TV Sets Maker Vizio Moves Production to Cheaper Location

Case Type: improve profitability.
Consulting Firm: Accenture second round job interview.
Industry Coverage: electronics, semiconductors.

Case Interview Question #00501: The client Vizio is a privately held producer of consumer electronics, based in Irvine, California, United States. Vizio currently primarily produces television sets. It became the largest LCD TV seller by volume in North America for the second quarter of 2007, with more than 600,000 TVs sold. Recently the company has also begun production on other Audio/Video equipment such as High Definition Surround Sound Systems, LCD computer monitors and HDTV accessories, etc. Total sales are estimated to be USD $2.5 billion in fiscal year 2009.

You have been hired because the client Vizio is currently facing strong margin pressures in their television sets business. Why do you think this is happening? What could be done to improve Vizio's TV set profit margin?

Possible Solution:

What immediate thoughts came to your mind (or should have) when you heard the problem statement of the case (based on the type of case, for example – marketing versus cost reduction)? — As soon as the interviewer said margin pressure, I wrote down "declining profitability". This led to my hypothesis about competition or cost inefficiencies.

How did you prioritize the issues and what information did you filter out? — With declining profitability as my base, I immediately moved into dividing the problem into the following areas: **Product Mix, Revenues, Costs, Competition, Substitutes, Capacity, Customers**. While it is easy to say "substitute" first, my logic for this structure was that it is too easy and this was the reasoning for the division.

After writing down declining profits, I first asked about the client's business in general and their products. — By prodding about the **Product** I found that client's TV sets business has two distinct products, plasma TV and LCD (liquid crystal display) TV.

I then identified the **Revenue** generation potential for both the product ranges and the margin on each.

- Revenue:
  - 70% from plasma TV
  - 30% from LCD TV
- Profit Margin:
  - 7% – 10% for plasma TV and declining
  - 15% and growing or stable for LCD TV

Then we moved into **Costs** for each of the businesses, there was nothing there. I then asked for technology adoption at the client company, and if older machines were adding to higher costs. This moved into labor costs and location of existing facilities. — All manufacturing was in the US, hence the logical conclusion to higher costs.

We then moved into **Competition**, which was mostly from the Pacific Rim region, South Korea in particular (Samsung, LG Electronics, etc). Hence, competitors have lower costs.

The twist here became when the interviewer told me that the number of **Customers** of the client was going up. Switching costs popped up in my head, which were low. I then asked about the time for which the client company has been in the TV sets market (35 years), leading to a potential probability of leveraging relationships.

Substitutes — No substitutes in this case (surprised!)

It was obvious that the interviewer was aggressive but was very co-operative, making it important to be aggressive in my approach. So all discussions started with a decisive tone leading to conclusive arguments.

Conclusion:

I first went through our entire discussion, then gave my recommendations. Later I learned that the solutions given by me were very similar to the recommendations proposed by the consultants who actually worked on this project:

- Improve logistics
- Replace older machines
- Grow LCD TV business which has higher margin
- Reduce plasma TV production or even exit the market
- Leverage relationships with customers
- Move production to cheaper labor location, e.g. China, Vietnam, Mexico, etc.
- Acquire one low-cost competitor in South Korea or form joint venture.

PKO Bank Polski to Replace Paper Tickets with SmartCards

Case Type: new business, new technology.
Consulting Firm: Accenture 2nd round job interview.
Industry Coverage: financial services; restaurant.

Case Interview Question #00475: The Republic of Poland is a country in Eastern Europe with a population of over 38 million people. Currently the tax code in Poland allows for Polish companies to pay their employees in tax-free food tickets. These food tickets comprise only a fraction of the total compensation employees receive, yet they have created a sizable food ticket industry in the country. Because all employees receive these tickets, almost all restaurants in Poland accept them as cash.

The current system works as follows. Employers contract with food ticket producers to produce the tickets and track the food ticket compensation of each employee. The ticket producers deliver these tickets to the employers who in turn enclose the food tickets with weekly or monthly paychecks. The employees then exchange these food tickets at restaurants for food. The tickets have “same as cash value” at restaurants.

PKO Bank Polski (WSE: PKO) is the largest food ticket issuer and producer in Poland. Recently, PKO Bank Polski is thinking of replacing these paper based food tickets with SmartCards. Under this system employees would be issued a single SmartCard that they could charge once a week at a Card Charger (like an ATM) and then swipe their cards at a Card Reader at participating restaurants.

What issues should PKO Bank Polski think about in regards to the decision to switch to SmartCards?

Possible Answer:

The key to this case (adopt a new technology) here is to weigh the costs of such a move with the benefits. The candidate should identify key issues like:

- customer reactions
- competitor reactions
- governmental regulation changes
- technology concerns

Essentially the question to address remains: do the economic benefits outweigh the costs? The following conversation represents one of the many possible solutions to the case.

Candidate: Let's see. It would seem to me that we should begin by comparing the economic benefits of installing the new Sma1tCard with the systems costs. First, I would like to determine how much the system will cost to install. What investments will SmartCard require?

Interviewer: Obviously the system requires the chargers and the readers. Is there anything else you could think of?

Candidate: Well, there are the SmartCards themselves.

Interviewer: Yes, and?

Candidate: Perhaps the IT systems to track all of the data on the SmartCards?

Interviewer: Right.

Candidate: Let's see what investments we have identified so far: Chargers, Readers, SmartCards IT systems. What are the costs for each one?

Interviewer: Let's say the cards cost $15M and the IT systems cost $20M.

Candidate: How about the card readers and chargers. How many of those would we need?

Interviewer: PKO Bank Polski believes it will have to install 100,000 card chargers and there are 150,000 restaurants in Poland that currently accept food tickets. Both the card readers and chargers cost $500 each to install.

Candidate: OK, now we have $20 million for IT systems, plus $15M for cards, plus $75M for the card readers ($500 per reader x 150,000 restaurants = $75M) + $50M for card chargers ($500 x 100,000 chargers = $50M) = $160 million in total.

Interviewer: Great! Now what are the benefits of the system?

Candidate: It appears to me that the benefits would be the cost savings each player in the value chain obtains from the system. Let's start with PKO Bank Polski itself. How much would they save?

Interviewer: PKO Bank Polski would save $10M on the printing and distribution costs it currently incurs. What about the employers how much would they save?

Candidate: I think they would be negligible since PKO Bank Polski does all of the distribution. Also the employees wouldn't gain any actionable cost savings. That leaves the restaurants. They must have a cost for each ticket transaction.

Interviewer: You're right. In fact it currently costs each restaurant $0.30 per transaction and each restaurant does 20 transactions a day on average.

Candidate: That means each restaurant incurs $1,500 per year in transaction costs ($0.30 x 20 x 50 weeks per year x 5 days per week = $1,500 per year). How much would the restaurants save?

Interviewer: PKO Bank Polski expects the restaurants to reduce their transaction costs by 2/3.

Candidate: That means each restaurant would incur only $500 per year. Thus, the total transaction cost savings is $150M ($1500 – $500 = $1,000 per restaurant x 150,000 restaurants = $150M). That makes the total cost savings of $160M ($150M transaction costs + $10M printing = $160M). This equals the investments, so it only breaks-even on an economic basis.

Interviewer: That's right. How else could PKO Bank Polski make this a positive investment?

Candidate: Well, if PKO Bank Polski is one of the many food ticket issuers and producers, perhaps they could license their SmartCard system to other ticket producers who could then supply additional customers to increase the network's utilization. Or they could simply acquire a competitor.

Interviewer: Excellent! Now summarize your recommendations for me.

MGM Grand Hotel & Casino to Unveil New Dice Game

Case Type: pricing & valuation; math problem.
Consulting Firm: Accenture first round job interview.
Industry Coverage: entertainment; tourism, hospitality, lodging.

Case Interview Question #00382: The client MGM Resorts International (NYSE: MGM) is a Paradise, Nevada based corporation that brands itself as a global hospitality company. It is the second largest gaming company in the world by revenue – about USD $6 billion in fiscal year 2009. It owns and operates 15 properties in Nevada, Mississippi and Michigan, and has 50% investments in four other properties in Nevada, Illinois and Macau, China.

Recently, the CEO of MGM Resorts is considering unveiling a new game in his MGM Grand Las Vegas Hotel & Casino. The rules of the game are as follows:

- The player pays an amount of X to play the game
- The player then rolls a single standard 6-sided die
- After the 1st roll, the player is awarded the amount on the die times $1000 (i.e., if you roll a 4, you win $4000)
- The player then has the option to give up that prize and roll a 2nd time
- The player can again accept the amount on the die in thousands or choose to roll a 3rd time
- The maximum number of rolls is 3, and the player only gets the amount of money in thousands shown on the die on the last roll.

The CEO would like you to help him set a price for the new game. The price should not be too high that nobody wants to play. Also, it must not be too low that the Casino would run into a loss. The goal is to determine the

minimum amount of money X that the Casino should charge players to play the game. How would you go about the case?

Possible Answers:

This pricing and valuation case has no additional information; it is simply a look at the interviewee's approach to a real options/statistical analysis problem. Do not let the interviewee veer off into tangents about other miscellaneous concepts.

Assume that all parties act rationally, and although it is obvious the Casino will charge some amount of margin above the expected value of the game, the goal is to simply find the minimum amount they would be willing to charge in order to break even, which is the expected value. It is helpful to understand the concept of "Real Options", but it is not necessary to solve the case.

Possible Solution:

A. **1-Roll Game:**

Expected value of a single roll = (1+2+3+4+5+6)/6 = 3.5

Therefore, the expected payout of a single roll game is $3,500.

B. **2-Roll Game:**

The price of a 2-roll game will have to be higher than the price of a 1-roll game $3,500.

We will assume a certain price P1 for 1-roll game and will further determine the expected value of a 2-roll game, P1 is greater than $3,500.

At P1 = $4,000

- 1/3 of the players (those who roll a 5 or 6) will quit right after the first roll. The expected payout for these players is = (5+6)/2 * $1,000 = $5,500.
- 2/3 of the players will continue to play the 2nd roll. The expected value of their roll (which is now a single roll game), as established before is $3,500.

Therefore, the expected payout of a 2-roll game is: 1/3 * $5,500 + 2/3 * $3,500 = $4,166.67

The price of a 2-roll game will have to be greater than $4,166.67

C. **3-Roll Game:**

The price of a 3-roll game will be higher than the price of a 2-roll game.

We will assume a certain price P2 for 2-roll game and will further determine the expected value of a 3-roll game, P2 is greater than $4,166.67

At P2 = $4,500

- 1/3 of the players (those who roll a 5 or 6) will quit right after the first roll. The expected payout for these players is = (5+6)/2 * $1,000 = $5,500.
- 2/3 of the players will continue to play the 2nd roll. Again, among those 2/3 players,
    - 1/3 of them (those who roll a 5 or 6) will quit after the 2nd roll. The expected payout for these players is = (5+6)/2 * $1,000 = $5,500.
    - 2/3 of them will continue to play the 3rd roll. The expected value of their roll (which is now a single roll game), as established before is $3,500.

Therefore, the expected payout of a 3-roll game is: 1/3 * $5,500 + 2/3 * (1/3 * $5,500 + 2/3 * $3,500) = $4,611.11

Conclusion: The price for the new dice game will have to be greater than $4,611.11

Will You Take Over a McDonald's Restaurant in Frankfurt?

Case Type: market sizing; investment.
Consulting Firm: Accenture 2nd round job interview.
Industry Coverage: restaurant & food services.

Case Interview Question #00260: You get an offer to run a McDonald's (NYSE: MCD) restaurant in the middle of downtown Frankfurt in Germany. Just like every other McDonald's, the restaurant itself primarily sells hamburgers, cheeseburgers, chicken products, french fries, breakfast items, soft drinks, shakes, and desserts. It contains of a seating area of 150sqm and 3 cash points. The previous owner, however, keeps all financials secret. Should you agree to take over and run the McDonald's? Why?

Possible Answers:

First you want to identify the main question and develop a clear framework. In this case, since you are the protagonist to decide on the offer, you can build the main question: I will agree to the offer if the McDonald's is profitable.

Next step is to open a structure to answer you question: Is the restaurant profitable? Since the previous owner is not giving you any data, the case turns into a market sizing question with the structure: potential profit = potential revenue – potential costs.

1. **Revenue** = # of customers * average order size
- How many people live in Frankfurt? (2009 population: 672,000, use round number 700,000 for calculation).
- How many people eat fast food? (break down total population into different age groups, estimate the percentage of people who eat fast food in each group).
- How often do they need fast food? (again, estimate the frequency in each age group).
- How many competitors are there? (KFC, Burger King, Arby's, Wendy's, Taco Bell, Subway, etc. Split the # of customers over other fast food restaurants).
- When do the customers visit a McDonald's (cyclical in the morning less, at lunch a lot and evening a lot = how many people per hour in those three daytimes?)

Identify THE BOOTLENECK of the restaurant: only 3 cashpoints and 150sqm. (3 cashpoints is the bootleneck because the # of potential customers > # of customers that can be served)
- How many people can be served in total and in an hour with only 3 cashpoints?

Multiply the potential customers that can be served (in a day/week/month) with the average order size (hint: use your own experience of around 5€/order).

2. **Costs**
Identify the major cost drivers of a McDonald's restaurant.
- franchise fee (depreciated)
- labour
- materials
- rent
- understand a little bit more the nature of the business

This will give you a potential profit. This is likely to be a bit negative, so you are asked in a second question whether you have any ideas to bring this business back to profitable. Now the case turns into a profitability problem.

Here it is important to identify that the potential demand is more than our capacity and that we can improve revenue by increasing capacity. Think about ways to increase capacity: "mobile cashiers", "drive through", etc. On the other hand of cutting costs, if you have found anything interesting and likely in the cost sizing before.

Finally, you may be asked about a potential price of the restaurant (now it is a pricing & valuation case). Do we get it for free? What would be otherwise the maximum paying price or how much can the restaurant be valued? (Using multiple of the potential revenue or profit or use Net Present Value framework).

Xerox Develops New Laminate for Glass Bottle Labeling

Case Type: pricing & valuation.
Consulting Firm: Accenture final round job interview.
Industry Coverage: Office Equipment; Manufacturing; Food & Beverages.

Case Interview Question #00180: The client Xerox Corporation (NYSE: XRX) has come to you with an exciting news that their R&D Division has developed a new laminating technology which will label glass bottles in a way that makes them look like they have been painted. Xerox wants to know how valuable the technology is before they start marketing it. How would you go about pricing the new laminating technology?

Additional Information: (to be given to you if asked)

- There is a limited set of companies which make glass bottles and apply labels. When a bottle is to be painted, a different company will generally do the painting, but will not necessarily create the bottle: only 10% of the painting is done at the glass bottle manufacturer. (There are actually only 4 major players in the market and it is mature; the job candidate should realize that margins are low and glass bottles are a commodity).
- The market size of the painting and labeling business today is $50 billion. 10% of all glass bottles get painted.
- Current painting technology provides crude images. The new laminating technology would create sharp bright images.
- Each color painting today adds additional expense; the new laminating technology would not necessarily be so.
- The laminate used in the new technology is more expensive than paper, but cannot be scratched off.

- The cost per bottle is $0.20 for paint, $0.15 for the laminate, $0.05 for paper labels. An un-labeled bottle costs $0.05.

Potential Questions to consider: Who wins and who loses with this new technology? Who really needs it?

Possible Answers:

This pricing/valuation case involves a little math and some reasonable assumptions on the part of the interviewee. The candidate could move down the path right away of who might need this technology. Then, the candidate should instead focus on the numbers, and finally come back to that discussion at the end.

Realizing that the market is $5 billion a year and the cost is still high for your product, you could really only charge no higher than $0.19 per bottle for the laminate since the cost per bottle is $0.20 for paint. In fact, you may only be able to realize a couple cents per bottle, since the bottle manufacturers need some incentive to move to your product. $0.185 seems like a reasonable number. Thus the actual value of the new technology would be something like $0.185 – $0.15 = $0.035 per bottle. Assuming that each glass bottle costs a nickel by itself, then the number of bottles with paint would be 5 Billion/(0.20+0.05) = 20 Billion bottles. So the new laminating technology would be worth about 20 Billion x 0.035 = $700 Million.

The candidate should then discuss who might use this technology and discuss why they might switch. Companies dependent on marketing may be best suited for this technology, such as Coca-Cola and Pepsi. The candidate should feel free to suggest other ways to expand the business. However, the candidate should realize that most bottled products are as much a commodity as the bottle themselves. If a drink producer makes $0.25 for every bottle drink sold using paper labels which cost only $0.05, then raising costs by $0.135 per bottle for laminated labels would seriously erode profits. They would have to sell twice as many bottles of soda than they do before switching. In an industry like the soft drink industry such increases are unlikely.

Finally, the candidate should realize that not all painted labels will convert to laminate; the technology is therefore worth somewhat less than the $700 million figure estimated above.

Pfizer to Introduce New Cancer Drug

Case Type: new product; investment; HR/organizational behavior.
Consulting Firm: Accenture 2nd round job interview.
Industry Coverage: Healthcare: Pharmaceutical, Biotech, Life Sciences.

Case Interview Questions #00108: Your client Pfizer (NYSE: PFE) is one of the largest pharmaceutical companies in the world, ranking number one in sales. Based in New York City and with its research headquarters in Groton, Connecticut, Pfizer produces a wide range of drugs including Lipitor (atorvastatin, used to lower blood cholesterol), the neuropathic pain/fibromyalgia drug Lyrica (pregabalin), the oral antifungal medication Diflucan (fluconazole), the antibiotic Zithromax (azithromycin), Viagra (sildenafil) for erectile dysfunction, and the anti-inflammatory Celebrex (celecoxib).

Currently, Pfizer has only one product on the market for cancer treatment ($500MM in annual sales). In 6 to 12 months, Pfizer is planning on introducing a new drug to the market. The new drug is also for cancer patients and target audience will be oncologists. There is one major competitor (Gleevec made by Novartis) for Pfizer's current cancer drug product. If the new drug is introduced within a year, there will be no competition for at least one year. Current sales force is comprised of 1000 sales representatives and most reps joined company to be in an entrepreneurial environment. The company has been selling only one cancer drug product for the past 5 years. To successfully introduce the new drug to the oncology market, Pfizer will need to invest money in expanding its sales force.

Your job as an external consultant is to help Pfizer think through the question: Should they invest money in expanding their sales force?

Additional Information:

- The life of a new drug patent is 17 years; however, most of this life is spent in the R&D and FDA approval processes.
- Being first-to-market is extremely important to a new product's success.
- Selling cycle: sales reps call on doctors to discuss products —> doctors recommend products to patients —> patients choose and buy products to use —> health plan or insurance company reimburses patients.
- Cancer drugs are generally very expensive; however, most of the patient's out-of-pocket costs are covered by their health plan or insurance company.
- To sell cancer drugs to oncologists requires experienced sales people with technical backgrounds (oncologists do not see sales reps easily) — it usually takes 6 to 12 months to recruit and train a new sales organization.

Possible Answers:

Key Issues – Problem Decomposition

- What is the potential demand (in units) for the new drug product?
- How many cancer patients are there?
- How frequently will patients use the product?
- What is the recommended dosage per usage occasion?
- What unit price will the company be able to charge for the new product?
- How will price be set for the product in the marketplace?
- What is the size of the sales force investment which will be required to support the new drug?
- What is the average annual cost of a sales rep?
- How many additional sales reps will be needed to successfully introduce and adequately support the new cancer drug product?
- How many oncologists will need to be called upon?
- How often will each oncologist need to be called?
- What will be the average length of an oncologist call?
- Where is the point of diminishing returns for sales calls?
- How will potential demand be impacted by the number of sales representatives selling the new product?

Additional Considerations and Questions to ask:

- How would you estimate the demand for the new cancer drug product?
- What approach would you use and what data would you want to see?
- How would you set the price for the new cancer drug product?
- Is this product likely to be price elastic or price inelastic?
- What if there was competition for the new cancer drug product?
- If the client decided to invest, should they go with one combined sales force (for both new drug and existing drug) or two separate sales forces (one for each product)?

- What would you want to consider in deciding between one or two sales forces?
- How similar are the two products and target audiences?
- Are the two target audiences located in geographic proximity to each other?
- Will the new product distract sales reps from selling the current product (or vice-versa)?
- What will be the likely impact of each alternative on employee satisfaction?
- If they went with one combined sales force, how would you determine how much sales effort should be spent on each product?
- What other sales channels (other than direct) might the company want to consider and why?
- What other factors might be important to consider in making these decisions?
- Strategic direction of the company.
- Financial situation (cash flow, capital availability, etc).
- Current sales organization structure and reward system.
- Potential barriers to entry for new competitors.
- Other investment opportunities (i.e., opportunity cost).

L'Oreal Considers Strategy Change to Improve Profits

Case Type: improve profit/bottom line.
Consulting Firm: Accenture 2nd round job interview.
Industry Coverage: Healthcare: Pharmaceutical, Biotech & Life Sciences; Cosmetics & Beauty Products; Consumer Products.

Case Interview Questions #00055: Your client L'Oreal Group (Euronext: OR) is the world's largest cosmetics and beauty company. With its registered office in Paris and head office in the Paris suburb of Clichy, Hauts-de-Seine, France, L'Oreal produces and sells various cosmetics products in several European countries. The company's different brands are well established in the markets. The various products are quite similar in terms of raw material and production.

The company has been doing very well in the past, however profits have been shrinking in recent years. The Chairman and CEO of L'Oreal Group is thinking of changing his strategy in the industry. He asks you if this is a good idea and what they should do. What recommendation would you like to give him?

Additional Information (to be given to you if asked):

- Many small to medium size companies, and few big companies own several brands.
- Many small to medium size brands comprise the market in the cosmetics and beauty product industry.
- L'Oreal produces all products in all countries; transportation costs are small (see operational part).

Possible Answer:

Possible way of discussion

What is the structure of the industry? – Fragmented industry.

Why?

- low entry barriers (small setup costs, etc…)
- high product differentiation (many ways of differentiation)
- diverse markets: customer needs (language, complexions)
- barriers: tariffs, customs

How can fragmentation be overcome?

Feasible for L'Oreal?

- Create Electronic Order System (EOS) and learning curves--Yes
- Standardize market needs--No
- Separate the product's commodity aspect from fragmenting aspect--Yes
- Changing environment: reduced tariffs

Possible Solution:

Consolidate production while keeping the marketing and branding nationally decentralized.

Pros:

- EOS in production (better sourcing, longer runs, quality), optimize location (interest rates, wages, labor)
- Learning curve of running a more complex plant and logistics (see also Cons)
- Keep "fragmented" marketing required in the market
- Total inventory decreases (safety stock at original plant locations can be pooled centrally)

Cons:

- More complex central operation
- Increased logistic complexity
- Transportation costs increase

Portugal Cement Maker CIMPOR to Add Capacity

Case Type: add capacity, business expansion.
Consulting Firm: Accenture first round job interview.
Industry Coverage: Building Materials; Manufacturing.

Case Interview Questions #00033: Your consulting firm has been retain by the CEO of CIMPOR (Cimentos de Portugal, Euronext: CPR), the number one producer of cement in Portugal. The company is mainly involved in manufacturing and marketing cement, hydraulic lime, concrete and aggregates, precast concrete and dry mortars.

The client currently has 45% of the Portuguese market, and feels it could have more, but is already running at 100% capacity of their major plant, located near Lisbon, in Southern Portugal. The CEO of CIMPOR has asked you to

help him decide if they should build another plant or expand the capacity of current plant. How would proceed to gather information? And what recommendation would you give him?

Additional Information: (to be given to you if asked)

Costs: The cost structure for cement production is as follows:

Raw materials	28%
Labor and allocated fixed costs	16%
Distribution	26%
Sales and overhead	18%
Pre-tax profit	12%

Company: The company's selling prices are set by prevailing market prices in Portugal. Land is available to expand the current factory; there is also a suitable site near Porto, the second largest city about 200 miles to the north. Approximately 80% of the customers are within 100 miles of the current plant located in Lisbon.

Production/Distribution: Raw materials are purchased from a government-owned company, and prices are set by a yearly contract with the government. The plant is unionized, and extra shifts are not possible. The trucks are owned by the company, and transport all product directly to the customers throughout the country. Customers pay for trucking by the mile. The fixed cost of plant additions is roughly the same as the cost of a new plant of the same capacity.

Possible Solution:

As distribution is the second-largest cost item, it makes sense to minimize distribution costs in choosing the site of the next facility.

From the given data, it is safe to assume customers that are further away from cement plant are less inclined to buy due to the increased trucking costs. Therefore, to build a new plant in the north may increase sales in the north by reducing delivery costs to customers in this region.