Facts:

* Department 345 can’t be used for anything else than making Item 345 in order to stenghten working capital
* Jan 2002, raised price from 15$ to 20$ / meter for Item 345
* Competitora held prices at 15$ for equivalents; lots significant market share
* Forecast for industry in 2004: 700,000 meters. If 15$/meter, can secure 25% (175000m). Otherwise, at 20$, sales should be 75,000m (10.7%)
* Recent approval of long term modernization and expansion program
* Finance afraid that is Lille announces 15$, competitors will lower. Marketing disagrees because they are tight on cash and have higher costs.
* Actions on Item 345 do not impact other lines

Goal definition

* Determine if the price of Item 345 should be set at 15$, and if so, the impact on profits, both at the company level and at the department’s profit center level
* If the price is kept at 20$, assess if competition could raise their prices and associate impacts

Quantitative analysis

* Exhibit 1 (provided) shows cost per meter. Since even with the largest economies of scale unit cost is above $15/m, based on the assumption that competitors have higher costs, competitor’s 15$ price point is not sustainable.
* Exhibit 2 shows estimated market share for various scenarios. Because of the unsustainability of the 15$/m price point, the most likely scenario is D; in the long run both Lille and its competitors will price Item 345 or equivalents at 20$/meter
* Exhibit 3 shows NI of various scenarios. If Lille maintains a 15$ price point, it will either roughly break even or loose 1M$. If Lille increases its price point to 20$, it will either roughly break even or make 1M$.

Qualitative analysis

* Because of the unsustainable nature of the 15$/m price point, it is extremely unlikely that competition would further drop prices.
* Regardless of the competition’s actions, the obvious best action for Lille is to increase its price to 20$. This is further reaffirmed by the fact that competition will most likely follow.
* At the departmental level, the most profitable situation is also for Lille to increase its price to 20$ as well as the competition. If however department managers believes that competitors will maintain a 15$ price point, the best alternative then becomes to keep a 15$ price.

Recommendation

* Lille should increase its price point to 20$/m

**Exhibit 1: Lille’s cost per meter of Item 345**

Production costs are reduced with economies of scale as production volumes increases, until 175,000m volume is reached, after which they start increasing again. This is most likely due to the economic theory of diminishing marginal returns.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | **Volume ('000m)** | | | | | |
|  |  | **75** | **100** | **125** | **150** | **175** | **200** |
| Direct Labor | | 4 | 3.9 | 3.8 | 3.7 | 3.8 | 4 |
| Material | | 2 | 2 | 2 | 2 | 2 | 2 |
| Material Spoilage | | 0.2 | 0.2 | 0.19 | 0.19 | 0.19 | 0.2 |
| Department Expense | |  |  |  |  |  |  |
|  | Direct | 0.6 | 0.56 | 0.5 | 0.5 | 0.5 | 0.5 |
|  | Indirect | 4 | 3 | 2.4 | 2 | 1.71 | 1.5 |
| Department Total | | 4.6 | 3.56 | 2.9 | 2.5 | 2.21 | 2 |
|  |  |  |  |  |  |  |  |
| General OH | | 1.2 | 1.17 | 1.14 | 1.11 | 1.14 | 1.2 |
|  |  |  |  |  |  |  |  |
| Factory Cost | | 12 | 10.83 | 10.03 | 9.5 | 9.34 | 9.4 |
| SGA |  | 7.8 | 7.04 | 6.52 | 6.18 | 6.07 | 6.11 |
|  | Total Cost/m | 19.8 | 17.87 | 16.55 | 15.68 | 15.41 | 15.51 |
|  | Total Cost ($) | 1485 | 1787 | 2068.75 | 2352 | 2696.75 | 3102 |

**Exhibit 2: Estimated Market share for various scenarios**

Scenarios A and C are based on assumptions provided by Lille’s management.

Scenario D is based on 1998 and 1999 numbers, when both Lille and its competitors were prices at 20$. The original 35% market share was reduced to 30% in order to account for customers that would not undergo a supplier change unless they gain a price advantage. Within a few years, it is possible that Lille would regain its 35% market share, but forecast is only observing 2004.

In Scenario B, the 5% was added to scenario D for these specific price sensitive customers. It is likely that in subsequent years, if Lille maintains its pricing at 15$ while its competitors are charging 20$ that Lille could reach a ~45% market share.



**Exhibit 3: Income Statements for various scenarios.**

For the factory costs of Scenario D, numbers for a volume of 200k meters were used, assuming incremental 10k units would not affect marginal unit costs all that much. For Scenario B, since no data is available, the highest factory costs provided were used in order to provide as conservative of an estimate as possible.

