Sales Force Management: Pipeline Analysis

This module covers the concepts of pipeline analysis, including the stages of lead, prospect, purchase, and post-purchase, CRM systems, sales forecasting techniques, sales force workload and sales force performance measures.

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Marketing Metrics Reference: Chapter 6

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In “push marketing”, where a sales force normally is necessary to educate and convince a customer to purchase a product or service, there are a number of metrics available to track the sales process from the early stages through to the ultimate purchase and post-purchase follow-up. This process is called pipeline analysis.

**Insight**
Pipeline analysis may be used to track the progress of sales efforts in relation to all current and potential customers in order to forecast short-term sales and to evaluate sales force workload and effectiveness.

First, let’s visualize the sales process. The process is often divided into four stages: *Interest creation, pre-purchase, purchase, and post-purchase*. Each stage has associated levels of customer interest as shown on the following page.
Stages of Pipeline Analysis

- Cold Leads
- Warm Leads
- Prospects

Pre-Purchase Meeting(s)

Purchase Meeting

Delivery

Support

Interest Creation

Pre-Purchase

Purchase

Post-Purchase
Stages of Pipeline Analysis

Several of the important distinctions among the different potential customer stages* in the interest creation and pre-purchase stages are described below:

Definitions

Cold Lead: A lead that has not expressed interest. Examples include mailing lists, business listings, etc.

Warm Lead: A lead that is expected to be responsive. Examples leads generated through company website, product information requests, etc.

Prospect: A potential customer who has been identified as a likely buyer, possessing the ability and willingness to buy.

* Note that the names of the stages may vary by company and industry, and some stages may be omitted or added, but the general evolution of a potential customer through the various stages from lead creation through purchase (or not) still occurs.
An important characteristic of pipeline analysis is the observation that from a population of potential customers, only a subset will actually make purchases. Throughout the process from lead generation to purchase, some portion of the population is winnowed out at each stage. This is often called the sales funnel due to the “shape” of the process.
Once these stages in a company’s sales process are defined, managers and salespeople can use this information to improve their effectiveness. Generally, this information would be collected in a Customer Relationship Management (CRM) system. The CRM system would keep track of what stage potential sales are in the process for each salesperson.

Let’s explore some examples of how this information can be used to determine:

- Successful Closure Rates
- Sales Forecasting
- Workload Planning
- Performance Analysis
One of the most basic measures that a salesperson and a sales force manager should know is the percent of leads (or other stage in the pipeline) that are converted to sales. While this calculation is often used to compare the performance of individual salespeople, it can also be used to compare the effectiveness of lead sources, segmentation approaches, sales training programs, and other aspects of the sales pipeline.

**Definition**

Closure Rate (for a particular time period) = 
Sales derived from a population of leads / Same population of leads

**Insight**

Be sure when comparing to use the same time period. For example, do not compare the 6 month closure rate for one mailing list with the 2 year closure rate for another. Those would not be equivalent.
Closure Rate - Example

Realty One is interested in growing their share of the home sales market in their local region. Last year, they purchased a mailing list of 5000 homeowners who had expressed interest in selling their homes in the next six months. They randomly divided the mailing list among their five realtors (1000 leads each) who would contact these leads and attempt to convince them to list their home with Realty One. At the end of six months, each realtor had generated several new listings from that mailing list population:

- Alice: 5 new listings resulting in 4 home sales
- Bob: 3 new listings resulting in 3 home sales
- Carol: 2 new listings resulting in 2 home sales
- Doug: 8 new listings resulting in 6 home sales
- Elaine: 12 new listings resulting in 5 home sales

**Question 1:** What is Elaine’s closure rate for leads? For listings?

**Question 2:** What is the overall closure rate for Realty One for the six month period?
Closure Rate - Example

Answers:

Each salesperson starts with a population of 1000 leads. Of this, Elaine closes 5 sales, so her closure rate based on leads is…

Closure rate for leads = 5 / 1000 = 0.5%
Alice’s closure rate based on listings = 5 / 12 = 42%

To calculate the overall closure rate for Realty One we know…
Total leads = 5000, Total listings = 30, and Total sales = 20

Closure rate for leads = 20 / 5000 = 0.4%
Closure rate for listings = 20 / 30 = 67%

Question 3: What might the sales manager want to do with this information?
Answer:

Elaine’s successful closure rate from leads is 0.5%, which is above the overall average and would be considered good performance. However, by analyzing the pipeline at a finer level, additional insights may be available to the manager that might improve the entire sales force’s effectiveness.

Since Elaine’s closure rate based on listings generated is 42% compared to the company average of 67%, the sales manager might want to talk more to Elaine to understand why her rate is lower than average. In addition, if the manager also recognizes that Elaine’s rate for generating listings is significantly higher than average (12 / 1000 = 1.2% relative to the average of 30 / 5000 = 0.6%), perhaps Elaine has a more effective approach for capturing listings.
**Question 4:** How might the sales manager for a local printer create a sales forecast for the next 6 months using the following snapshot of the sales pipeline?

<table>
<thead>
<tr>
<th>Salesperson</th>
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<td></td>
<td>Cold Leads</td>
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</tr>
<tr>
<td>Jane</td>
<td>100</td>
<td>40</td>
<td>20</td>
<td>15</td>
</tr>
<tr>
<td>Joe</td>
<td>50</td>
<td>30</td>
<td>22</td>
<td>10</td>
</tr>
<tr>
<td>Total</td>
<td>150</td>
<td>70</td>
<td>42</td>
<td>25</td>
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The manager also knows the following historical averages for a successful closure rate within a six month period:

- 2% of cold leads are converted to sales
- 10% of warm leads are converted to sales
- 20% of prospects are converted to sales
- 30% of customers who are involved in pre-purchase meeting are converted to sales
- 50% of customers who are involved in purchase meeting are converted to sales
To generate a sales forecast using historical averages, just multiply the total leads at each stage prior to purchase by the successful closure rate.

Answer:

150 * .02 = cold leads converted to sales = 3
70 * .10 = warm leads converted to sales = 7
42 * .20 = prospects converted to sales = 8.4
25 * .30 = pre-purchase meetings converted to sales = 7.5
7 * .5 = purchase meetings converted to sales = 3.5

Total 6 Month Forecast = 29.4 successfully closed sales
Question 5: How could the manager use this result to estimate revenues, total contribution, and sales force commissions, if we know that the average purchase price is $4,500, the commission rate is 25% of the sales price, and the variable manufacturing cost is $1000?

Answer:

Revenue Forecast  = Forecast * Avg Price  = 29.4 * $4,500  =  $132,300
Commissions       = Rev Forecast * Rate   = $132,300 * .25  =  $33,075
Contribution      = (Price – Variable Cost) * Forecast
                    = (4500 – (1000 + .25 * 4500)) * 29.4
                    = (4500 – 2125) * 29.4  =  $69,825

Note that one could estimate revenues and commissions by salesperson by going through the same analysis based on a single salesperson.
Question 6: Over the next three months, the sales force is expected to move each potential customer to the next stage of the process and support existing customers. Based on this, what is the expected workload for each salesperson?

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<td>30</td>
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The manager also knows the following historical averages for time spent for each stage of the process:

- 15 minutes per cold and warm leads to identify a prospect
- 15 minutes to schedule a meeting with a prospect
- 3 hours for each pre-purchase meeting and, on average, two pre-purchase meetings are required per customer.
- 8 hours for each purchase meeting
- 4 hours for delivery and 1 hour for on-going support of current customers.
To generate the workload for a salesperson for the quarter, just multiply the estimated time for each stage by the value at each stage.

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Answer:

Jane’s Workload = \(0.25 \times 100 + 0.25 \times 40 + 0.25 \times 20 + 3 \times 15 \times 2 + 8 \times 5 + 4 \times 8 + 1 \times 25\)

= 227 hours

Now try to calculate Joe’s workload on your own...

(answer on the following page)
## Workload Planning - Example

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### Answer:

Joe’s Workload  
= 0.25 * 50 + 0.25 * 30 + 0.25 * 22 + 3 * 10 * 2 + 8 * 2 + 4 * 4 + 1 * 60  
= 177.5 hours

### Insight

Be careful about using standard hours for various sales force tasks as different customer types might require very different amounts of time to either convert to a sale or to support. While standards can be an effective tool, they can also be misused.
The sales pipeline can also be used for company and individual analysis of performance such as comparing lead generation alternatives or analyzing a salesperson’s effectiveness at particular stages in the process.

Consider the following sales pipeline measures where the values indicate the percentage of a level of interest is advanced to the next highest stage. For example, the company has historically moved 1% of cold leads and 40% of warm leads to the prospect stage. Of those, 75% agree to pre-purchase meetings. Of those, 45% make it to a purchase meeting and 35% of those are converted to sales.

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<td>50%</td>
<td>70%</td>
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<td>2%</td>
<td>30%</td>
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<td>75%</td>
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Question 7: If it costs the company the same amount to purchase a mailing list of 1000 potential customers, or to run a series of ads in a trade magazine that generates 50 leads, which is the more effective method of lead generation?

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Answer:

Cold Leads = 1000 * .01 = 10 potential customers
Warm Leads = 50 * .40 = 20 potential customers

The trade magazine ad campaign is the more effective method.
Question 8: If the mailing list from question 4 reaches a completely different audience from the trade magazine and it costs 20 cents per name, should it be used in addition to the trade magazine presuming the average customer lifetime value is $1500 / customer and commissions of 25%?

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Answer:

First calculate the number of successful sales that are likely to be generated using historical averages.

(see next page for calcs)
Answer (continued):

So, we could expect 1.18 successful sales from 1000 cold leads from a mailing list.

The cost of the mailing list is $0.20 / contact, so the fixed cost is $200.

The expected value of the total CLV generated from the mailing is:

$1500 * 1.18 = $1772, but the net is (1 - 25%) including commissions.

$1772 * .75 = $1329 which is greater than $200.
However, this does not take into consideration the additional workload or expenses for the sales person. For example, travel expenses might be estimated at $100 per pre-purchase and purchase meetings. One should also think about the long-term implications of additional workload. Would the additional time required impact the quality of follow-up on other leads? Would these additional lead sources ultimately create the need for additional employees (and additional cost)?

**Insight**
Make sure to include all relevant costs in your analysis and recognize the workload implications of expanding the volume entering your sales funnel.
Question 9: Sally and Steve’s manager noticed several significant deviations from the company historical values. The manager noted that Sally’s close rate at the purchase meeting far surpassed the company average, but that she lost quite a few prospects during the pre-purchase meeting stage based on her 15% rate.

Based on surveys from potential customers, it was determined that Sally’s performance could be improved with additional product knowledge training. With this training, the manager estimated that Sally’s pre-purchase meeting rate could improve from 15% to at least the company average of 45%. How many additional sales would Sally generate based on 1000 cold leads and 50 warm leads?

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<td>50%</td>
</tr>
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<td>1%</td>
<td>40%</td>
<td>75%</td>
<td>45%</td>
</tr>
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</table>
**Answer:**

First, calculate expected sales based on Sally’s current performance.

<table>
<thead>
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<th>Creation Warm Leads</th>
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<th>Pre-Purchase Meetings</th>
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<th>Sales</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sally</td>
<td>1000</td>
<td>50</td>
<td>35.00</td>
<td>24.50</td>
<td>3.68</td>
<td>2.57</td>
</tr>
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</table>

Next, calculate the expected sales with the product training.

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</thead>
<tbody>
<tr>
<td>Sally</td>
<td>1000</td>
<td>50</td>
<td>35.00</td>
<td>24.50</td>
<td>11.03</td>
<td>7.72</td>
</tr>
</tbody>
</table>

Sally could be expected to generate $7.72 - 2.57 = 5.15$ additional sales with the training. One could then estimate the value of the training to the organization based on the CLV of the sales.
Forthcoming MBTN Sales Force Management Module which will include topics such as sales force coverage and workloads, setting sales force goals, measuring effort, potential and results, and salary/reward mix.