Lille Tissages, S.A.

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Assesstment of Lille Tissages, S.A.

- It is the largest firm in its segment of the industry.
- It is financially strong and faces weaker competitors.
- It is expanding and needs capital.
- It recently raised the price if Item 345 to align markup to other fabrics in its product line.
- Is L.T. really a "price leader"?
  - Followers are not following…
  - Perhaps followers are confused…
  - Or perhaps they only follow when L.T. charges low prices.

Market Share Analysis

Exhibit 1 Item 345, Prices and Production, 1991-1996

	Volume of Production (meters)		Price (FF)	
Year	Industry Total	Lille Tissages	Competitors	Lille Tissages
1991	610,000	213,000	20.00	20.00
1992	575,000	200,000	20.00	20.00
1993	430,000	150,000	15.00	15.00
1994	475,000	165,000	15.00	15.00
1995	500,000	150,000	15.00	20.00
1996 (est.)	625,000	125,000	15.00	20.00

- The market is estimated to reach 700,000 meters.
- The case generate predictions on the market shares for different combinations of prices offered.

Market Share Analysis

Exhibit S1 Analysis of Lille Tissage's Market Share

Year	Volume of Production (meters)		Lille Tissage's Market Share	Price (FF)	
	Industry Total	Lille Tissages		Competitors	Lille Tissages
1991	610,000	213,000	35	20.00	20.00
1992	575,000	200,000	35	20.00	20.00
1993	430,000	150,000	35	15.00	15.00
1994	475,000	165,000	35	15.00	15.00
1995	500,000	150,000	30	15.00	20.00
1996 (est.)	625,000	125,000	20	15.00	20.00
Estimated 1997	700,000	175,000	25[a]		
Estimated 1997	700,000	140,000	20[b]		
Estimated 1997	700,000	75,000	11[a]		

a. Estimate provided in the case by the sales director.
b. Estimate provided here for illustrative purposes.

- Demand is sensitive to prices.
  - When competitors charged a lower price L.T.'s share shrunk from 35% to 20%.

Cost Analysis

Exhibit 2 Estimated Cost per Meter of Item 345 at Various Volumes of Production (FF)

	75,000	100,000	125,000	150,000	175,000	200,000
Direct labor[a]	4.00	3.90	3.80	3.70	3.80	4.00
Material	2.00	2.00	2.00	2.00	2.00	2.00
Material spoilage	0.20	0.20	0.19	0.19	0.19	0.20
Department expense:						
Direct[b]	0.60	0.56	0.50	0.50	0.50	0.50
Indirect[c]	4.00	3.00	2.40	2.00	1.71	1.50
General overhead[d]	1.20	1.17	1.14	1.11	1.14	1.20
Factory cost	12.00	10.83	10.03	9.50	9.34	9.40
Selling & administrative expense[e]	7.80	7.04	6.52	6.18	6.07	6.11
Total Cost	19.80	17.87	16.55	15.68	15.41	15.51

a. Any workers made redundant as a result of a decrease in the volume of sales of Item 345 could be economically absorbed in other departments.

b. Indirect labor, supplies, repairs, powers, etc.

c. Depreciation, supervision, etc.

d. Thurty percent of direct labor, consisting principally of general plant administrative costs (plant supervision, plant services, etc.) and occupancy costs.

e. Sixty-five percent of factory costs.

- Are all these costs really variable for the production of Item 345?

Cost Analysis

- Only variable costs are relevant for pricing decisions.
  - Departamental Indirect Expense is FF 300,000 at all production volumes, i.e., it is a fixed cost.
  - General Overhead and Selling and Administrative Expense are each applied to Item 345 using a percentage of other costs.
    - They are being allocated on an arbitrary basis and independently of the scale of production if Item 345.
    - Remember, for instance, that sales force was on straight salaries and they sold the whole line of products of Lille Tissages.

Cost Analysis

Exhibit S2 Analysis of Variable Costs per Meter

	75,000	100,000	125,000	150,000	175,000	200,000
Direct labor	4.00	3.90	3.80	3.70	3.80	4.00
Material	2.00	2.00	2.00	2.00	2.00	2.00
Material spoilage	0.20	0.20	0.19	0.19	0.19	0.20
Direct department expense	0.60	0.56	0.50	0.50	0.50	0.50
Variable cost/unit	6.80	6.66	6.49	6.39	6.49	6.70

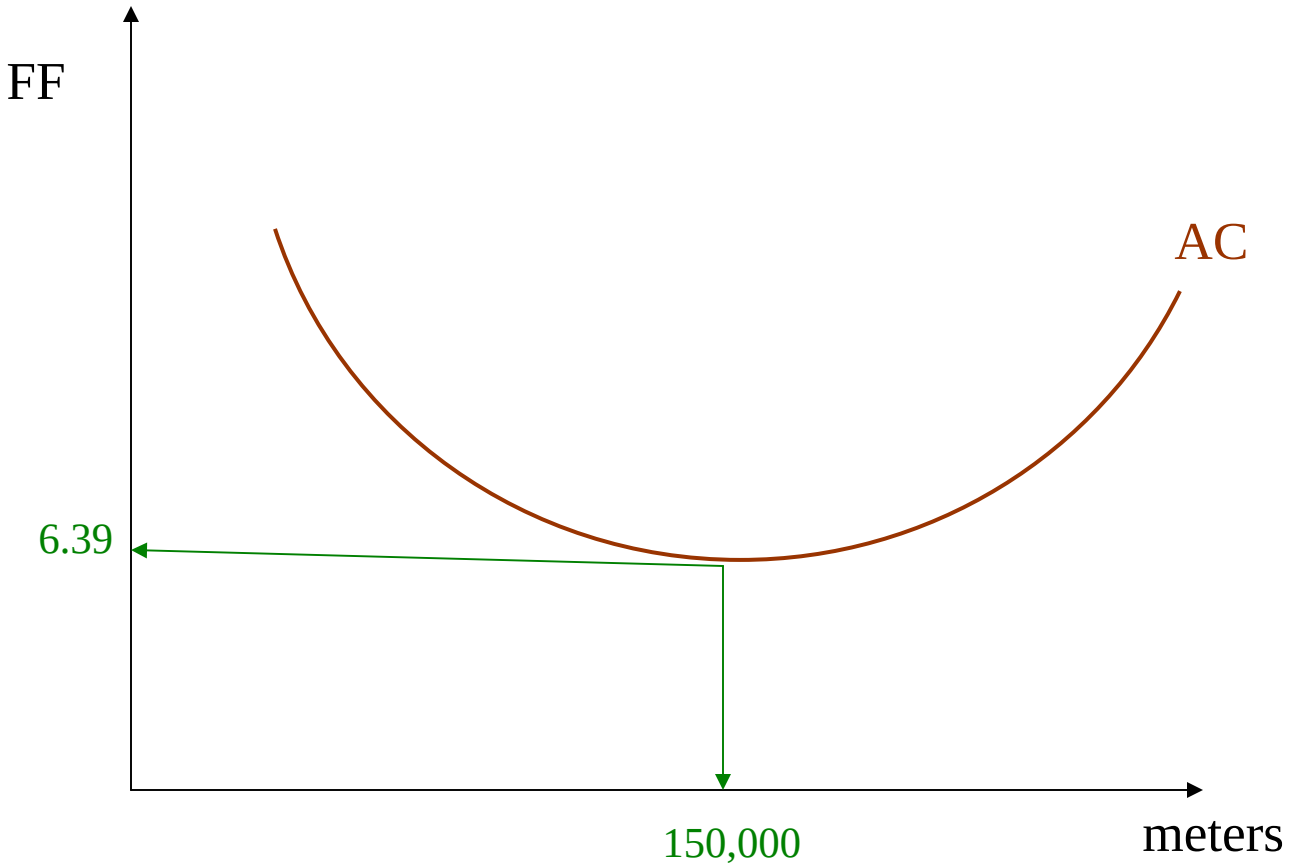
Notes:

a. **Department Indirect Expenses** is FF 300,000 at all production volumes. Hence, it appears to be a nonvariable cost.

b. There is no indication that **General Overhead Expense** and **Selling and Administrative Expense** are variable. They appear to be variable because each is allocated on the basis of other variable or partly variable costs. In fact, selling expenses (sales representatives) are a nonvariable expense because the personnel are paid on a straight salary basis and sell the entire line.

- Unit costs are not independent of the scale of production.
  - Actually, the average cost function is U-shaped.

Cost Analysis



Profitability Analysis

This is the initial price combination but not the only possible strategy of these firms!

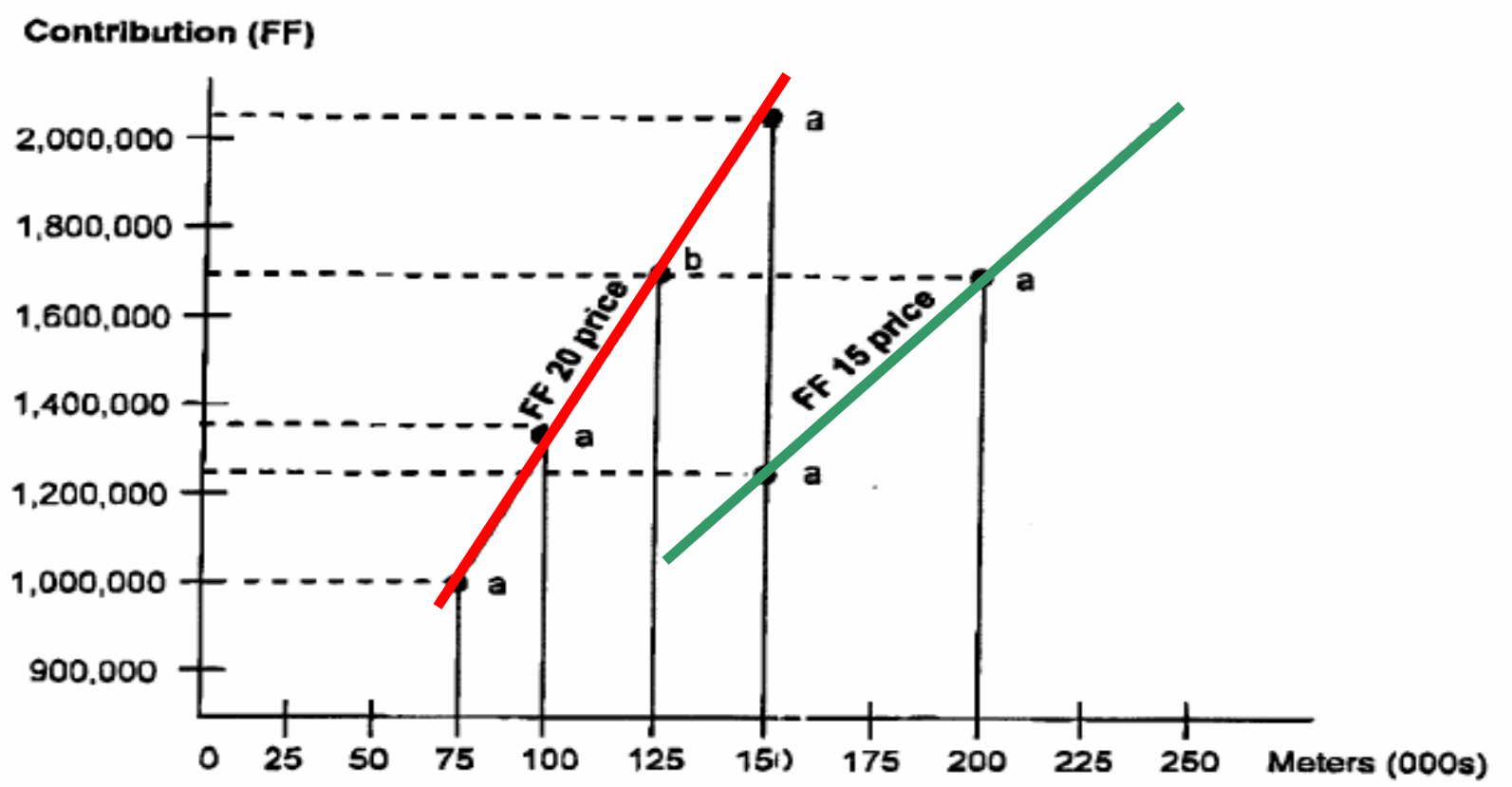
Exhibit S3 Price and Profit Analysis (assuming a 700,000 meter total market)

L.T. Price	Competitors' L.T.' Market Share	L.T.'s Volume	AVC	Unit Profits	T. Profits
20.00	15.00	11[a]	75,000	6.80[b]	13.20	990,000
20.00	15.00	14	100,000	6.66[b]	13.34	1,334,000
20.00	15.00	16	125,000	6.49	13.51	1,688,750
20.00	15.00	21	150,000	6.39	13.61	2,041,500
15.00	15.00	21	150,000	6.39	8.61	1,291,500
15.00	15.00	25[a]	175,000	6.49	8.51	1,489,250
15.00	15.00	28	200,000	6.70	8.30	1,660,000
15.00	15.00	32	224,000	6.70[b]	8.30	1,867,500
20.00	20.00	18	125,000	6.49	13.51	1,688,750
20.00	20.00	19	133,000	6.46[b]	13.54	1,800,820
20.00	20.00	21	150,000	6.39	13.61	2,041,500
20.00	20.00	20	140,000	6.43[b]	13.57	1,899,800
20.00	20.00	25	175,000	6.49	13.51	2,364,000

a. Hypotesized relationships as cited in the case.

b Guesstimate

Profitability Analysis



Answer to question 2: L.T. prefers a high FF 20 price.

- The softer price competition helps L.T. to increase its market share.

Pricing Analysis for Competitors

- We need to make some basic assumptions:
  - Market size for Item 345 is 700,000 meters in 2004.
  - Competitors are less efficient (as noted in the case). Let's assume an average variable cost of FF 6,80 / meter.
  - Lille Tissages maintains price at FF 20 / meter.

- Market share assumptions.
  - Situation A: Competitors price at FF 15 / meter.
    - Competitors market share is 89%, i.e., 625,000 meters.
  - Situation B: Competitors raise price to FF 20 / meter.
    - Competitors's market share is 75%, i.e., 525,000 meters.

Pricing Analysis for Competitors

Analysis	Situation A	Situation B
Competitor's price	FF 15.00	FF 20.00
Variable cost/unit	6.80	6.80
Contribution/unit	8.20	13.20
Competitor's volume	625,000 meters	525,000 meters
Profit to competitors	FF 5,125,000	FF 6,930,000

- Answer to question 3: Competitors may also prefer a high FF 20 price.
  - Why have competitors not followed L.T. so far?
    - Perhaps L.T. has not signaled that it is always in its own interest to charge a high price.
    - Perhaps reducing output will increase competitor's unit cost substantially.
    - There might be quality differentials that are thought more important by producers than by consumers.

L.T.’s Decision Analysis

- First Strategy: FF 15 / meter.
  - L.T.’s own estimated market share is 25%, i.e., 175,000m.
  - Competitors’ price will always be FF 15 / meter.
  - Expected profits = **1,489,250**.

- Answer to question 4: Lille Tissages will make a profit at a low FF 15 price.

L.T.'s Decision Analysis

- Second Strategy: FF 20 / meter.
  - Scenario 1: Competitors price at FF 20 with probability x.
    - L.T.'s own estimated market share is 25%, i.e., 175,000m.
    - Expected profits = **2,364,000**.
  - Scenario 2: Competitors price at FF 15 with probability 1-x.
    - L.T.'s worst estimated market share is 11%, i.e., 75,000m.
    - Expected profits = **990,000**.

L.T.'s Decision Analysis

- Expected Profits:
  - Charge FF 20 if:

$$2{,}364{,}000x + 990{,}000(1-x) > 1{,}489{,}250$$

Which happens for **x > 36,34%**.

- Answer to question 1: Lille Tissages may adopt a low FF 15 price if it expects that competitors will rarely match the high price of FF 20.