Case 12: Bell Computer Inc.

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Case Question

- Our client, Bell Computer Inc., is the second largest PC manufacturer, by unit sales, in the United States. Over the past 5 years, Bell has been gaining market share and growing revenue, but at the same time, their net income is eroding.
- The founder of Bell has returned to the company and taken over as CEO. He has hired us to determine:
  - Why have our profit margins declined?
  - What can we do to improve our profitability and reach our "Full Potential"?

8

Quants.

10

Structure

Mkt. Stgy
Comp. Als
Sup Chain

Case tracker

- **Industry:** Tech/Telecom
- **Level of Difficulty:** Hard
- **Case Format:** Improving profitability + Reducing Costs
- **Concepts Tested:**
  - Marketing Strategy
  - Competitive Analysis
  - Supply/value chain

Fit Questions

Spend first 15 min on fit

- What skills can you bring to this position?
- Give me an example of a business problem your company faced and tell me how you solved it.
- What other types of jobs are you considering? Why and how did you choose the companies? How do they compare to consulting?

Guide to interviewer

- This case is primarily about product mix changes in the PC industry combined with Average Selling Price (ASP) Declines resulting in lower overall revenues for the industry. Competitors that did not keep up with cost reductions are faced with tighter margins
- The interviewee should recognize that this is a "Profit Equation" style question and use a version of the following equation in their "Framework":
  - Profit/Unit = Price/Unit – Variable Cost/Unit – Fixed Costs/Unit
- Various terms from the PC industry are used throughout the case and it is not expected that the interviewee knows these terms. Help as needed.

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Clarifying answers and case guide

Clarifying answers to provide if Asked

Industry Definitions

- *ASP*: ASP or Average Selling Price is the term used for the average price sold by the company for a computer. Multiplying units sold by ASP will give you total revenue.
- *Client Segment*: PCs designed for, and sold to, retail consumers either direct or through a retailer like Best Buy.

Client Characteristics

- *Items Sold*: Assume that only hardware is sold as shown in Exhibit 1. Interviewee could suggest selling additional items such as printers, software, warranty service, etc. to improve profit
- *Locations:* This is a US Domestic decision only. Ignore international.

Competitive Dynamics

- All competitors face the same ASPs and sell comparable products.

Interviewer Guide to case and handouts

Case Structure – Interviewee's structure should be structured as a comparison of Bell Computer's financials from Before, i.e. 2005, and After, i.e. 2010. The interviewee should note the "Profit Equation" and they should make the following inferences from the question setup:

- *Revenues are going up and Market Share is Increasing* AND *Net Income is going down*
- *Thus: Prices (ASPs) are being reduced to buy market share. This is causing more units to be sold, but, with Net Income going down, it is clear that* ***costs have not reduced to keep up with the reduction in ASPs.***

Exhibit 1-3 – After Interviewee walks through structure, they should ask questions about the components of Net Income, i.e. Revenue and Costs.

- *Have a conversation with the Interviewee to force them to talk through the essential components of the Profit Equation that are needed to answer the question.*
- *Let the Interviewee drive the case. When you feel that they have asked enough information about the following topics, give them the exhibit that shows this information:*
  - *Sales Units* → *Exhibit 1*
  - *Prices* → *Exhibit 2*
  - *Costs* → *Exhibit 3*

Answer – The interviewee cannot solve this case without all three exhibits. Once they have given you sufficient reason to hand them each exhibit, they should drive through the case to answer both questions.

Key elements to analyze

Marketing Strategy

- Using Exhibits 1-3, the interviewee should be able to determine that margins are falling due to product mix shifting and price declines

Competitive Analysis + Supply Chain

- Using Exhibit 3, the interviewee should identify a "Full Potential" improvement for Bell to improve its margins by copying the strategy of its direct competitors.

Notes to interviewer

- The Interviewee should be able to answer the question, "**Why have our profit margins declined?"** with the following rationale:
  - Exhibit 1: Shift in Client preference towards Laptops & Netbooks
  - Exhibit 2: Declining ASPs for Laptops and Low ASPs for Netbooks
  - Exhibit 3: Cost position has remained unchanged
- The interviewee could answer the question qualitatively by interpreting Exhibits 1-3. To make this case more quantitatively focused, ask the interviewee to calculate various metrics for 2005 and 2010.
- The interviewee should be able to calculate the following using Exhibits 1-3 (**Math calculations on following page**):
  - Net Income per Unit by product type
  - Revenue by product type and Total Revenue
  - Cost by product type and Total Cost
  - Net Income by product type and Total Net Income

Notes to interviewer

- The interviewee should be able to answer the question, **"What can we do to improve our profitability and reach our "Full Potential"?"** with the following COST REDUCTION strategy:
  - Copy Haysus' strategy for part procurement to reduce the build cost of PCs
  - Copy Racer's strategy for Direct Labor to reduce the labor cost of producing PCs
  - Copy HC's strategy for G&A to reduce the total company overhead
- The interviewee could answer the question qualitatively by interpreting Exhibits 3. To make this case more quantitatively focused, ask the interviewee to calculate various metrics for "Full Potential".
- The interviewee should be able to calculate Bell's "Full Potential" using Exhibits 1-3 (**Math calculations on following page**):
  - Net Income per Unit by product type
  - Revenue by product type and Total Revenue
  - Cost by product type and Total Cost
  - Net Income by product type and Total Net Income

Math Solutions

Math Part I

BELL FY2005	Desktop PCs	Laptop PCs	Netbook PCs	Servers	Other	TOTAL
Units Sold (K)	20.0	10.0	0.0	5.0	5.0	**40.0**
ASP	$1,000.0	$2,000.0	$0.0	$3,000.0	$250.0	
CPU	800.0	800.0	0.0	800.0	200.0	
NI/Unit	*$200.0*	*$1,200.0*	*$0.0*	*$2,200.0*	*$50.0*	
Revenue ($M)	$20.0	$20.0	$0.0	$15.0	$1.3	**$56.3**
Total Cost ($M)	16.0	8.0	0.0	4.0	1.0	**$29.0**
NI ($M)	*$4.0*	*$12.0*	*$0.0*	*$11.0*	*$0.3*	**$27.3**
Profit Margin	*20.0%*	*60.0%*		*73.3%*	*20.0%*	**48.4%**

BELL FY2010	Desktop PCs	Laptop PCs	Netbook PCs	Servers	Other	TOTAL
Units Sold (K)	30.0	30.0	5.0	10.0	5.0	**80.0**
ASP	$1,000.0	$750.0	$500.0	$3,000.0	$250.0	
CPU	800.0	800.0	800.0	800.0	200.0	
NI/Unit	*$200.0*	*($50.0)*	*($300.0)*	*$2,200.0*	*$50.0*	
Revenue ($M)	$30.0	$22.5	$2.5	$30.0	$1.3	**$86.3**
Total Cost ($M)	24.0	24.0	4.0	8.0	1.0	**$61.0**
NI ($M)	*$6.0*	*($1.5)*	*($1.5)*	*$22.0*	*$0.3*	**$25.3**
Profit Margin	*20.0%*	*(6.7%)*	*(60.0%)*	*73.3%*	*20.0%*	**29.3%**

Math Part II

BELL Full Potential	Desktop PCs	Laptop PCs	Netbook PCs	Servers	Other	TOTAL
Units Sold (K)	30.0	30.0	5.0	10.0	5.0	**80.0**
ASP	$1,000.0	$750.0	$500.0	$3,000.0	$250.0	
CPU	350.0	350.0	350.0	350.0	200.0	
NI/Unit	*$650.0*	*$400.0*	*$150.0*	*$2,650.0*	*$50.0*	
Revenue ($M)	$30.0	$22.5	$2.5	$30.0	$1.3	**$86.3**
Total Cost ($M)	10.5	10.5	1.8	3.5	1.0	**$27.3**
NI ($M)	*$19.5*	*$12.0*	*$0.8*	*$26.5*	*$0.3*	**$59.0**
Profit Margin	*65.0%*	*53.3%*	*30.0%*	*88.3%*	*20.0%*	**68.4%**

Results:

	Desktop PCs	Laptop PCs	Netbook PCs	Servers	Other	TOTAL
NI ($M) Improved	$13.5	$13.5	$2.3	$4.5	$0.0	**$33.8**
Cost Per Box Reduced	$450.0	$450.0	$450.0	$450.0	$0.0	

Solution and recommendations

Solution & Recommendations

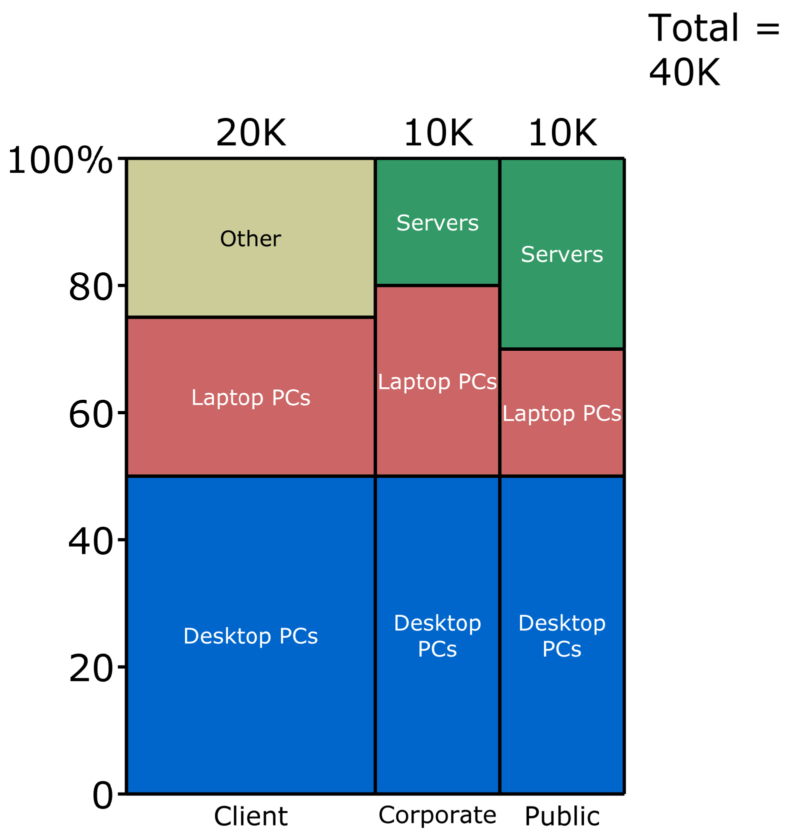
- Bell Computer Inc., and the PC industry, have faced five years of Average Price declines in the Laptop product segment. At the same time, "Client" or retail consumers have shifted their preferences towards Laptops, and a new product segment called Netbooks. Because Bell Computer has not reduced their costs over this same timeframe, profit margins and net income have deteriorated despite increases in Revenue.
- In order for Bell Computer Inc. to return to profitability, they must reduce their cost per unit sold. The best approach we identified was through an analysis of our competitors. Using our competitors line-item costs as a benchmark, we could potentially reduce our cost per box by $450. This amounts to a total Net Income improvement of roughly $34M.

Bonus/Guide to an Excellent Case

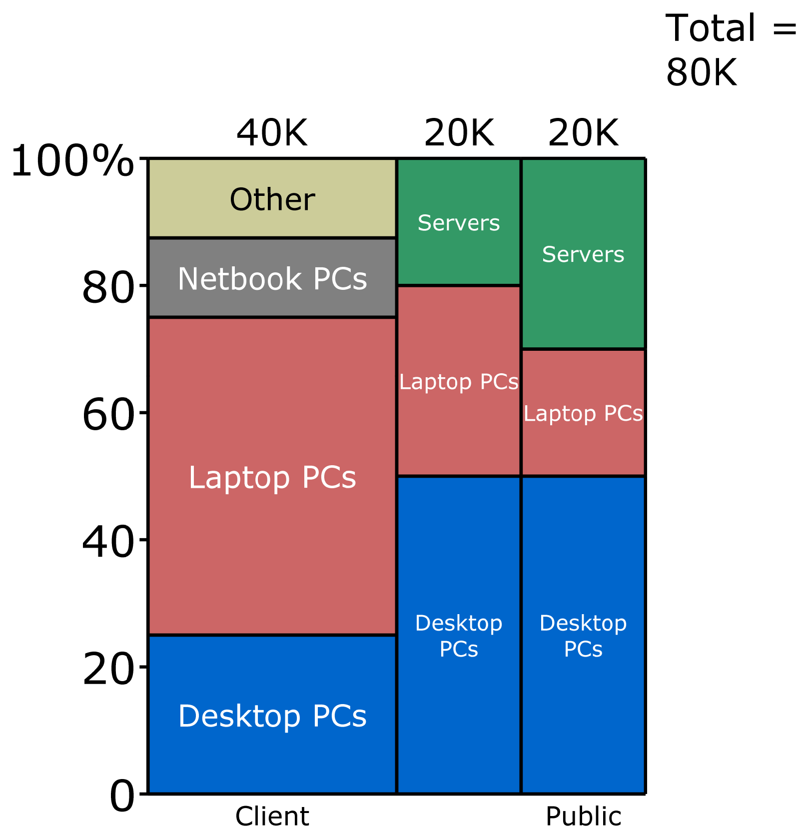
- An excellent interviewee will note:
  - Additional ways to improve net income by selling complimentary, high margin products such as:
    - Printers
    - Software
    - Parts upgrades
    - Warranties
  - Additional ways to cut costs, such as:
    - SKU Rationalization (Reducing the number of product models)

Exhibit 1: Product Mix breakdown by Business Segment for 2005 and 2010

PC Units(K) Sold in 2005

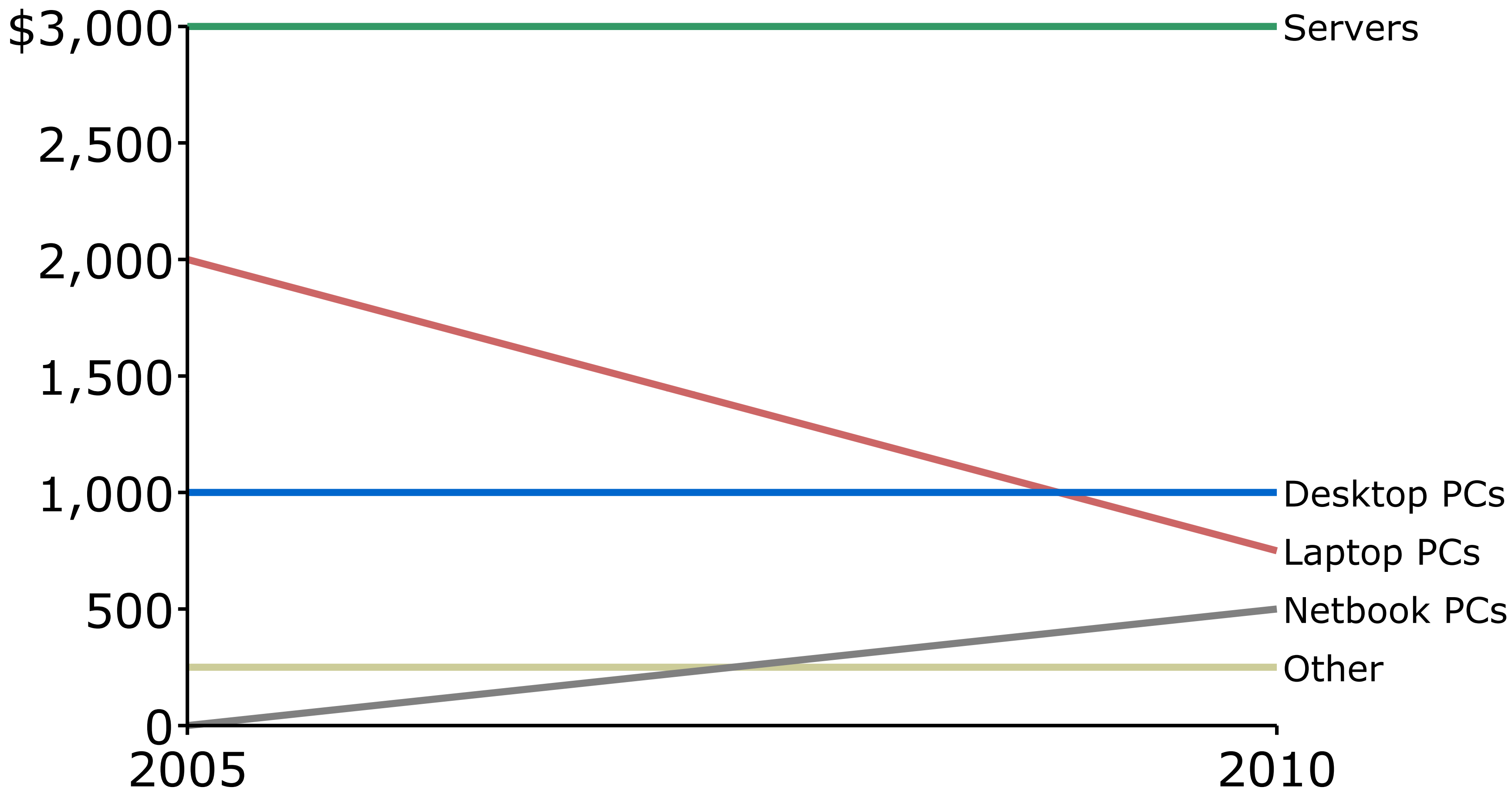


PC Units(K) Sold in 2010



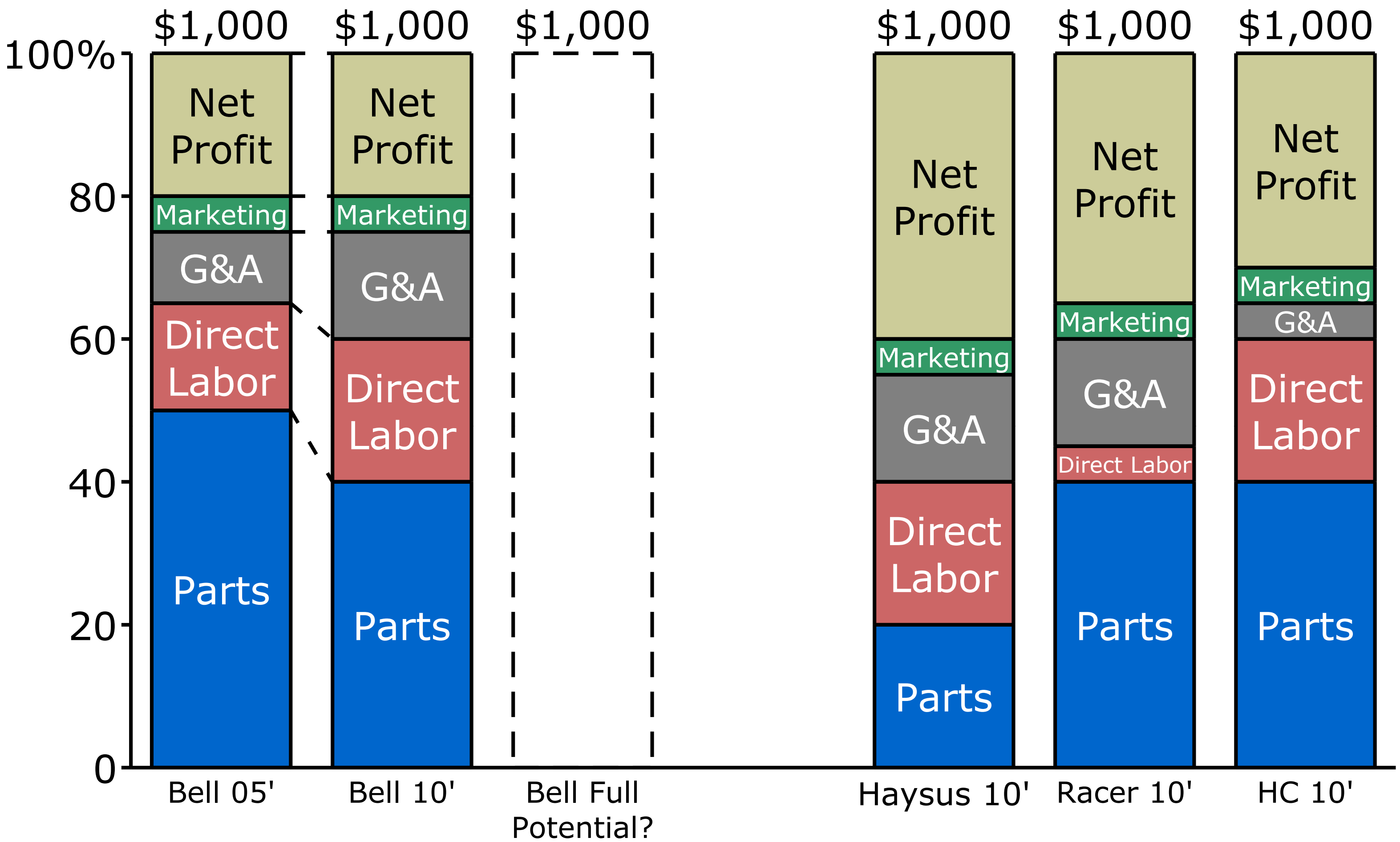
*Note: Netbook PCs did not exist in 2005; "Other" products include Pocket PCs and Calculators

Exhibit #2: ASPs by Business Segment 2005 and 2010



*Note: Netbook PCs did not exist in 2005

Exhibit 3: Avg. Per Unit Cost Breakdown of a Desktop PC for Bell (05',10') and Top 3 Competitors



*Note: Servers, Laptops, and Netbook Product types have the same costs per unit; however, Net Income will vary based on ASP.
"Other" products have a total CPU of $200