Sizing the Potential of a New Market or Product

Dr. Bruce Isaacson, President of MMR Strategy Group
New markets and new products or services provide the engine of growth for many companies. Faced with sluggish demand in existing markets, the need for continued innovation, and investors who require ongoing growth, companies find themselves entering new markets, taking on new products in new markets, and developing very new and different products for existing customers.

When considering a possible new category or a potential new product, one of the most important tasks is estimating the size of the category or projecting possible demand for the new product. It is difficult to justify the commitment required to move into a new market or launch a radically new product without a clear picture of the potential.

The problem is that many managers aren’t sure how to size a new product or marketing opportunity. Sometimes they rely on their intuition regarding which opportunities in the pipeline have the most potential. Other times technologies or processes that come from R&D become development projects, without a clear projection of customer acceptance or potential revenues. Both of these methods can succeed at times, but they miss the opportunity to gather feedback directly from the marketplace early in a project’s progress, and to use this feedback to focus resources on the opportunities with the greatest potential.
You may have heard the cliché that consumers could never have predicted demand for the radical innovations such as the microwave oven or the iPod. This advice simplifies the true picture, which is that nearly all projects to enter new markets or develop very new products can benefit from a series of powerful tools to predict demand and market share. This article describes some of those tools that can be used to estimate the size of an entirely new category, or estimate the potential of a unique product, a product in a new category, or a product that otherwise has no prior history.

We’ll start by explaining how to estimate the potential demand for a very new product, and then turn to the task of estimating the size of a new market. Although we’ll use the term “product” in this document, the concepts and methods apply equally to products or services.

Before getting into the details, the next section provides some background to explain what we mean when we talk about new products and new markets.
How to Classify New Markets and New Products

Since this white paper discusses new products and new markets, we’ll start by looking at how those two variables interact. Although this may seem theoretical, it provides very useful background because the difficulty of estimating demand for a new market or a new product depends on the type of new product, and the market in which it is introduced.

Figure 1: New Products and Markets

As shown by Figure 1, new products can be classified into two categories. Incrementally new products are those that are improvements on existing products, such as a new flavor of ice cream, an updated car model, or the next generation of an antivirus software program. By contrast, radically new products are very new and very different, such as a new category of food, an entirely new type of car, or a new type of software program.
The job of demand estimation for radically new products is more difficult because we don’t have any history to rely upon, as we often do with incrementally new products.

Now, let’s turn to markets. Figure 1 organizes markets into those that a company currently serves versus those that are new to the company. When a company already serves a particular market, typically the company has pre-existing information about the market on topics such as who the customers are, how they buy, and what they want.

The two axes of the matrix in Figure 1 provide four quadrants. The easiest demand estimation task is Quadrant 1, where we know the market and there is a prior history of product introductions. The most difficult is Quadrant 4, where both the product and the market are very new. Quadrant 2 and Quadrant 3 fall somewhere in between.

In the next section, we’ll look at the task of predicting demand for a very new product, one that is radically new.
Predicting Demand for a Very New Product

This section looks at the task of predicting demand for a very new product. We’ll start with an example where we have prior history, which corresponds to Quadrant 1 of our matrix from Figure 1.

Using History to Predict Demand for a New Product

The easiest task of predicting demand for a new product is when we have a history of introductions with similar products. As we’ve described in other publications (for example, see 10 Best Practices to Improve Your Concept & Product Tests), prior history can provide standards to predict the size of a new product. In that case, we can use the history to create what researchers call norms.

As an example, imagine we are testing a new flavor or type of ice cream. If we have introduced other flavors previously, we can use those prior flavors as benchmarks against which to judge our new flavor. Because we know how those flavors performed on the same types of tests, and we know how those flavors went on to perform in the marketplace, we can use their test scores to predict volume. If our new flavor performs about as well as other flavors that were moderate successes, we might expect that the new flavor will also be a moderate success.

This example is great if every company were like our ice cream example, with a history of product testing and marketplace experience for those products. What happens when we lack history, because there were no similar products introduced in the past or because the market is entirely new?
In those cases, we create our own benchmarks by comparing against either other existing products or services (we call these “internal benchmarks”) or by comparing products and services offered by other companies in the new market (we call these “external benchmarks”).

The next section uses an actual MMR Strategy Group case experience to show how to predict demand when there is little or no past history upon which to rely. This case corresponds to Quadrants 2, 3, and 4 in the Figure 1 matrix, where either the product is very new, or the market is very new to the company, or both.
Developing Benchmarks to Estimate Demand for a New Product

The best way to predict demand for a very new product or a very new service is to develop benchmarks. We’ll describe how benchmarks work using a disguised example from a project we did for a travel industry client.

Our client, a cruise line operator, wanted to establish a new type of service. They had never operated this type of service, and weren’t sure how many ships they could fill. The investment in ships runs into the hundreds of millions of dollars, so determining or knowing how many ships to operate in the new market, or whether to operate at all, was an important question.

We developed projections for demand using two sets of benchmarks:

- Internal benchmarks created based on existing cruises operated by our client in other markets, and
- External benchmarks based on cruises operated by competitors.

To develop each benchmark, we conducted a survey where consumers saw a description of the new cruise and were asked how likely they would be to go on the cruise, the size of the party that would accompany them, and their expectations about the cruise, including important attributes such as on-board entertainment and food.

We’ll describe each of the methods in turn.
Figure 2: Two Benchmarks to Estimate Demand

<table>
<thead>
<tr>
<th>Benchmark to Project Demand</th>
<th>Internal Benchmark</th>
<th>External Benchmark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Gathered in Survey</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Measure purchase intent for client’s new service and existing service</td>
<td>Measure purchase intent for client’s existing service</td>
</tr>
<tr>
<td></td>
<td>Calculate actual response rate for client’s existing service</td>
<td>Measure actual demand for competitive cruises in the new market</td>
</tr>
<tr>
<td></td>
<td>Calibrate purchase intent to actual response rate</td>
<td>Calibrate purchase intent to actual demand</td>
</tr>
<tr>
<td></td>
<td>Apply calibration to estimate demand for client’s new service</td>
<td>Apply calibration to estimate demand for our client’s new service</td>
</tr>
</tbody>
</table>

Estimating Demand by Comparing with Existing Products

As shown in Figure 2, we used internal benchmarks to estimate demand for the new cruise by comparing with our client’s existing service. Respondents to the survey that provided the data for this model saw either a brochure for our client’s existing cruise or the new cruise that our client was considering starting in the new market. Respondents were asked to evaluate the service they saw by indicating their purchase interest – how likely they would be to go on that cruise.

As shown in Figure 2, we developed a calibration ratio which accounts for the fact that a larger percentage of people say they will go on a cruise than actually go on the cruise. The calibration ratio was based on a comparison with the client’s existing services.
We used purchase interest scores for the new service and the calibration ratio to predict the demand for the new cruise. Figure 3 shows a disguised version of the calculations. The calculations start with the total market size (the number of households who would consider this type of cruise) and work through purchase interest and the calibration factor to predict demand for the new service.

**Figure 3: Calculations for Internal Model**
Based on comparisons with our client’s existing service

<table>
<thead>
<tr>
<th>Weightings</th>
<th>100%</th>
<th>50%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very likely</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Somewhat likely</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Calculate Calibration Factor

<table>
<thead>
<tr>
<th>Passengers</th>
<th>Market Size</th>
<th>Weighted Purchase Intent, Current Service</th>
<th>Estimated Demand Based on Purchase Intent</th>
<th>Actual Demand</th>
<th>Calibration Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequent</td>
<td>400,000</td>
<td>40%</td>
<td>160,000</td>
<td>40,000</td>
<td>25%</td>
</tr>
<tr>
<td>Less frequent</td>
<td>200,000</td>
<td>30%</td>
<td>60,000</td>
<td>12,000</td>
<td>20%</td>
</tr>
<tr>
<td>Total</td>
<td>600,000</td>
<td></td>
<td>220,000</td>
<td>52,000</td>
<td></td>
</tr>
</tbody>
</table>

### Estimate Demand Using Calibration Factor

<table>
<thead>
<tr>
<th>Passengers</th>
<th>Market Size</th>
<th>Weighted Purchase Intent, New Service</th>
<th>Calibration Factor</th>
<th>Adjusted Demand Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequent</td>
<td>400,000</td>
<td>45%</td>
<td>25%</td>
<td>45,000</td>
</tr>
<tr>
<td>Less Frequent</td>
<td>200,000</td>
<td>35%</td>
<td>20%</td>
<td>14,000</td>
</tr>
<tr>
<td>Total</td>
<td>600,000</td>
<td></td>
<td></td>
<td>59,000</td>
</tr>
</tbody>
</table>

*Note: Numbers and calculations have been modified and simplified.*
Estimating Demand by Comparing with Competitors

A second model used external benchmarks which compared with competitive brands already operating in the new market. The survey for this model presented similar materials as the survey to develop the internal benchmarks, except that this questionnaire measured purchase interest scores for two types of cruises: competitive brands already operating in the new market, and our client’s cruise in the new market.

As shown in Figure 3, calculations for the external benchmarks followed a slightly different process. Once again we calculated a calibration factor, in this case by comparing purchase intent for the competitor’s cruises with actual demand for the competitor’s cruises. We then used purchase interest scores for our client’s cruises in the new market along with the calibration factor to estimate demand.

Figure 4 shows a simplified version of the calculations used for the external benchmarks. The model using the external benchmarks was calibrated by comparing the percent of respondents who intended to go on each competitor’s cruise with the numbers who actually went. The resulting calibration ratio was then applied to the purchase interest scores for our client’s new cruise.
Figure 4: Calculations for External Model
Based on comparisons with competitive services

<table>
<thead>
<tr>
<th>Calculate Calibration Factor</th>
<th>Competitor 1</th>
<th>Competitor 2</th>
<th>Competitor 3</th>
<th>Competitor Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passengers per year to destination</td>
<td>150,000</td>
<td>200,000</td>
<td>200,000</td>
<td></td>
</tr>
<tr>
<td>Weighted purchase intent for competitor’s service</td>
<td>15.0%</td>
<td>10.0%</td>
<td>6.7%</td>
<td></td>
</tr>
<tr>
<td>Calibration factor</td>
<td>10,000</td>
<td>20,000</td>
<td>30,000</td>
<td>20,000</td>
</tr>
</tbody>
</table>

Estimate Demand

<table>
<thead>
<tr>
<th>Calculation</th>
<th>Calculation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weighted purchase intent for our service</td>
<td>7.5%</td>
</tr>
<tr>
<td>Calibration factor</td>
<td>20,000</td>
</tr>
<tr>
<td>Implied passenger demand for our service</td>
<td>150,000</td>
</tr>
<tr>
<td>Number of ships filled annually</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Note: Numbers and calculations have been modified and simplified.

Other Benefits of Using Benchmarks to Estimate Demand for a New Product

This method for using internal or external benchmarks to estimate demand for a new product not only provides an estimate of demand, but also provides a range of diagnostics that can be used to fine-tune the new product. In the survey, we can also gather feedback about issues such as whether consumers viewed our client’s brand as credible in the new market, or anticipated purchase behaviors and purchase processes.

In short, these methods provide not only estimates of demand, but also useful diagnostics.
Sizing a New Market

Sometimes the task is not just estimating demand for a specific new product, but rather estimating potential demand or size of a market under consideration. Often, the company is considering offering multiple products to that new market, so the benchmark method described previously would not be practical.

Instead, we estimate demand for a new market using two types of data: syndicated data and survey data. We’ll describe both in this section.

Sizing a new market using syndicated data

Figure 5 shows an example of the output that results when we size a market with syndicated data. The example is based on an actual MMR Strategy Group project.

In this case, our client made a particular category of frozen food that was sold at retail to consumers and also to foodservice operators. To estimate this model, we gathered data from a variety of sources, including syndicated data reports, government studies, and the judgment of the client’s salesforce. The process involved triangulating across these data sources to analyze the market across a series of segments, such as fresh versus frozen, retail versus foodservice, and raw versus cooked.
Once we had calculated the total size of the US market, we worked through a series of data sources and estimates to calculate the size of each part of the market. The project also included price and profitability estimates to understand the market by volume (pounds), revenues, and profits, as well as estimates by a variety of other marketing channels. The client used this information to identify the best opportunities for growth in the near term.
Sizing a New Market Using Survey Data

A new market can also be sized using survey data. An example is provided in Figure 6, which was developed from a client project to estimate the potential demand for a household appliance that is used in a relatively small percentage of U.S. households. (The figure shows that only 3% of households currently have this appliance.)

**Figure 6: Sizing a Market Using Consumer Survey Data**
*From appliance project*

To size the market, we used consumer survey data to estimate key components of the market, including the following:

1. The percentage of households that have this appliance
2. The market share of major brands in the market
3. The percentage of respondents who may not own the appliance but qualify as *prospects*
4. The percentage of prospects who have high versus moderately high purchase intent

*Note: Numbers and calculations have been modified and simplified.*
The figure shows how a model based on survey data can estimate the percentage and number of households who would potentially be in the market for this appliance. (The actual model provided estimates of units as well as dollars.) The survey also provided a number of other important diagnostics, such as the attributes that consumers most sought in this appliance, as well as purchase and usage behaviors.
Conclusions
In this white paper we’ve demonstrated a number of methods that can be used to estimate demand for a very new product or to estimate the size of a potential new market. No matter what goal your project has, or which method you use, keep the following tips in mind:

1. **Customize the estimation**: Your method for estimating the potential of your new market or new product must be altered and adjusted to fit the goals of the project and the data available. All estimates are specific to products, consumers, channels, and other factors.

2. **Dig deeply into the data**: We have always been able to locate data to size a potential product or market, but oftentimes the source and interpretation of that data can make a big difference in the estimates. We suggest you dig into the data to understand how figures were gathered and what they measure.

3. **Collaborate across functions**: Your estimates are only as good as the data and experience that go into them. Seek out managers with experience who can help you make sure your methods are sound. If the head of sales or customer service or engineering thinks your estimates are way off, find out why.

4. **Plan, and plan some more, before you gather data**: Build your model in a blank format before you gather any data. That way you can make sure that you will gather the data you need to complete the model. Sometimes you’ll need to adjust your model to fit the data available, but even that process starts with a solid initial plan.

5. **Iterate until you get it right**: Plan on many iterations of building your model, getting feedback, and improving the model. Estimating the potential of a new product or new model usually takes more than once to get it right.
About MMR Strategy Group

MMR Strategy Group (MMR Strategy) is a full-service market research-based consulting firm. We help our clients grow by leveraging customer insight to develop marketing and sales strategies. In order to support critical business decisions, we combine the data gathering capabilities of a research firm with the business analytics of a strategic consulting firm.

For more information, please contact us at 818.464.2400 or email info@mmrstrategy.com.

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