[ N = \quad \]
\[ MS = \quad \]
\[ P = \quad \]
\[ Q = \quad \]
\[ MP = \]
References

Bullen, Gary. 2006. *Direct Answers for Direct Marketers*. Marketing Resource CD developed as part of Southern Region Sustainable Agriculture Research and Education (SARE) grant. Raleigh: N.C. State University, Department of Agricultural and Resource Economics. Contact gary_bullen@ncsu.edu.
