ROSS CASEBOOK 2013

Ross Consulting Club

December, 2013

Table of Contents

Cases : Index

Note to the Reader

We proudly present the RCC 2013 casebook. This document is meant to provide a brief overview of case interviews and a series of practice cases. For each case, we have specified the type, difficulty level, and industry. Some cases are also specific to some firm formats. In this case book, the difficulty level for all cases is medium or hard. Therefore, we recommend that you refer to previous Ross casebooks for easier cases if you have just started preparing for case interviews.

We have updated the firm section of this casebook, based on the most recent information for the firms. We have also updated the industry section. The material is a starting point in your effort to learn more about firms and different industries that could give you some insights while saving you a lot of time. However, it is only a first step and we encourage you to build upon the information by doing your own research on industries and engaging with firms to gain a deeper understanding.

Best of luck in the upcoming recruiting season!

RCC 2013 Casebook Team

Philip Anselmino (MBA 2014)
Justin Brown (MBA 2015)
Shantanu Kumar (MBA 2015)
Deovrat Kajwadkar (MBA 2014)
Saurabh Kumar (MBA 2015)

Acknowledgements

Many people contributed to this year's casebook. We are really grateful for your help and support.

- The Boston Consulting Group
- Daniel Andersen
- Nitin Baliga
- Igor Dudchenko
- Mark Eliason
- Deovrat Kajwadkar
- Christopher Kalich
- Aditya Kapoor
- Nikolay Kovarsky
- Elizabeth Mills
- Kristin Wall

ROSS CONSULTING CLUB

FIRM OVERVIEW

Accenture

Accenture is a large global management consulting firm specializing in executable solutions and organizational transformation.

About

- Focused on practical solutions that clients can implement
- Balance of strategy and implementation
- Rapidly growing management consulting division
- Internal Strategy College offers consultants the opportunity for professional growth
- New consultants hire into the global operating model or a specific industry

Interview process overview

- First Round:
  - Two 45- minute interviews consisting of a fit portion and a 30 minute case
- Second Round:
  - Two/Three 45- minute interviews consisting of a fit portion and a 30 minute case

Quick Facts

- Number of consultants: 17,000
- Number of offices: 200
- Services: 18

Career path

- Consultant
- Manager
- Senior manager
- Senior Executive

A.T. Kearney

A.T. Kearney is a global team of forward-thinking, collaborative partners that delivers immediate, meaningful results and a long-term transformational advantage to clients and colleagues.

About

- Traditional strengths are operational consulting & strategy
- Increased presence in private equity work
- Diverse work environment and friendly colleagues
- Strongest industry verticals: Consumer, Industrial, Retail and Public Sector Energy (CIRP). Financial Services picking up
- Recent Managing Director change and aggressive growth strategy (including lateral hires) has been announced for the firm

Interview process overview

- First Round
  - Two back-to-back 45 min interviews, each includes fit and case
  - Conducted by a Manager/Principal
- Second Round
  - Written case (60 minutes preparation, 30 minute presentation including 15 minutes for Q&A)
  - 45 minute fit interview
  - 45 minute full case

Quick Facts

- Number of consultants: 2300
- 58 offices in 40 countries
- 13 Industry groups
- 11 practice areas

Career path

- Associate
- Manager
- Principal
- Partner

Bain & Company

Bain & Company is a global management consulting firm that differentiates itself in solving business problems for clients by working with the clients' team as business partners and focusing on results.

About

- Expertise across all major industries and across functions
- Bain redefined the boundaries of traditional strategy consulting in working with companies such as: Tied Economics, BridgeSpan Group, PE consulting, Bain Capital
- Emphasis on people – opportunities to balance work –life, international transfers, externships, private equity rotations
- Leading consulting firm sought by major private equity firms
- Generalist model with office-based staffing

Interview process overview

- First Round:
  - Two-45 minute interviews including a brief fit interview (5-10minutes) and a case interview
- Second Round:
  - 45 minute behavioral interview
  - 45 minute case interview
  - Written case: Interviewee has 60 min to review a written case followed by a 30 minute presentation/Q&A by interviewer

Quick Facts

- Number of consultants: 5,400
- Number of offices: 49

Career Path

- Consultant
- Case Team Leader
- Manager
- Principal
- Partner

Boston Consulting Group

BCG is a global management consulting firm and one of the world's leading advisor on business strategy. Commitment to both clients' success and its own standards is what sets BCG apart.

About

- Regional staffing model
- Creative and supportive environment
- BCG provides one of the lowest leverage ratios in the consulting industry; senior management works closely with junior consultants
- Emphasis on a generalist approach. Consultants are not required to specialize in an industry or service line until becoming a Principal
- Fortune magazine's 2013 rankings listed BCG as the fourth "best company to work for"

Interview process overview

- First Round
  - Two Case Interviews (Includes a section for behavioral)
  - Conducted typically by 2nd year Consultants to Principals
- Second Round
  - Three Case Interviews typically conducted by senior representatives
- All Interviews are 45 min with at least 25 min dedicated to the case
- Some offices (such as Chicago) piloting a written case

Quick Facts

- Number of consultants: 6,200
- 78 offices in 43 countries
- 19 Industry groups
- 18 practice areas

Career path

- Consultant
- Project Leader
- Principal
- Partner

Booz & Company

Booz & Company is a global management consulting firm known for its functional expertise, industry foresight, and "sleeves rolled up" approach to working with clients.

About

- Booz & Company is been known for deep industry and functional expertise across public and private sectors, influential global studies and books, and management magazine "strategy + business"
- Emphasis on mentoring and assessment – senior mentor, junior mentor, 360 degree performance assessment
- Expertise across diverse industries and functional areas and emphasis to pick either industry or function (See appendix for details)
- National staffing model

Interview process overview

- First Round:
  - Two 45- minute interviews consisting of a fit portion and a 30 minute case
- Second Round:
  - Two 45 minute interviews with partners following the same format as the first round

Quick Facts

- Number of consultants: 3000
- Number of offices: 57

Career Path

- Associate
- Senior Associate
- Principal
- Vice President, Partner

Cognizant

Cognizant is a global consulting firm focusing on business & IT solutions that increase competitive advantage through added efficiency and effectiveness.

About

- Strong data analytics driven solutions
- Senior consultants put on high profile projects right away
- Accelerated promotion track available for top performers
- National staffing model
- Customer-focus culture, based on passion, collaboration, cost reductions and business results
- End-to-end solutions provider with ideation to value realization framework

Interview process overview

- First Round:
    - One 30 interview consisting of fit questions and another 45 minute interview consisting of a technology case question
- Second Round
    - Two 30 minute interviews consisting of fit and experience questions

Note: Technology case will be a general case consisting of a discussion about a general idea

Quick Facts

- Number of consultants: 3,000+
- Number of global offices: 50
- Industry Practices: 12
- Functional Practices: 6

Career path

- Senior Consultant
- Manager
- Senior Manager
- Director
- Senior Director

*Based on best available information

Cummins

Cummins is a corporation of complimentary business units that design, manufacture and distribute engines and related technologies with opportunities in corporate strategy/development

About

- Immediate exposure to senior level executives
- Work on actual problems with large impact on operations/future growth
- MBAs go on to lead strategy functions within business units or take challenging roles in the marketing divisions
- Commitment to a solid work/life balance
- "Working Right": committed to building partnerships with their people, customers, environment and community

Interview process overview

- First Round:
  - One 45 minute interview consisting of a case and fit questions
- Second Round:
  - Same day, one 45 minute interview consisting of a case and fit questions

Note: Case is industrial and equipment focused.

Quick Facts

- Number of employees: 46,000
- Global presence: 190 countries, 600 independent distributors, 6,500 dealer locations
- Cummins earned $1.66 billion on sales of $17.3 billion in 2012
- Fortune 500 rank: 160

Career path

- Corporate Strategy/Supply Chain Management Manager
- Corporate Development
- General Management

Note: advancement with Cummins can take many different paths

Deloitte

Deloitte is a global management consulting firm specializing in strategy and implementation across a broad range of industries and functions.

About

- National staffing model provides flexibility to work in a variety of industries regardless of office location
- Focused on executable strategy that offers opportunities in both strategy and implementation
- Job flexibility and culture encourage work-life balance
- Deloitte University, leadership center near Dallas where leaders thrive and ideas prosper
- Expanded strategy practice and capabilities with acquisition of Monitor Group during January2013

Quick Facts

- Number of consultants: 20,000
- Number of offices: 89 US offices
- Practices
  - Strategy & Operations
  - Technology
  - Human Capital

Interview process overview

- First Round:
  - 30 minute behavioral interview
  - 30 minute case interview
- Second Round:
  - 30 minute behavioral interview
  - 60 minute individual case interview
  - 90 minute group case interview

Career path

- Senior Consultant
- Manager
- Senior Manager
- Partner or Director

EY

EY is the 2nd largest professional service firms in the world delivering capabilities to help companies turn innovation into action, information into insight and risk into results.

About

One of the Big Four Accounting +consulting firms

Advisory Services

- Performance Improvement (PI) - includes all operations related work and a strategy function known as "strategic direction"
- Financial Services Organization (FSO) - strategy work for financial services clients

Transaction Advisory Services (TAS) includes

- Commercial Advisory Services (CAS) - strategy work related to growth strategies and due diligence
- Operational Transformation Services (OTS) - post-merger integration
- Valuation and Business Modeling
- Transaction Real Estate (TRE)

Interview process overview

- First Round (on campus):
  - One or two interviews[1]
  - Behavioral may be separate or part of each interview
- Second Round (off campus):
  - 2-4 interviews with Managers, Senior Managers and Partners
  - Mixture of behavioral and case interview

[1]*Depends on which service line you are interviewing for.*

Quick Facts

- Number of consultants: 167,000
- *Vision 2020* is a firm-wide growth revenue to double revenues by 2020 (largely led by growth of consulting practices)

Career Path

- Senior Associate
- Manager
- Senior Manager
- Partner

ROSS CONSULTING CLUB

L.E.K Consulting

L.E.K Consulting is a global management consulting firm that leverages its deep industry expertise and uses analytical rigor to solve the toughest and most critical business problems of its global clients.

About

- Expertise in Private Equity, Airlines and MedTech
- 5 offices in the U.S: Boston, New York, San Francisco, Chicago and Los Angeles
- Office-based consulting model limits frequency of travel
- Provides strong opportunities for international exposure
- Option of declaring an industry focus early on in the career

Interview process overview

- First Round (phone interview):
  - Behavioral and case interviews (quantitative and estimations); 45 minutes; conducted by a consultant and manager
  - Behavioral and case interviews (qualitative); 45 minutes; conducted by a consultant and manager
- Second Round (Off-campus):
  - Business presentation interview ; 1 hour preparation, 30 minutes presentation including Q&A; conducted by principal and manager
  - Behavioral; 30 minutes; conducted by a partner
  - Behavioral and case; 45 minutes; conducted by a manager

Quick Facts

- Number of consultants: 1000
- 22 offices in 14 countries
- 15 Industry groups and 4 functional areas worldwide

Career path

- Consultant
- Manager
- Principal
- Partner

PwC Advisory

PwC Advisory is a rapidly growing consulting organization backed by the stability and strength of the PwC brand. They support clients in designing, managing and executing lasting beneficial change.

About

- National staffing model
- Focus on four industry verticals: Financial Services, Health Care, Product and Services, Public Sector
- Consulting practice projected to double in the next two years
- High investment by the firm on internal networking events to develop strong intra-company bonds
- New employees recruit for a specific industry focus rather than a generalist role

Interview process over view

- First Round (On-campus, 2 sections, 45 minutes each)
  - Behavioral
  - Mini-Case and Fit
- Second Round (3 sections, 45 minutes each)
  - Behavioral
  - Content interview: Industry Focus Interview
  - Case interview: a presentation based on a case emailed 48 hours in advance

Quick Facts

- Practice areas:
  - Strategy
  - Finance
  - Operation
  - People & Change
  - Risk

Career path

- Senior Associate
- Manager
- Partner/ Principal

McKinsey & Company

McKinsey & Co is a large global management consulting firm focusing on high profile studies for businesses, governments, and institutions.

About

- Strong research department supporting consultants
- National staffing model
- High profile clients and studies
- Teams with diverse backgrounds (MBAs, PhDs, JDs)
- A culture that promotes work-life balance
- Encourages active discussion; individuals have "obligation to dissent"

Interview process overview

Selected candidates have to take Problem-Solving test: 26 Qs, 60 mins

- First Round:
  - Two 45-60 minute interviews consisting of a case and fit questions
- Second Round:
  - Three 45-60 minute interviews consisting of a case and fit questions

Note: Fit questions address three main points: personal impact, leadership, and problem solving skills

Quick Facts

- Number of consultants: 9,000
- Number of global offices: more than 100 offices in more than 60 countries
- Industry Practices: 22
- Functional Practices: 8

Career path

- Associate
- Engagement Manager
- Associate Principal
- Partner
- Director

Roland Berger

Roland Berger is one of the top international consultancies. It prides itself on developing creative strategies and implementing practical solutions.

About

- Locations in U.S: Chicago, Boston, New York, Detroit
- Values entrepreneurial spirit and individuality of consultants
- Three core values: entrepreneurship, partnership and excellence
- Deep Understanding of diverse cultures and markets
- Internal transfer policy that allows consultants to permanently change offices if they have suitable language skills
- Every new hire is assigned a senior mentor to help with the transition and personal development

Interview process overview

- First Round
  - Fit and short case interview; 45 minutes; conducted by consultants
- Second Round
  - Personal fit interview; 30 minutes; conducted by consultants
  - Business knowledge interview; 30-45 minutes; conducted by a partner
  - Presentation case interview ; 30-60 minutes preparation, 30 minutes for presentation including Q&A; conducted by consultants and members of management team

Quick Facts

- Number of consultants: 2700
- 51 offices in 36 countries
- 26 Industry groups and 27 functional areas worldwide
- 3 industry groups and 4 functional areas in North America

Career path

- Senior Consultant
- Project Manager
- Principal
- Partner

The Cambridge Group

The Cambridge Group is a management consulting firm specializing in helping clients identify and capture market demand.

About

- Acquired by The Nielsen Company in 2009 enables access to key customer insights
- Emphasis on helping Growth strategy – top line growth
- Major industries include retail, CPG, and financial services
- Office-based consulting model limits frequency of travel
- Major industries include retail, CPG, and financial services, but expanding into other areas including media and technology

Interview process overview

- Single Round:
  - 3 consecutive interviews totaling 2 hours consisting of a case and fit questions.

Quick Facts

- Number of consultants: 90
- Number of offices: 1 (Chicago)

Career path

- Consultant
- Project Manager
- Project Director
- Principal

ZS Associates

ZS Associates is a global management consulting firm specializing in using data driven strategies to provide sales and marketing solutions.

About

- Expertise in marketing and sales with a focus in healthcare
- Partnership with clients to design and implement solutions
- ZS services include consulting, outsourcing, technology, and software
- Project-specific and formal training provide opportunities for continued professional development

Interview process overview

- First Round:
  - On –campus consisting of two sessions-a behavioral interview and a case interview; 45 minutes each; conducted by a manager
- Second Round:
  - Behavioral interview; 45 minutes
  - Case interview; 45 minutes; conducted by a principal
  - Business presentation interview ; 45 minutes preparation, 30 minutes presentation including Q&A

Quick Facts

- Number of consultants: 2000
- Number of offices: 20
- Practices
  - Business consulting
  - Business operations
  - Business technology

Career path

- Consultant
- Manager
- Associate Principal
- Principal

ROSS CONSULTING CLUB

INDUSTRY OVERVIEW

Auto Industry

Revenue Streams	Cost Structure	Market Trends
▪ Vehicle sales ▪ Vehicle financing ▪ Extended Warranties ▪ Branding is key for selling similar product at differing price points	▪ Manufacturing – 50% ▪ Production Overhead – 17% ▪ Corporate Overhead – 7% ▪ Selling (distribution, marketing, dealer support/discount) – 23.5% ▪ Profits – 2.5% ▪ Over 80% plant capacity utilization required for profitability	▪ Focus on fuel improving efficiency ▪ Increased popularity of hybrid and electric vehicles ▪ Top 10 firms control 80% of mkt. ▪ Average annual growth: 2.5% ▪ Significant model redesigns occur approximately every 5 years

Customer Segments	▪ Cars – 68.2% ▪ Pickup trucks and SUVs – 23.9% ▪ Vans – 7.9%
Channels	▪ Dealership networks – largest domestic segment ▪ Wholesalers – purchase fleets of vehicles for businesses and resale to dealerships ▪ Rental companies
Risk	▪ Relationship with UAW union a major factor in industry profitability
Key Economic Drivers	▪ Consumer Confidence Index ▪ Price of crude ▪ Steel prices ▪ Yield on 10-year Treasury note

Airline Industry

Revenue Streams	Cost Structure	Market Trends
▪ Ticket sales ▪ Charges for bags and on-board services ▪ Fuel surcharges ▪ Capacity optimization is key for profitability	▪ Direct, Indirect and Overhead costs ▪ Labor – 11% ▪ Fuel – 32% ▪ Aircraft depreciation/rentals - 12% ▪ Airport gates/ facility rentals – 6% ▪ Cancelled flights as a result of weather conditions can be a significant expense	▪ Airlines are consolidating ▪ Proliferation of low cost carriers offering pay per service options ▪ Flexible capacity is an important factor in airline profitability ▪ Online booking and checking to reduce administrative expenses ▪ Profit margins around 5%

Customer Segments	▪ Leisure travelers – 71%, generally price sensitive ▪ Business travelers – 25% ▪ Freight Transportation – 4%
Channels	▪ Online travel agencies (Orbitz, Expedia, Kayak, etc.) ▪ Airlines' sales team: call centers, online, or kiosk ▪ Travel management companies (TMCs) serving corporate clients
Risk	▪ Changes in fuel prices have a major impact on profitability ▪ Economic conditions greatly impact amount of leisure travelers
Key Economic Drivers	▪ World Price of Crude Oil ▪ Per capita disposable income ▪ Trips by US residents

Pharmaceuticals

Revenue Streams	Cost Structure	Market Trends
▪ Pharmaceutical manufacturing industry is highly capital intensive with high revenue volatility ▪ The effect of seasonality is high on certain products (vaccines and cold medicine) and low on other products (pain medicines) ▪ Federal government grants for R&D	▪ The manufacturing cost is the largest share of the industry's costs - 31.5% ▪ Research & Development- 20% ▪ Marketing costs – 7% ▪ Wages account – 11% ▪ The industry also faces high liability insurance costs and high legal fees and settlements	▪ Healthcare reform is expected to boost sales as more individuals gain prescription drug coverage in 2014 ▪ Tariff barriers are no longer a relevant form of protection ▪ Demographic shifts will increase sales over next five years ▪ Loss of patent on key drugs for many large pharma companies.

Customer Segments	▪ Patients/consumers who need these drugs/medicines ▪ Two other target stakeholders: 1. Doctors who prescribe 2. Insurance companies that pay
Channels	▪ Over-the-counter outlets – CVS, Walgreens ▪ Prescription drugs: Hospitals, pharmacies ▪ Mail order pharmacy: Express Scripts, Walgreens
Risk	▪ Price competition from generic drugs ▪ Change in drug utilization and mix patterns ▪ Unfavorable government healthcare polices
Key Economic Drivers	▪ Median age of Population ▪ R &D expenditure

Commercial Banking

Revenue Streams	Cost Structure	Market Trends

▪ Loan interest – 67.5%
▪ Service Fees – 32.5%
  ▪ Fee based services
  ▪ Credit cards
	▪ Wages – 26%
	▪ Bad debt expense – 21%, recent levels are significantly higher than historical average (5%)
	▪ Interest expense – 15%
	▪ Facilities – 7%
		▪ Industry consolidation in the wake of subprime crisis
		▪ Increased government regulation
		▪ Increasing importance on mobile banking for long term success
		▪ Avg. projected 5-year annual revenue growth: 7.4%
		▪ Four largest players accounted for estimated market share of 42.9%

Customer Segments	▪ Retail customers – 53% ▪ Corporate clients – 42% ▪ Other – 5%
Channels	▪ Branch offices ▪ Stand alone ATMs ▪ Mobile banking
Risk	▪ Non traditional competitors are beginning to offer banking services - Retail Co.
Key Economic Drivers	▪ Prime rate ▪ Household debt ▪ Corp. profit ▪ External competition ▪ Regulation

Oil & Gas

Revenue Streams	Cost Structure	Market Trends
▪ Heavy crude oil – 40% ▪ Light crud oil – 36.2% ▪ Natural gas – 23.8%	▪ Exploration – 36% ▪ Production – 41% ▪ Transportation – 5% ▪ Refining – 13% ▪ Distribution – 4% ▪ Marketing – 1% ▪ Industry divided among upstream, midstream and downstream	▪ Four largest players account for estimated market share of 38.5% ▪ Oil price forecasted to increase ▪ Incentive to invest in research for oil alternatives will rise ▪ Success of 'shale gas' transformed domestic energy supply, with potentially inexpensive and abundant new source of fuel

Customer Segments	▪ Petroleum refiners – 74.% ▪ Other industries – 10.6% ▪ Electricity generators – 9.2% ▪ Domestic and commercial users – 5.6%
Channels	▪ Retail ▪ Utilities & commercial ▪ Wholesale
Risk	▪ Access to reserves pose risk from political constraints and competition for proven reserves; government lands containing large reserves, but currently restricted ▪ Energy policy is in a continued state of flux in many key geographies, including the US
Key Economic Drivers	▪ Price of crude & natural gas ▪ BRIC nation GDP growth ▪ Downstream demand

Health Care

Revenue Streams	Global Cost Structure as % of GDP	Market Trends
▪ Hospital care - $929B ▪ Physician and clinical services - $588.8B ▪ Prescription drugs - $262.3B ▪ Nursing - $238.6B ▪ Dental services - $116.6B ▪ Research, Equipment, Investment - $161.5B	▪ US - 17.9% ▪ Europe - 10.6% ▪ OECD - 12.6% ▪ Latin America - 7.6% ▪ East Asia & Pacific - 6.8% ▪ Sub-Saharan Africa - 6.4% ▪ Middle East & N. Africa - 4.8% ▪ South Asia - 3.8%	▪ Increases in Medicare and a push for a national healthcare system promise high returns for the healthcare providers ▪ Highly fragmented: Top 50 organizations account for 15% revenues ▪ Employers pushing health care costs onto employees - 44.5% of Americans get benefits, down from 49.2% in 2008

Customer Segments

- Patients/consumers
- All generations: Baby Boomers, Generation X, Y (Millennial generation), and Z

Channels

- Hospitals
- Doctors offices
- Nursing homes
- Outpatient surgery centers
- Other centers
- Medical equipment
- Pharmacies

Risk

- Profitability depends on efficient operations and in some cases, grants and federal funds
- Impact of Affordable Care Act of 2010 still uncertain

Key Economic Drivers

- Regulation for Health & Medical insurance
- Federal funding for Medicare and Medicaid
- Aging population
- Advances in medical care and technology

Private Equity & Hedge Funds

Revenue Streams	Cost Structure	Market Trends
▪Total Revenue: $89.2bn: ▪56% from Private Equity Funds ▪40% from Hedge Funds	▪Wage compensation and benefits are the largest expense incurred by operators, accounting for 21% ▪Administrative costs, including regulatory filings, record keeping, travel, communication and information services, accounting for 15% ▪Profits – 33%	▪Over 2013-18, industry revenue is expected to grow at 3.8% ▪Tighter regulations and fund oversight expected in the wake of the financial crisis ▪No government assistance (tariff or stimulus) expected in the next 5 yrs ▪Top 6 Private Equity players control 15 % of market share ▪Top 5 Hedge Funds have 9% market share

Customer Segments	▪Institutional investors (e.g. public and private pension funds) - 61% ▪Private investors (e.g. High net-worth individuals) - 39%
Channels	▪Private equity funds and hedge funds ▪Fund of funds
Risk	▪ New legislation, forecast increases in interest rates, rising competition and the continued de-leveraging of investments will temper revenue growth over the next five years
Key Economic Drivers	▪ Investor uncertainty ▪Access to credit ▪S&P 500

Retail

Revenue Streams	Cost Structure	Market Trends
▪ Women's Apparel sale accounts for the major share of revenues at 21% ▪ Drugs & Cosmetics and Furniture & Household appliances contribute 16% each to total revenue ▪ Children and Men's wear are each 10% of retail revenue ▪ Toys - 8%, Footwear – 5% and misc. items - 13% are other sources of revenue	▪ Industry costs are similar for most operators, but vary between firms of different sizes & specialties ▪Largest expense for the industry is Cost of Goods Sold (purchases). Has increased due to weak sales & accounts for 74% of total costs ▪Employee wages account for 9.5% ▪Rent and Utility costs are 3% ▪Marketing costs are close to 3%	▪ Over the four years to 2017, retail sector revenue is forecast to grow at an average rate of 4.5% per year ▪ Employment in the industry is projected to grow slowly ▪ Consolidation expected to continue ▪ The industry's contribution to the GDP is expected to underperform compared to the US economy ▪Major players account for 81% of market share

Customer Segments	▪ The industry is consumer-oriented and, due to the spectrum of products, its markets are generally segmented into different age groups ▪ Segment shares of the revenue have remained relatively unchanged over the past five years
Channels	▪ Big-Box Retailers ▪ Discount Department stores ▪ Specialty Retail stores
Risk	▪ Changes in consumer disposable income can cause consumers to defer purchasing products from retailers as industry is sensitive to changes in economic activity
Key Economic Drivers	▪Consumer confidence index ▪Population segmentation ▪Per capita disposable income

Telecommunication

Revenue Streams	Cost Structure	Market Trends
▪ Plain old telephone calls, and increasing text and images. High-speed internet access, broadband information services and interactive entertainment ▪The fastest growth comes from services delivered over mobile networks. ▪Advertising income accounts for about 5% of total industry revenue.	▪ Investment and investment-related costs are 60% of the costs of production ▪ Wage shares are at about 25% ▪A notable part of the investments are what economists refer to as "sunk costs". These are long term investments which can be used only for specific economic activities.	▪ Expectations of always-on service everywhere forcing operators to boost network capacity and connectivity ▪Increased demand for emerging services like mobile payment platforms and cloud computing ▪Revenue increase forecast for Internet services and wireless telecom are 7.9% and 4.8% per annum respectively till 2017

Customer Segments	▪ Residential and small business markets ▪ The corporate market - less price-sensitive than residential customers. Large MNCs, premium service buyers include those opting for high-security private networks & videoconferencing.
Channels	▪ Retail Channels ▪ Direct Sales
Risk	▪ Capital-intensive telecom industry the biggest barrier to entry is access to finance ▪ New technology is prompting a raft of substitute services, with lower prices and more exciting services driving down industry profitability
Key Economic Drivers	▪ Number of broadband and mobile internet connections ▪ Demand from broadcasting and telecommunications

Utilities

Revenue Streams	Cost Structure	Market Trends
▪ Transmitted electricity is separated into two categories, base load and intermittent electricity ▪ Base load electricity is expected to account for the bulk of industry revenue [95%] (Coal – 36%, Natural gas – 25%, Nuclear – 17%, Others – 17%) ▪ Intermittent electricity is generated from renewable energy sources [5% revenue share]	▪ Purchased power accounts for the largest component of this industry's cost structure – 48% ▪Wages - 9% , wage growth has fallen due to slower rate increases and industry consolidation ▪High depreciation costs because infrastructure requires significant capital investments ▪Marketing, maintenance contracts and other costs – 9%	▪ Overall growth over the next five years is anticipated to be positive ▪ Advanced metering technology will become a consistent feature of this industry over the next five years ▪ Renewable power, such as solar and wind, are projected to grow strongly over the next five years ▪ Public utility commissions (PUC) are expected to grant rate increases, fueling revenue and profit growth.

Customer Segments	▪ Residential ▪ Commercial ▪ Industrial and Transportation
Channels	▪ Transmission grids
Risk	▪ The Utilities industry is in the mature stage of its life cycle and is associated with low risk s ▪ Seasonality of electricity consumption (due to weather shifts) can squeeze revenues in the short term
Key Economic Drivers	▪Electric power consumption ▪World price of natural gas ▪Industrial production index

Further Reference

Auto Industry - IBISWorld Industry Report 33611a

Commercial Banking - IBISWorld Industry Report 52211

Oil & Gas - IBISWorld Industry Report 21111

Airlines: IBISWorld Industry Report 48111b

Pharma: IBISWorld Industry Report 32541a

Healthcare: IBISWorld Industry Report 52411b

Retail: IBISWorld Industry Report (Retail Trade)

Telecom: IBISWorld Industry Report 51332, 51711c, 51741, 51791a

Utilities: IBISWorld Industry Reports 22111 a-e, 22112, 22121

Private Equity: IBISWorld Industry Report 52599

Case Interview Basics

Case Structure

Understand the Question (~1-2 minutes)

- LISTEN
- Summarize the problem statement to make sure you understand the situation and objectives
- Ask 1-2 clarifying questions around the topic and/or metrics to be used for the analysis
- Make sure you have all the information you need to develop a framework

Develop Framework (~1-2 minutes)

- Ask for a moment to organize your thoughts
- Develop 3-4 areas to analyze along with a few tailored sub-topics
- Structure the framework in a logical fashion – it should open with the most important topic and provide the interviewer with a roadmap of where you plan to take the case
- Engage the interviewer by turning the framework towards them

Analyze (~20 minutes)

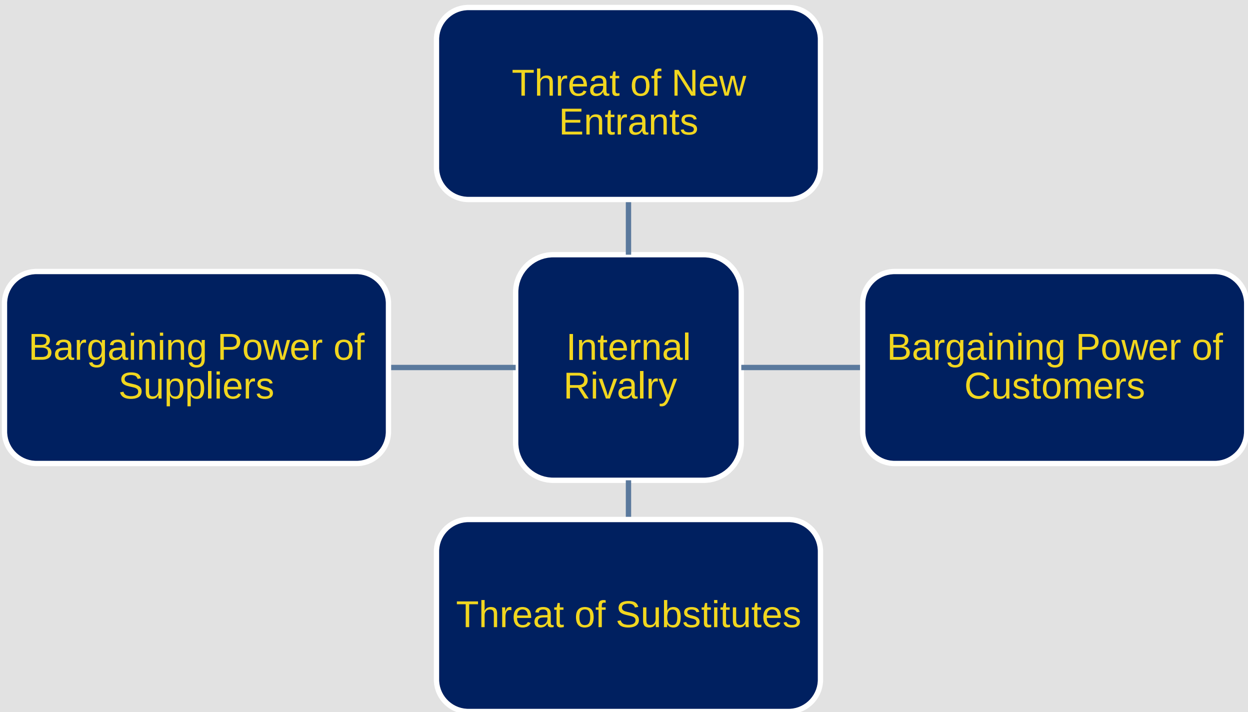
- Refer back to the framework as you move through each of the main areas
- Use one sheet of paper per topic – think of the case as a PowerPoint deck
- Tie back each piece of analysis to the main objective/problem statement
- Walk through the calculations /analysis
- Drive insights whenever possible!

Form Recommendation (~1-2 minutes)

- State your recommendation as a direct response to the problem/objective – it should not come as a surprise to the interviewer
- Incorporate key metrics/findings as a part of your recommendation
- Include risks and next steps

Porter’s Five Forces

Porter’s Five Forces Analysis



Porter's Five Forces

Concept	Key Drivers	
Internal Rivalry	• Concentration and balance • Industry growth • Product differences	• Exit barriers • Overcapacity
Threat of New Entry (Barriers to Entry)	• Economies of scale • Capital requirements • Access to distribution channels	• Competitor response • Brand identity • Proprietary product differences
Threat of Substitutes	• Switching costs • Relative pricing	• Availability of and consumer propensity to substitute products
Bargaining Power of Suppliers	• Supplier concentration • Switching costs	• Threat of forward integration • Product differentiation
Bargaining Power of Customers	• Buyer concentration • Buyer volume • Buyer switching costs	• Ability to backward integrate • Substitute products

Key Marketing Concepts

4Ps	Considerations	
Product	• Features and capabilities • Quality and reputation • Service and warranties	• Packaging and size • Positioning and market segmentation • Differentiated versus commodity
Promotion	• "Pull" versus "push" • Consumer awareness • Loyalty • Advertising medium	• Public relations • Buying process • Trial/Repurchase
Price	• Perceived value • Willingness to pay • Retail/Discounts • Economic incentives	• Skimming • Strategy → relation to market size, product lifecycle, and competition
Place (Distribution)	• Channels • Inventory → levels, turnover, carrying costs	• Coverage • Transportation → alternatives, efficiencies, costs

Key Marketing Concepts

3Cs	Considerations
Company	• Strengths/Weaknesses/Opportunities/Threats • Strategy and vision • Available resources/Capacity • Experience/Learning Curve • Financial • Culture/Organizational structure
Competition	• Industry • Size/Number/Market share • Economies of Scale/Scope • Capabilities/Experience • Resources → financial, distribution
Customer	• Perceptions • Loyalty • Switching costs • Purchase behavior • Segmentation • Market characteristics/trends

General Frameworks

Topic	Key Drivers

Revenue	• Volume
	    • Internal →Price, Customer Service, Distribution/Inventory/Capacity
	    • External →Competition, Substitutes/Complements, Market Forces/Demand
	• Price → Competition, Elasticity, Differentiation, Segments
	• Product Mix → Attributes (e.g. niche, patent), Quality, % of Revenue, Variety
	• Alternative Revenue Streams

Costs	• Fixed Costs → Manufacturing, Labor, Marketing, Overhead, IT, SG&A, PP&E • Variable Costs → Inputs, Distribution, Marketing, Maintenance, Packaging, Inventory • Balance Sheet Items • Benchmark Opportunity Cost/Cost Accounting/Capacity Utilization • External → Union strikes, Technology, Currency Fluctuations, Tariffs, De-Regulation

General Frameworks

Topic	Key Drivers	
Competition	• Rivals (structure) • New Entrants • Substitutes	• Reaction • Position
Customers	• Market Size • Segments • Needs	• Purchase Drivers • Price Elasticity • Retention/Loyalty
Processes	• Manufacturing • Marketing • Sales • Distribution	• Customer Service • IT • R&D • Forecasting
Company	• Core Competencies • Cost of Capital • Brand • Organization / Incentives	• Controls • Financial Capability • Management Capability

General Frameworks

Topic	Key Drivers
Macro	• Legislation • Unions • Technology • Economy → Oil, Interest Rates, Unemployment • International Issues → Politics, Regulations, Taxes, Tariffs • Environment • Socio-Cultural • Demographics
Supply Chain	• Suppliers • Distributions
Industry	• Barriers to Entry/Exit • Lifecycle • Consolidation • Government Policy • Capital Costs • Access to Technology, Distribution, etc.

Key Formula Review

Topic	Formula
Time Value of Money	Value to Perpetuity = $\frac{Value\ of\ Asset}{Discount\ Rate}$ NPV = $\sum_{t=0}^{n} \frac{Annual\ Cash\ Flow}{(1+r)^t}$
Rule of 72	Time for Invested Principle = $\frac{72}{r}$ • r = rate of return • At 7% r, the investment will double every 10 years • At 10% r, the investment will double every 7 years
Little's Law	$Inventory = Throughput \times Flow\ Time$
Inventory	Inventory Turns = $\frac{COGS}{Average\ Inventory}$ Days of Inventory = Inventory Turns * 365
Profitability	$\pi = Q(P - VC)$ - FC
Breakeven	Breakeven = $\frac{FC}{P-VC}$
Margin	$Gross\ Margin = \frac{P-C}{P}$ $Net\ Margin = \frac{Net\ Income}{Sales\ Revenue}$
Markup	$Markup = \frac{P - C}{C}$

Key Formula Review

Topic	Formula
Return on Assets (ROA)	$Return\ on\ Assets = \frac{Net\ Income}{Total\ Assets}$
Return on Equity (ROE) DuPont Analysis	$ROE = \frac{Net\ Income}{Total\ Shareholders'\ Equity}$ $ROE = \frac{Net\ Profit}{Sales} \times \frac{Sales}{Assets} \times \frac{Assets}{Equity}$ $ROE = operating\ efficiency \times asset\ efficiency \times financial\ leverage$
Working Capital	ROI = $\frac{\pi}{K}$ • K = Capital Invested (e.g. Assets, Working Capital) • Working Capital = Assets – Liability
Income Statement	Sales − COGS = Gross Profit − SG&A = EBITDA − Depreciation/Amortization = Operating Profit − Interest Expense = EBIT − Tax Expense = Net Income

ROSS CONSULTING CLUB

Economics Review

Concept	Definition
Adverse Selection	Situation in which an individual's demand for insurance is aligned to their risk of loss (i.e. people with the highest expected value will buy insurance) and the insurer cannot account for this correlation in the price.
Consumer Surplus	Economic gain achieved when consumers purchase a product for a price less than their willingness to pay. • Consumer Surplus = Willingness to Pay - Price
Economies of Scale	The average cost per unit for a business entity is reduced by increasing the scale of production.
Economies of Scope	The average cost for a business entity is reduced by producing two or more products.
Elasticity	• If E>1, decrease price to increase revenue • If E<1, decreased price leads to lower revenue
Law of Diminishing Returns	At some point in the production process, the addition of one more unit of output , while holding everything else constant, will eventually lead to a decrease in per unit returns.

Economics Review

Concept	Definition
Marginal Cost	Cost of one more unit of output.
Monopoly	Entity is the only supplier of a particular good. • Lack of competition → produce less and charge more • Barriers may include government regulation, networks, patents, etc. • Revenue is the midpoint of the demand curve
Moral Hazard	The unobservable actions and risks that humans may take once a contract is signed since they don’t bear consequences. It is a special case of information asymmetry that affects the cost of transaction.
Perfect Competition	• Firms take price → MR = P • Maximum profit = MR = MC • P<AVC → shut down
Price Discrimination	Situation in which identical goods are sold at different prices from the same provider. • 1sr degree → Different price for different willingness to pay • 2nd degree → Different price for different quantities • 3rd degree → Different price for different segments (attributes)
Risk Averse	Individuals who prefer certainty over the uncertain for the same expected value (EV).
Risk Neutral	Individuals who are indifferent on risk taking if the EV is the same.
Risk Seeking	Individuals who prefer risk even if the EV for a certain event and the risk is the same.

Glossary

Term	Definition
Arbitrage	The purchase of securities on one market for immediate resale on another market in order to profit from a price discrepancy.
Break-Even	Total amount of revenue needed to offset the sum of a firm's costs. Implies that the firm's profit will be $0.
CAGR	Compound Annual Growth Rate: (Ending value/beginning value)^(1/# of years)-1. Most likely to show up in a case with graphs and exhibits.
Capacity	The maximum level of output of goods and/or services that a given system can potentially produce over a set period of time.
Competitive Advantage	When a firm is able to deliver benefits equal to competitors but at a lower cost OR able to deliver greater benefits than competitors.
Contribution Margin	C=P-V, where P is unit price, and V is variable cost per unit.
Core Competencies	The activities that a firm does well to create competitive advantage.

Glossary

Term	Definition
Customer Segmentation	Subdivision of a market into discrete groups that share similar characteristics.
Discount Rate	Also known as cost of capital. There is an opportunity cost associated with every investment, with the cost being the expected return on an alternate investment.
Entering New Market	Three main methods: start from scratch, form joint venture, acquire an existing player.
Fixed Costs	Costs that do not change with an increase or decrease in the amount of goods or services produced.
Gross Margin	A Company's total sales minus its cost of goods sold, divided by the total sales revenue, expressed as a percentage.
Horizontal Integration	The acquisition of additional business activities at the same level of the value chain.
International Expansion	Main mechanisms: exporting, licensing, franchising, joint venture, foreign direct investment (acquisition or startup).

Glossary

Term	Definition
Inventory Turnover	A ratio showing how many times a company's inventory is sold and replaced over a period. Should be compared to industry averages: low turnover implies poor sales or excess inventory; high ratio implies either strong sales or ineffective buying.
Learning Curve	Visually shows how new skills or knowledge can be quickly acquired initially, but subsequent learning becomes much slower. A steeper curve indicates faster, easier learning and a flatter curve indicates slower, more difficult learning.
Market Share	The percentage of market size controlled by an individual firm.
Payback Period	The length of time required to recover the cost of an investment.
Market Size	Total size of a population (usually measured in number of people or actual dollar value) that would purchase a company's goods or services. Market size is always relevant and is a question that should be asked.
Product Lifecycle	Four main stages: market introduction, growth, maturity, decline.
NPV	The difference between present value cash inflows and present value cash outflows.

Glossary

Term	Definition
Product Mix	Total number of product lines that a company offers to its customers. Often an important area to explore in profitability cases to identify loss-making products.
Promotion	Coupons, discounts, trials, etc. designed to increase sales of a product or service.
Rule of 72	Also known as the rule of 70, AKA rule of 69. Simply put 72, 70 or 69 in the numerator and the projected annual growth rate in the denominator to give you the amount of time until the investment doubles.
Sales per Square Foot	The average revenue a business creates for every square foot of sales space. Used in the retail industry as a measure of efficiency.
Same Store Sales (SSS)	A statistic used in retail industry to determine what portion of new sales has come from sales growth and what portion from the opening of new stores.

Glossary

Term	Definition
SWOT Analysis	Strengths, Weaknesses, Opportunities and Threats. Very basic framework, probably not a good idea to put down as your case framework, but good to have as a mental checklist.
Synergies	The idea that the value and performance of two companies combined will be greater than the sum of the separate individual parts. Used mostly in M&A.
Value Chain	Another concept from Michael Porter. His Value chain: Inbound Logistics, Operations, Outbound logistics, Marketing and Sales.
Variable Costs	Costs that vary depending on a company's production volume; they rise as production increases and fall as production decreases.
Vertical Integration	Degree to which a firm owns its backward suppliers or forward buyers.
Weighted Average	An average in which each quantity is assigned a weight. These weightings determine the relative importance of each quantity on the average.

Cases

Case 1: HealthCo

- Type : Market Entry
- Difficulty: Medium
- Industry: Healthcare
- Firm Format: N/A

HealthCo Market Entry
RCC Original

Difficulty: Medium

Industry: Healthcare

Type: Market Entry

Problem Statement

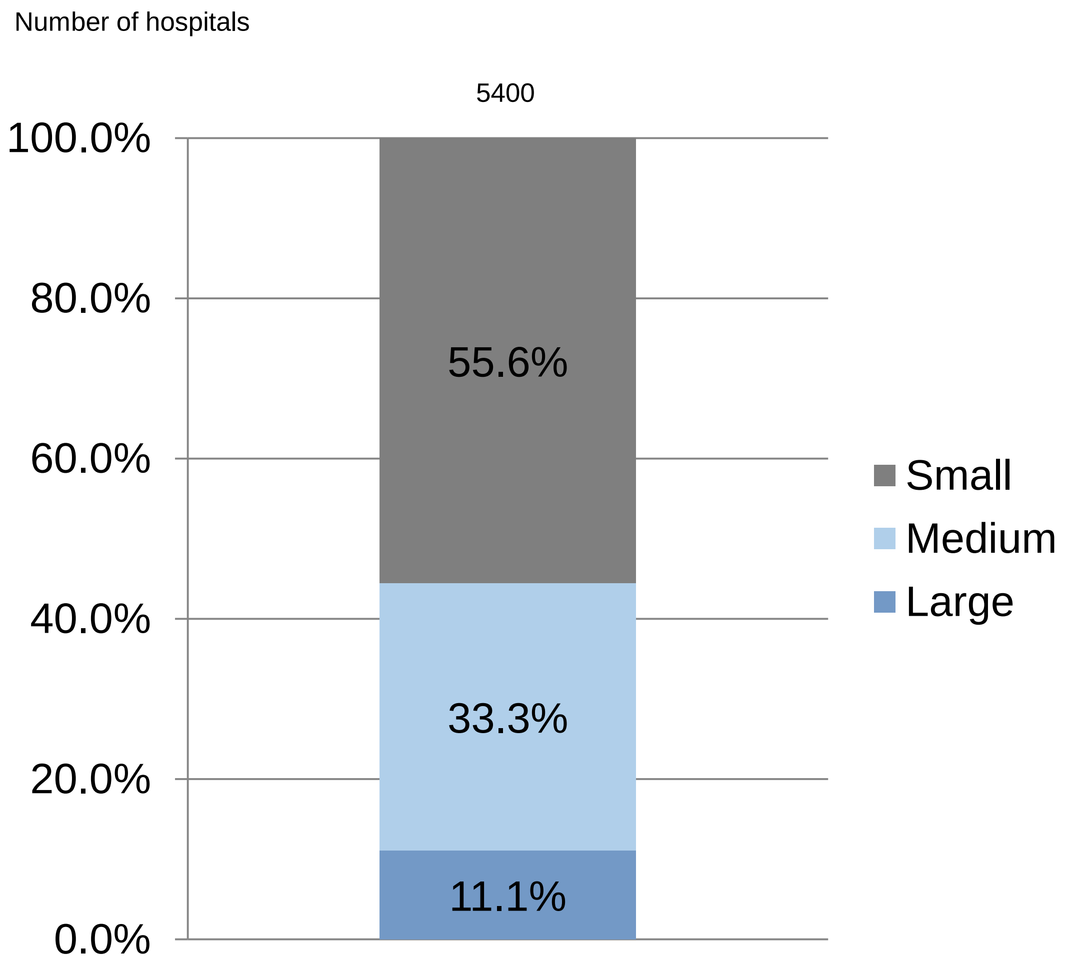
Your client is HealthCo, a software company that has developed an innovative software solution for hospitals. The software is used for tracking patient outcomes and utilizes an extensive database and proprietary analytics to recommend procedures based on patient comorbidities.

HealthCo is preparing to go to market and is seeking our advice on how to maximize revenue.

Information Provided Upon Request

- Software is provided to hospitals for a fixed annual fee, independent of the number of patients served or doctors using it
- Client is focused on maximizing revenue
- Software is patented and there are currently no competitors in the market

Exhibit 1
Hospital distribution by size



Model answer and interview guidance

High level model answer

- Interviewee should recognize that this is a Market Entry/Pricing case prompt.
- Interviewee should identify that pricing should be based on the value the software brings to the hospital
- A strong candidate will recognize that the value provided to the hospital will depend on the hospital size. In this case, the software provides less value to large hospitals because they see more patients and can use that sample size to recommend treatments.
- The interviewee should correctly calculate the number of hospitals in each segment and the maximum willingness to pay based on the "Additional guidance" to the right
- Next, the candidate should calculate the revenue generated at each of the three price points calculated above ($150k, $250k, $300k).
  - 150k: Small, Medium, & Large hospitals all purchase :150k*5400=$810M
  - 250k: Small and Medium hospitals purchase: 250k*(3000+1800)=1.2B
  - 300k: Only Medium hospitals purchase: 300k*1800=540M
- An excellent candidate will notice that software value is significantly based on total number of users (multiple hospitals), there are significant benefits of a "network effect" provided by a larger data set. There may be a possibility for a pricing increase after a large base is established.

Additional guidance

- Software is provided to hospitals as a fixed annual fee, independent of the number of patients served or doctors using it
- Annually patients served per hospital:
  - Small: 5000
  - Medium: 10,000
  - Large: 15,000
- Annual value of software to hospital per patient:
  - Small: $50/patient
  - Medium: $30/patient
  - Large: $10/patient
- Cost are based on a per hospital basis

Solution

Calculate willingness to pay by hospital size:

	Small	Medium	Large
Patients per Hospital	5000	10,000	15,000
Value / patient	$50	$30	$10
Maximum willingness to pay	5k*$50= **$250k**	10k*$30= **$300k**	15k*$10= **$150k**

Maximize revenue by multiplying willingness to pay by # of hospitals participating. Hospitals will not purchase if price is above their maximum willingness to pay.

Size # of Hospitals	Small 3000	Medium 1800	Large 600	Total Revenue
Priced at $150k	$450M	$270M	$90M	$810M
Priced at $250k	$750M	$450M	-	$1,200M
Priced at $300k	-	$540M	-	$540M

ROSS CONSULTING CLUB

Conclusion

Recommendation	Next Steps
■ Recommendation – Price software at $250k per hospital to achieve maximum revenue of $1.2B ■ Risks – Insufficient adoption, hospitals unable to achieve maximum value	■ Hire and train a sales team ■ Develop marketing pitch to demonstrate value for hospitals ■ Develop software for other patient service institutions such as physical therapy, primary physicians, etc.

ROSS CONSULTING CLUB

Case 2: Consumer Product Strategy

- Type: Market Entry
- Difficulty: Hard
- Industry: Consumer goods
- Firm Format: BCG provided

Consumer products strategy

Industry (case name)	Consumer products	**Business problem type**	Market Entry Strategy

Description of the business problem	Our client is a large, multinational consumer products company with business in over 200 countries. Today, we are going to focus on its US business. Our client has been following US demographic trends and has found that low income households have been growing two times as quickly as other consumer segments. Low income is defined as families with income at the poverty level or below. Our client has always had a premium product strategy. It sells its products in grocery stores, convenience stores, mass retailers, etc. but its products are always priced at the high-end of their respective categories. It has never targeted the low income segment before and doesn't have a low income strategy, but given the growth of this segment, our client is considering entering the low income segment. Our client has 3 questions for BCG.
Case questions to solve	1) Should it have a low income strategy? 2) If it should have a low income strategy, what are some tactics it should deploy? 3) What are some of the risks the client may face?

Consumer products strategy

Questions for the candidate	What would you like to know to help the client answer its questions? [When the candidate asks about products, share Exhibit 1] The client has shared some data for its key products. What do you make of this information? If the client achieved its fair share of the low income segment, how much additional revenue would it generate? What else would you like to know about diapers and cold medicine to assess the opportunity? Ok. The client is not interested in cold medicine, but it has done customer research that suggests low income consumers are interested in buying diapers. [Share Exhibit 2] What do you see that could help us figure out why low income consumers aren't buying our client's diapers? What else should our client think about as it develops a low income strategy? What are the risks?
Information provided upon request	Low income consumers purchase largely in smaller, local shops Low income consumers can't afford salons, but will indulge on shampoos Low income consumers are willing to spend more on baby food to protect their children There are valid generics that compete with our client's cold medicine

Consumer products strategy

Recommendation	The client should pursue a low income strategy, focusing on diapers, which could generate an additional $25M in revenue. To pursue low income consumers, our client should reduce its package size. Today, our client's package size is significantly larger than its competitors. Our client could keep the price /diaper the same, but if it dropped the package size from 40 diapers to 20 diapers, it would cut the absolute price of the box to $10, even lower than its competitors. There will be some risks involved with adopting a low income strategy including cannibalizing business from existing products and brand risk.

Quantitative analysis and solutions

1 Calculate overall share and share of low income consumers by product/category

Product/category	Client Overall Market Share	Client Share of Low Income Consumers	Overall share vs Low Income Share
Shampoo	100/400= 25%	30/90 = 33%	Overall < LI
Cold Medicine	50/250 = 20%	7.5/75 = 10%	Overall > LI
Diapers	150/300 = 50%	25/100 = 25%	Overall > LI
Baby food	100/300 = 33%	30/100 = 30%	Overall = LI

2 Calculate incremental revenue for cold medicine and diapers

- Cold medicine = (20%-10%) * $75M = $7.5M
- Diapers = (50%- 25%) * $100M = $25M

Total incremental revenue = $7.5M + $25M = $32.5M

Exhibit 1

Consumer products strategy

Product/ category	Total category sales (US$M)	Client category sales (US$M)	Total LI consumer spend on category (US$M)	LI consumer spend on client (US$M)
Shampoo	400	100	90	30
Cold Medicine	250	50	75	7.5
Diapers	300	150	100	25
Baby food	300	100	100	30

LI: Low income

Exhibit 2

Consumer products strategy

Product/ category	Client package size	Average package size of competitors	Client price	Average price of top 5 competitors
Shampoo	10 oz bottle	12 oz bottle	$4	$3
Cold Medicine	6 oz bottle	6.5 oz bottle	$6	$3
Diapers	40-pack	32 pack	$20	$16
Baby food	6 oz jar	6 oz jar	$2	$1.50

ROSS CONSULTING CLUB

Case 3: C.M. Burns Manufacturing Company

- Type : Consolidation / Synergies
- Difficulty: Medium
- Industry: Consumer Electronics / Manufacturing
- Firm Format: Bain & Co

C.M. Burns Manufacturing Company
Bain & Co.

Difficulty: Medium

Industry: Consumer Electronics

Type: Consolidation / Synergies

Problem Statement

Scenario: C.M. Burns Manufacturing Co., a $20B annual revenue consumer electronics company has just purchased Smithers Electronics, a $4B annual revenue consumer electronics company, and is busy integrating the two firms. Both companies spend a significant amount of money on branding and marketing their different products. Both are present in all of the major channels, and both produce DVDs and Blu-Ray players, televisions, MP3 devices, and headphones.

The CEO of Burns, Charles Montgomery Burns, has come to your firm to request help on identifying $350M in near-term synergies in order to justify the stock-price premium that Burns Manufacturing paid for the acquisition of Smithers.

Information Provided Upon Request

- Product mix is the same, meaning that each company generates the same proportion of revenues from DVD players, Blu-ray players, TVs, MP3 devices, and headphones.
- Both manufacture proprietary goods and each has its own operations.
- Both sell products via retailers, neither sell direct (neither is considering direct sales).
- Products are not differentiated in terms of quality or functionality, but branding sets them apart and distinct customer segments prefer one brand to the other (though this does not matter which segments for this case).
- These are both US-based firms with operations in the US and both exist in all major channels across the US.
- Growth of each company is stable.

Guidance for interviewer

Directions for this case moving forward

The interviewee should immediately recognize a couple of things:

- First, because their product mixes are the same and the brand is the differentiator, interviewee should get straight to cost synergies, as revenue synergies are not likely to be relevant in this case. Feel free to challenge the interviewee if they go after revenue synergies. If they provide decent justification, then give them due credit, but then ask: what other synergies are available? If they ID cost synergies, push them forward in the case, but if not, then continue to challenge until they see cost synergies as the clear path.

- Great interviewees will immediately notice that Burns Manufacturing Co.'s revenues are 5X those of Smithers'. This ratio plays an important role in the case. If the interviewee does not see this right away, then give them time to ID this element further down the road. When they absolutely have to know it, then lead them to this insight through targeted questioning. Bonus points for anyone who sees it very early in the case, though.

A solid framework will:

- Focus mainly on cost synergies, breaking costs into its various components: FC and VC, down to PPE, back office, packaging, components for electronics, labor, operations, marketing, etc.

- Have a step for quantifying the impact of each of the interviewee's findings.

Exhibit Guidance for interviewer

Guidance to Exhibit 1

Once the interviewee asks about costs generally, go ahead and give them Exhibit 1, detailing the specific cost categories. If they do not ask for this, push them in the general direction. Give them this cost info before giving them any other specific information.

Somewhere in here the interviewee needs to have recognized the 5X multiplier in the revenues of the company, but don't just give it away yet.

Once you give the interviewee Exhibit 1, they may reason through it. Pay attention to their logic and take note. If interviewee wants to tackle marketing, note that it's not a bad idea at first glance. But then ask him/her what we know about these companies and marketing (these are companies who distinguish themselves through their brands, not differentiated products—can't easily cut marketing). Plus, marketing won't cut along the lines of the 5X multiplier the same way packaging and components will—because these things are proportionally related to the sales volume, whereas marketing is not.

Interviewee may also mention labor or distribution. If he/she wants to tackle this issue, say that labor and distribution is optimized and there's not a lot of room for improvements in that area.

Interviewee should focus in on components and packaging; may also mention overhead, but again, overhead does not match up with the 5X multiplier as well as components and packaging.

Exhibit 1: Cost Categories Across Each Company

Cost Category	CM Burns	Smithers
Marketing	$6,000M	$1,000M
Distribution	$5,000M	$1,000M
Packaging	$1,600M	$400M
Components	$2,600M	$800M
Labor	$1,000M	$200M
Overhead	$1,600M	$400M

Exhibit Guidance for Interviewer

Exhibits 2 - 4

- As stated earlier, interviewee should prioritize packaging and components. Bonus points to the interviewee who prioritizes components explicitly over packaging because of the cost savings he/she can see from the aggregate numbers.
- The theory behind these cost synergies is that if CM can buy for a lower price (which it looks like it can), then now that Smithers is merged with CM, Smithers should be able to get the same price (increased buyer power, decreased supplier power).
- The cost savings look like this (if interviewee can't eyeball exact numbers, go ahead and tell them):

Components

Cost Category	CM Burns	Smithers (current)	Where cost should be	Savings
Molded plastic	$600M	$200M	$120M	$80M
Chips, proc.	$800M	$200M	$160M	$40M
Metal casing	$1,200M	$400M	$240M	$160M

Total savings if CM renegotiates w/ Smithers' component suppliers: $80 M + $40 M + $160 M = $280 M

Exhibit Guidance for Interviewer Cont'd

Exhibits 2 - 4

- A similar process can be done for the packaging costs, which will yield smaller results.
- Interviewee should notice on this analysis that cardboard is different from recycled materials and that without more information, there is nothing to be done about this category.

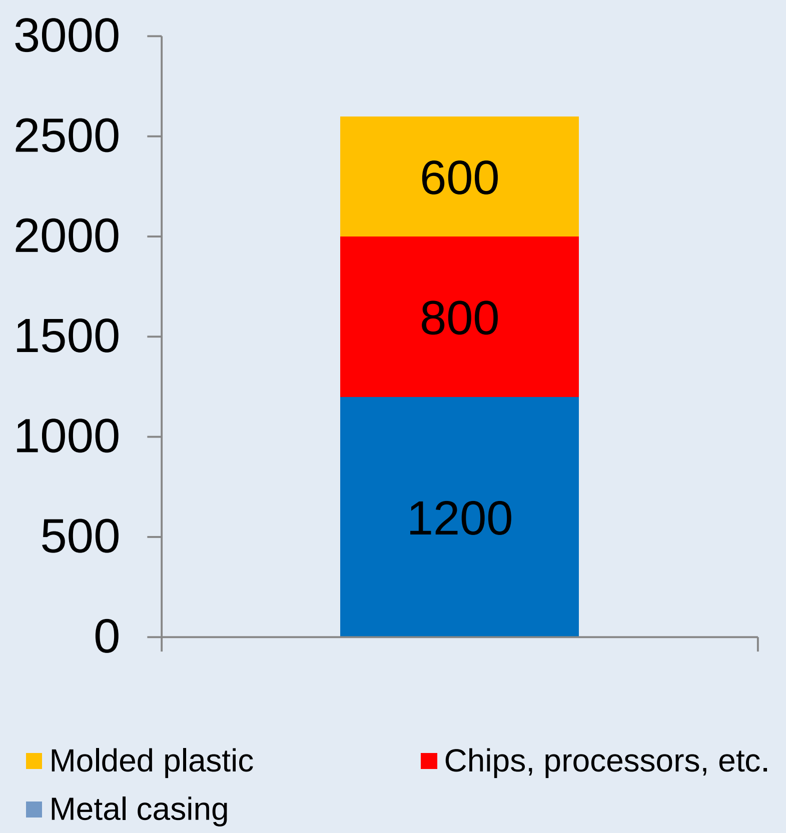
Cost Category	CM Burns	Smithers (current)	Where cost should be	Savings
Styrofoam	$160M	$80M	$32M	$48M
Recycled materials and cardboard can't be compared				
Plastic	$690M	$160M	$138M	$22M

- Total savings from re-negotiating packaging costs: $70M
- If the interviewee wants to analyze overhead costs, let them do the math, but then challenge the feasibility to use the 5X multiplier in this situation—we don't have enough information to know if the costs are proportional with the revenues (unlike components and packaging)—so these are not realizable savings

Cost Category	CM Burns	Smithers (current)	Where cost should be	Savings
Salaried Staff	$2,000M	$120M	$40M	$80M
IT	$1,400M	$280M	$280M	$0M

Exhibit 2: Components Costs

C.M. Burns Manufacturing Co.



Smithers Electronics

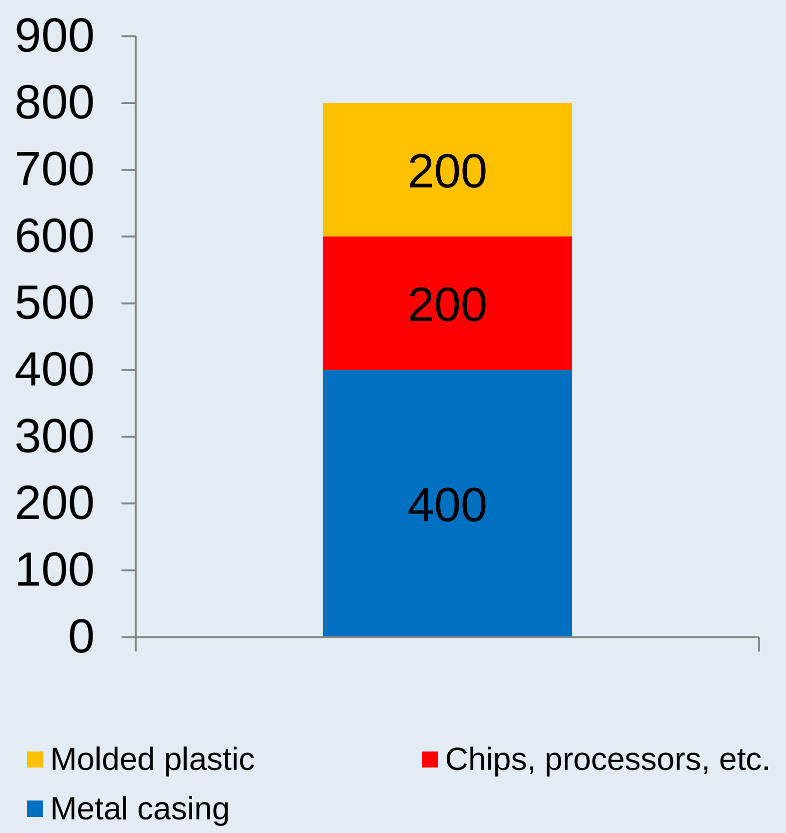
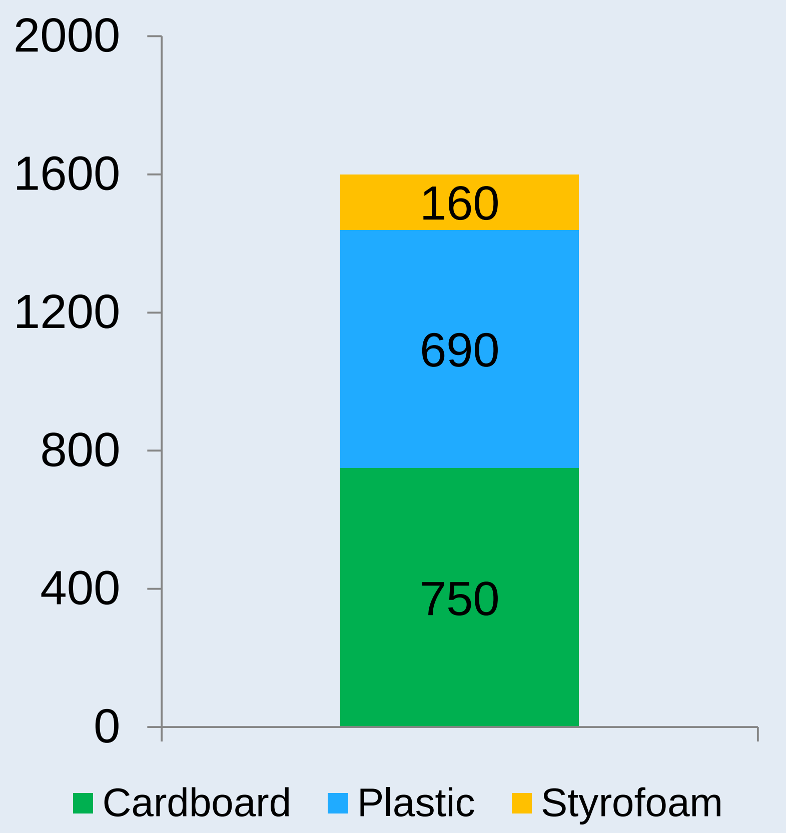


Exhibit 3: Packaging Costs (in millions)

C.M. Burns Manufacturing Co.



Smithers Electronics

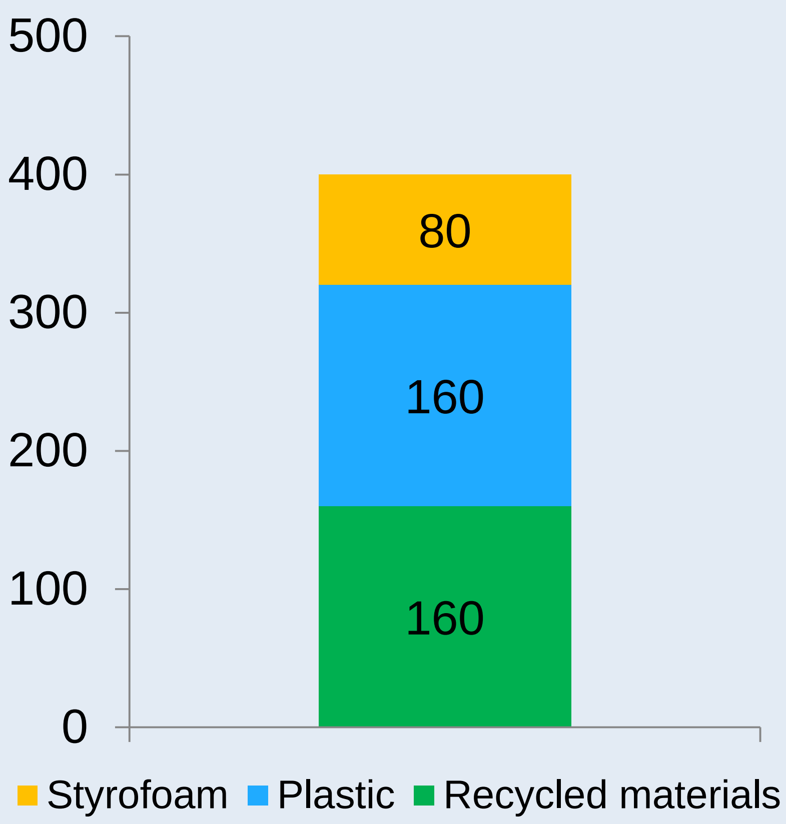
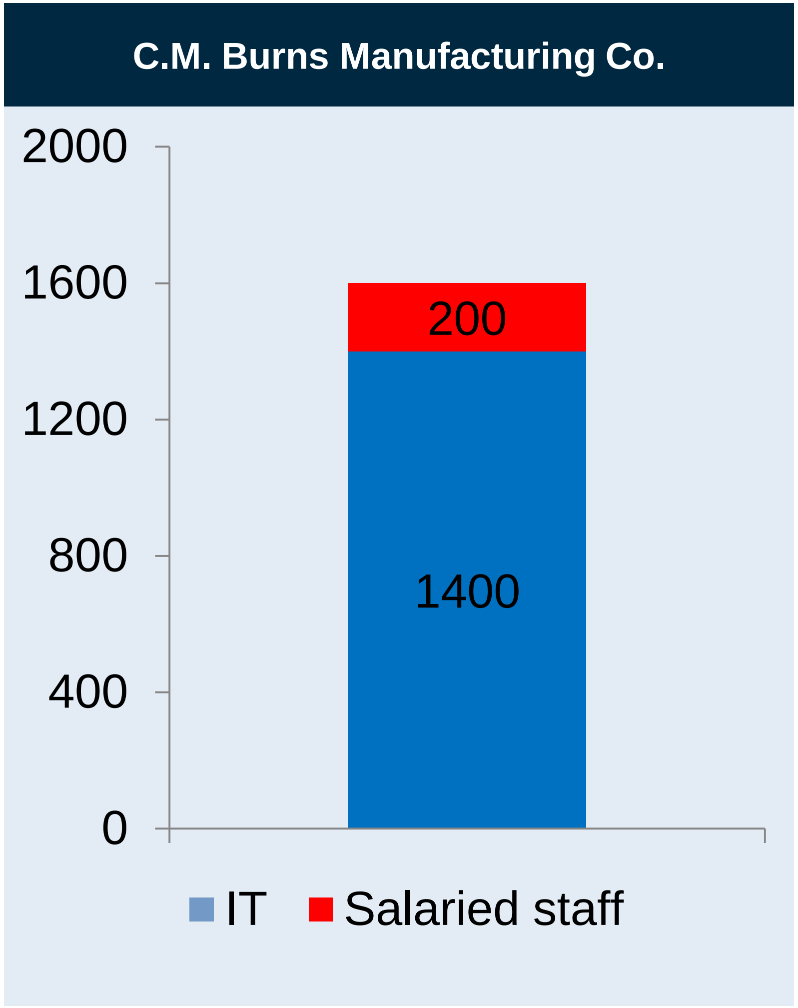
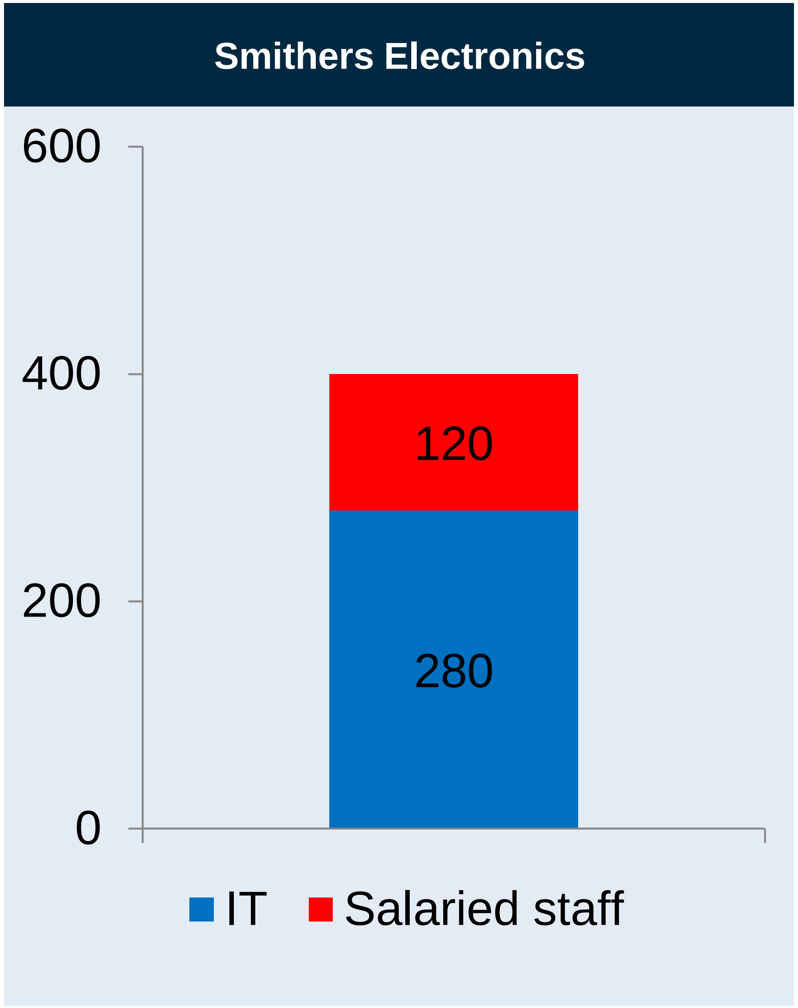


Exhibit 4: Overhead Costs (in millions)





Additional

Brainstorming section (if you have time)

Some interviewees will work through the case very quickly—if they do, ask them to think about long-term synergies available to the company

Now that we've considered short-term synergies, what long-term synergies might we have?

Possible long-term synergies:

- Distribution: using economies of scale, we should be able to decrease distribution costs for the combined company below a 5-to-1 ratio (as it currently is)
- Overhead: consolidating our various IT systems and corporate functions will be a long project, but should also allow us to decrease costs as processes are streamlined
- Labor: another long-term project, labor costs should go down as manufacturing operations are brought together—removing excess capacity will allow labor costs on a per-unit-basis to go down over time

Conclusion

Recommendation	Next Steps
➢ Re-negotiate supplier contracts so that raw materials for Smithers Electronics will cost the same as raw materials for CM Manufacturing Co ➢ Components: $280M in savings ➢ Packaging: $70M in savings ➢ This results in exactly $350M in savings ➢ Long-term synergies to consider: ➢ Distribution ➢ Overhead ➢ Labor ➢ Risks: ➢ Long-term supplier contracts ➢ Recommendation assumes same level of quality between suppliers/goods	✓ Examine contract requirements (long-term or no?) ✓ Identify relevant suppliers and reach out to them with new deal information ✓ Begin a long-term study of possible synergies to be obtained from distribution, overhead, and labor

ROSS CONSULTING CLUB

Case 4: HitNot Tires

- Type: Market Entry
- Difficulty: Medium
- Industry: Manufacturing / Automotive
- Firm Format: N/A

Difficulty: Medium
Industry: Manufacturing / Automotive
Type: Market Entry

HitNot Tires
(Ross Original – modified from Southern California Edison 1st round)

Problem statement narrative

- The R&D division of ABC chemicals has invented a special rubber with the unique quality that the rubber is impervious to any impact. This material is also much lighter and slightly cheaper to manufacture than conventional rubber.
- ABC wants to produce bullet proof tires for the auto industry using this new material.
- The client has approached us and they need our help in assessing the market size for bullet proof tires and come up with a pricing strategy. The client also wants to decide whether entering the bullet proof tire market is a good decision.

Information provided upon request

Objective: 10% increase in total revenues in 2 years

ABC facts: Mature company with constant annual revenue of $10B. No products in the current lineup sold to the auto industry; current chemical products sold to refineries, semiconductor plants etc. through B2B channels

Product fact: It is patent protected. No other product in the market right now can stop bullets completely, competitors tires sustain damage but allow the car to run at up to 75mph after a hit.

Bullet proof Tire Market facts: 5 big players control the market with 20% market share each

Market growth: last 5 years (8%, 11%, 12%, 9%, 10%) (individual year data not important, interviewee can assume 10% avg.)

Channels: If candidate mentions channels, guide to bonus section on channels after completing market sizing and pricing.

Suggested Structure

Solution Guide

- Ideal candidate structure will look similar to this

1. Analyze company
   - Size
   - Revenue
   - Brands
   - Channels

Note:

This is a new product, not only for the company but the industry. Good candidates will want to think about price before sizing the market.

2. Analyze market
   - Major Players
   - Barriers to entry
   - Product differentiation

3. Pricing
   - Cost based
   - Value based
   - Competitions prices

Pricing

Solution Guide

- Info to be provided when candidate wants to work on pricing
  - Competitors prices: $800 - $1000
  - Assume industry profit margin to be 25%
  - Our costs to manufacture a tire: $450
- Ask the candidate about pricing strategies (cost-based pricing and value based pricing). Let them list out pros and cons of each.
- Cost Based Pricing: Ask candidate to calculate price using cost based strategy (Ans. $600)
- Value Based pricing: Any price that the candidate can justify when thinking about value to customer will work. The final number is not important. Do not let the candidate spend too much time on this.
- Brownie points if the candidate brings up the conventional tire market. They should quickly realize though that there is a huge difference in price and ABC will not be able to achieve much penetration in the conventional tire market
  - ➢ Conventional tires sell for $60-$300

Market Sizing

Solution Guide

- The interviewee should start calculating the market size . Let them make assumptions as and when needed. Focus on the approach used by the candidate and help with following assumptions if asked
- 1 percent of US cars have bulletproof tires, US market is 10% of world market
- US population: 320 M translates to 100M households (3.2 people per household)
- Candidate should segment households by income level and calculate total number of cars owned by the US population: 160M (sample table on next page, the candidate can assume any breakdown in income and number of cars per household as long as it is realistic)
- Push candidate to realize that there is another important segment besides households (the Government heads, High ranking corporate executives, Military, Police, Armored trucks, Celebrities etc.) and should try and assume a number for this market
- Let the candidate assume a number that helps him reach a total number to the nearest round number (in our calculation lets assume 40M cars)

Market Sizing Cont'd

Solution Guide

- The candidate should ask about life expectancy of tires. They can assume 4 years.
- Calculation
    - 200M cars on the road, Cars that need new tires every year 200M/4=50M
    - Tires per car: 4, Annual Tire market in US: 200M tires
    - Bullet proof tire market share:1%, Annual Bullet proof tire market : 200M*0.01=2M tires
    - US is 10% of world market, therefore world market: 20M bullet proof tires annually (The candidate may end up with a completely different number but they should be logical in their approach)
    - If candidate asks, say that client assumes it can capture 10% of mkt.
    - Most candidates will calculate revenues at this point in the case and conclude that the revenue is ($600*20M*10%=$1.2B) which meets the clients objective ($1B revenue)

Income	Households	# of cars/HH	Total cars
High	10M	4	40M
Middle	50M	2	100M
Low	40M	0.5	20M

Market Entry

Solution Guide

- When the candidate concludes that the client should enter the market, let them brainstorm the different modes of market entry
- Some relevant modes of entries that the candidates may bring up are:
  - Produce in house and grow organically
  - Acquire a competitor (very hard to do given that there are only 5 competitors)
  - Sell patent on technology
  - Produce and supply to all competitors

The candidate should support one of the modes of entry and be able to present clear pros and cons of that strategy

BONUS – Sales Channels

Solution Guide

Only go through this section if the candidate framework includes channels!

- 75% of tires are sold through OEM's and 25% are after market
- Tell the candidate that establishing a OEM channel takes at least 3 years
- The candidate should identify that the only viable channel is the aftermarket route
- This reduces the addressable annual global market to (25%*20M = 5M)
- Expected revenues, at 10% market share in this channel are therefore only ($600*5M*10%) = $300M
- This implies that the client should not enter the market
- Ask the candidate to conclude and provide next steps

Conclusion

Recommendation	Possible Next Steps
• Do not enter the bullet proof tire market	• Look for alternate markets to monetize the new technology • Sell the patent on the technology • Sell the business to a competitor • Conduct sensitivity analysis to test pricing at premium above competition • Explore contracts with government and military

ROSS CONSULTING CLUB

Case 5: Pharma Business Growth

- Type: Growth
- Difficulty: Hard
- Industry: Healthcare
- Firm Format: BCG Contributed

Pharmaceutical rare disease business growth

Industry (case name)	Healthcare	**Business problem type**	Growth

Description of the business problem	Our client is a large pharmaceutical company with a strong business in "Rare Disease" (rare diseases are conditions that affect fewer than 200,000 people in the US). Historically, pharmaceutical companies have not invested significantly in Rare Disease because it has not been cost effective to conduct research for such small populations. Due to the fall off in the number of pharmaceutical blockbusters and improved regulation to make R&D cheaper for Rare Disease, pharmaceutical companies have begun to invest more in Rare Disease R&D over the last few years. Our client has hired BCG because it would like to grow its Rare Disease business.
Case questions to solve	1. How can the client double its Rare Disease business in 5 years?

Pharmaceutical rare disease business growth

Questions for the candidate	How would you approach our client's question on growing its Rare Disease business? Where would you like to start? [When the candidate asks about the existing business, share Exhibit 1] Based on the data, how large will the client's rare disease business be in 2016? [If necessary,] what is the shortfall to its goal of doubling its business? What does the client need to do to double the Rare Disease revenues by 2016? [If candidates discusses acquisitions] Who to acquire? How many assets will we need to buy? Let's say the CEO walks in, could you summarize for me?
Information provided upon request	Our client is an industry leader with a track record of success. Its existing business is $2.5B, expected to grow at 5% per year Rare disease market is $30B and is as profitable as "Big Pharma" • While research is relatively expensive, the government provides tax credits for drugs designated to treat rare diseases • Additionally, prices tend to be higher to make up for the upfront research investment. It's also growing faster than Big Pharma. There are many small bio-techs that are attractive targets and there are also other big pharmaceutical companies that have rare disease divisions / assets

Pharmaceutical rare disease business growth

Recommendation	Internal growth will not be sufficient to achieve your goal of doubling your business. You will need to acquire ~3 "peak revenue" assets to close the gap between your goal of $2.5B and the $1.1B your portfolio will generate organically.

Quantitative analysis and solutions

Growth from existing assets

- Current baseline is $2.5B, growing at 5% for 5 years
- $2.5B * 5% * 5 = $625M (assumes linear growth – would not ask to calculate compounding growth)

Growth from pipeline

- Research assets need 6 years to reach the market = $0M
- Phase I = 5 assets * 20% attrition * $500M peak rev * 20% rev in 1st year = $100M
- Phase II = 3 assets * 40% attrition * $500M peak rev * 40% rev in 2nd year = $240M
- Phase III = 1 asset * 60% attrition * $500M peak rev * 60% rev in 3rd year = $180M
- Total = $520M

Shortfall

- Target is to double the business = $2.5B
- Internal growth is $625M + $520M = $1.145M, need ~$1.4B more
- If each asset is $500M, then need to buy 3 peak revenue assets, or more if they are in R&D

2016 Portfolio

- $5B portfolio with: $3.1B (60%) from current baseline, $520M (10%) from pipeline, $1.4B from acquisitions (30%)

Exhibit 1

Pharmaceutical rare disease business growth

Assets in research and development

Phase	# Assets	Time to market (years)	Attrition (% expected to be approved to reach the market)	Peak revenue ($M)
Research	20	6	10%	500
Phase I	5	4	20%	500
Phase II	3	3	40%	500
Phase III	1	2	60%	500

Revenue by years on market

Year on the market	Revenue (% of peak revenue)
1st	20%
2nd	40%
3rd	60%
4th	80%
5th	100%

ROSS CONSULTING CLUB

Case 6: Federal Motors

- Type: Profitability
- Difficulty: Medium
- Industry: Automotive
- Firm Format: N/A

Federal Motors
Ross Original

Difficulty: Medium

Industry: Automotive

Type: Profitability

Problem Statement
Leading car manufacture in Federal Motors desperately wants to increase profits. CEO has approached us to help them increase profits.

Information Provided Upon Request
FM – biggest US producer of passenger cars and trucks. Currently it has 5 different brands. Maddilac – luxury brand, Frenchroller – mass brand, Muick –between luxury and mass market, Rontiac – sport cars, Lammer – heavy cars, trucks and regular cars. FM sells cars across the world, main sales (60%) in the US, with 20% in China, and 20% across other countries, such as Russia, India and Brazil. All these brands are sold in all countries, but the sales structure and prices for the cars are different in different countries. Currently we have sales structure only in for the North America region. We do not have any information on competitors. Market is stable and we do not have any forecasts on for the future.

Federal Motors

Step #1
Interviewer should drive the case. Allow interviewee prepare the initial structure. Hand out the first slide to interviewee. **Question to ask:** What is the revenue structure? What is the total revenue of the company? **Solution:** Total revenue = 550*$50K + 1950*$30k + 350*$35k + 200* $27 + 150*$60k= $112.65B Revenue per brand in North America Maddillac- $27'500; Frenchroller $58'500; Muik $12'250; Rontiac $5'400; Lammer $9'000. It is good if the interviewee notices that the two main brands drive ~75% of sales. Too many brands could be a driver of costs.

Federal Motors

Step #2

Hand out Slide#2 with cost structure.

How much does it cost to manufacture each car?

Solution:

Muick, Rontiac, and Lammer are loosing money for the company.

Cost in Thousands	Maddillac	FrR	Muik	Rontiac	Lammer
Profit	5	2	-1	-4	-8
Profit margin	10%	7%	-3%	-11%	-30%

Ask interviewee what solutions he sees and what additional information he might need to make a decision. Good answer might include:

- Rise prices for the cars
- Decrease costs (it is not possible at the moment)
- Abandon brands that are loosing money

Do you think it is a good idea to rise prices for the brands that are loosing money? What things should we consider? Allow interviewee to come with some thoughts and hand out 3d slide.

Federal Motors

Step #3,4

Additional information on slide #3:

Clients' loyalty demonstrates % of clients who stick with the brand after the first purchase of the car.

Clients' satisfaction shows % of clients satisfied with the car.

Solution:

Due to low customers' satisfaction and low loyalty it might be a good idea of closing the Rontiac and Lammer, who are loosing money for the company. However, some work could be done with Muik, custromer satisfaction is relatively high and satisfaction is not that bad.

Step 4.

To make a final decision it might be a good idea to check profitability and client loyalty in other countries.

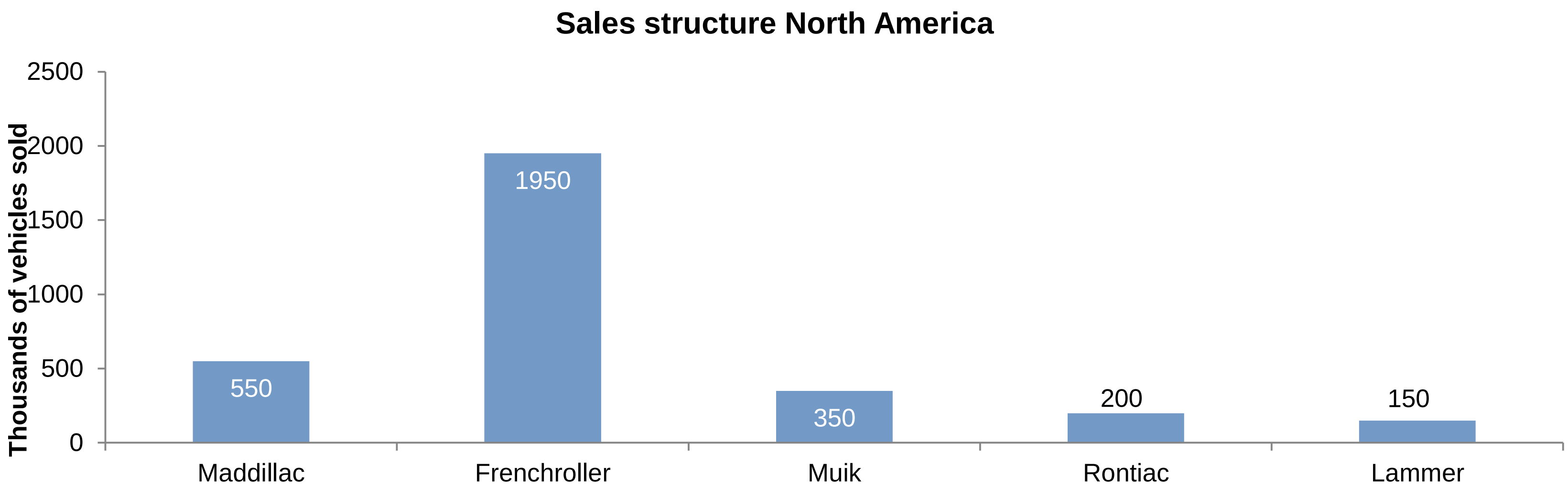
Hand out slide#4 Muick stands for the most part of the sales in China, as it is vastly seen as an prestigious American car. Customers like and enjoy the brand. Given the information, it might be damaging for the FM to close the brand in US, as it might hurt sales in China.

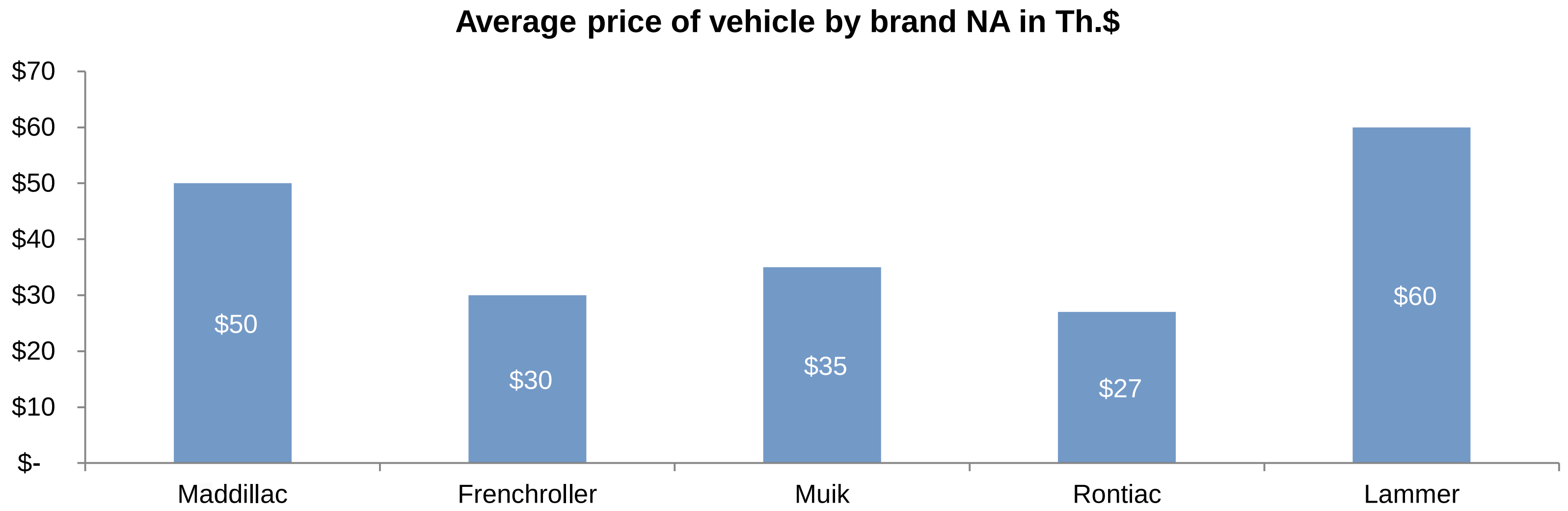
Solutions possible: Increase prices for Muik in USA and close Rontiac and Lammer brands.

Conclusion

Recommendation	Next Steps
FM is loosing money by sustaining unprofitable brands – Rontiac & Lammer.	Increase prices for Muik in USA and close Rontiac and Lammer brands.
Restructuring brand portfolio will increase profitability for the company.	Do not close Muik brand – might hurt sales in China.

Federal Motors
Slide #1



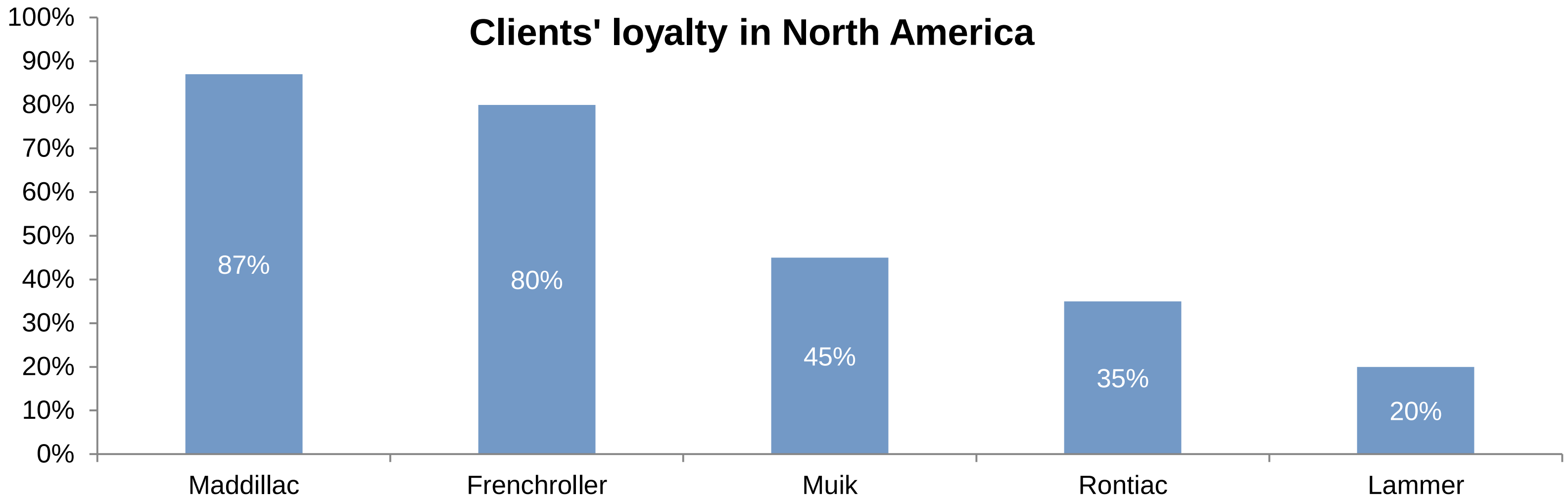


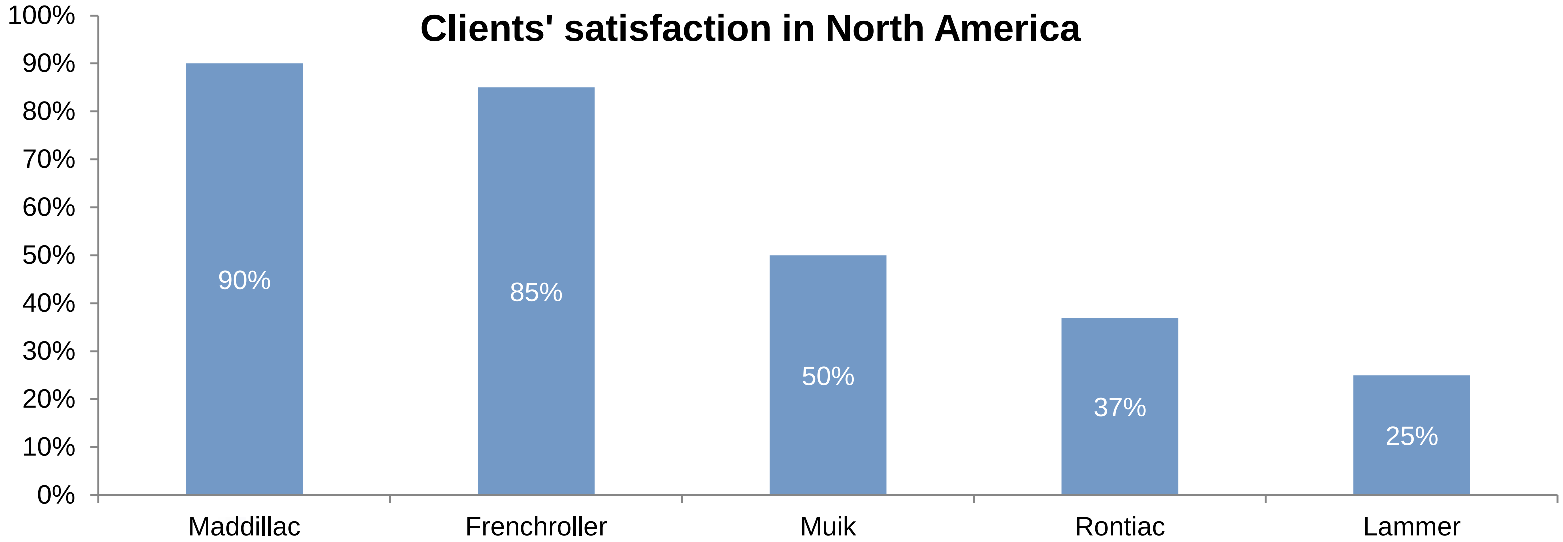
ROSS CONSULTING CLUB

Federal Motors
Slide #2 Cost structure per vehicle

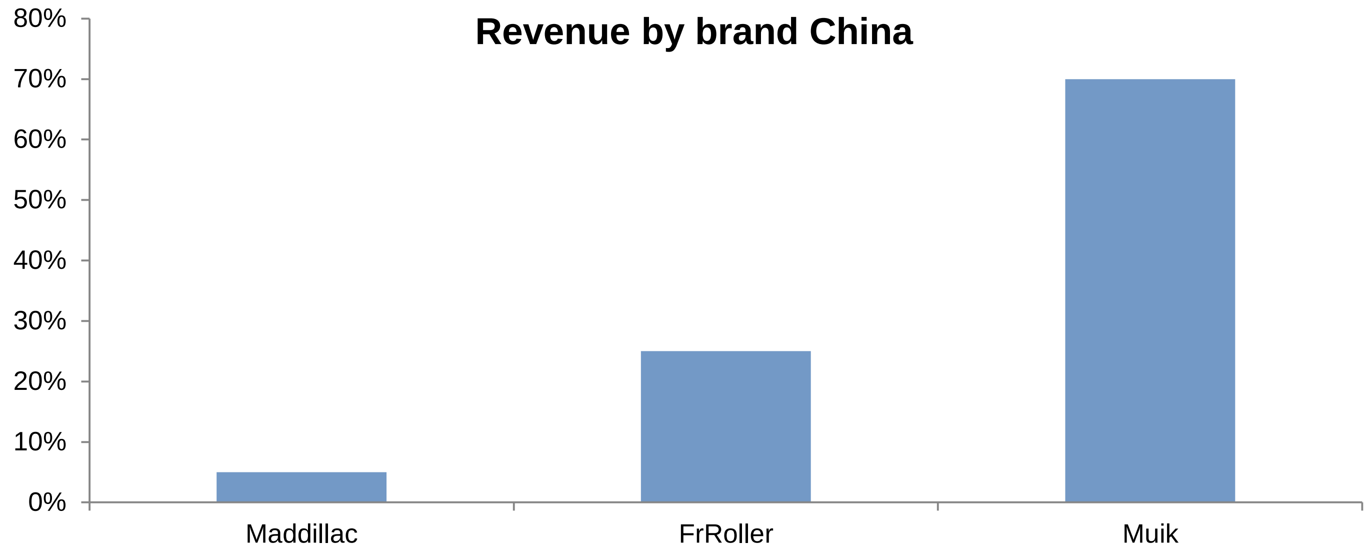
Cost in Thousands	Maddillac	FrR	Muik	Rontiac	Lammer
Car	30	20	27	22	45
Marketing	10	3	4	4	15
Transportation	2	2	2	2	3
Warehouse	1	1	1	1	2
SG&A	2	2	2	2	3

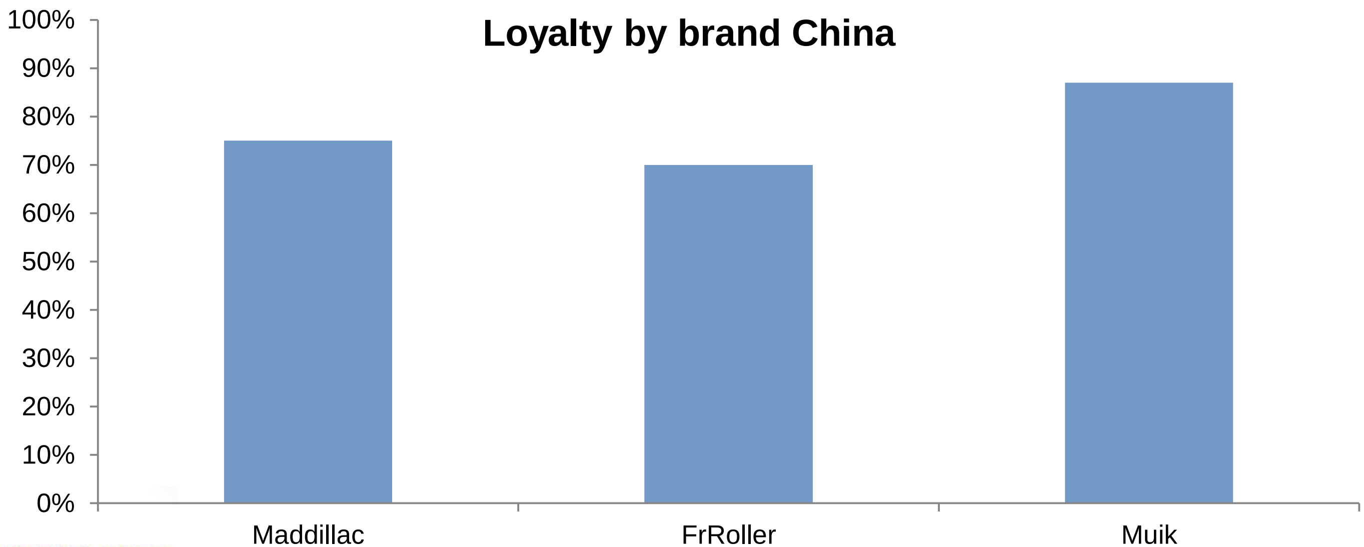
Federal Motors
Slide #3





Federal Motors
Slide #4





ROSS CONSULTING CLUB

ROSS CONSULTING CLUB

Case 7: Freedom Bikes

- Type: Operations
- Difficulty: Medium
- Industry: Automotive
- Firm Format: N/A

Difficulty: Medium

Industry: Automotive

Type: Operations

Freedom Bikes

Intro: Our client is Freedom Bikes, the US-based producer of mountain bikes – luxury sport bikes that represent the American spirit of freedom. The bikes are fully designed and manufactured in the US and are sold mainly to US customers, who value independence, freedom and high quality of a US-based manufacturer.

The client brought us to help decrease costs, which increased in the resent years and eroded the client's margins.

General data:

- The client asks us to look ONLY costs; no revenue/profit considerations are necessary
- There is no fixed target, the more we save – the better
- Overseas sales make up 10% of Client's operations and for this case can be ignored
- The customers (rich MBA interested in sports) value the US-made bikes so the client will not consider outsourcing or sourcing even from Canada! The student shall remember this fact while considering options
- There are two major competitors on the market, but they are from Japan and Italy, and we are the only US-based producer
- The demand for bikes is stable

Notes for the Interviewer:

- The case was designed to educate students to use the Top-Down approach, focus on 80/20, and be attentive to the details (read footnotes!)
- The good framework will focus on various elements of costs and possible solutions (outsourcing, Six Sigma etc)
- Ideally the student shall start with the cost breakdown (Exhibit 1) and proceed with exploring the details. But if the student starts elsewhere, let him wander around providing market, customer, competition and other data to realize he must focus on the company's costs.

Freedom Bikes

Costs data (Exhibit 1):

- Sales and promotion is done via specialized magazines and bike shows. This is small fixed cost and can be ignored.
- Overhead costs are slim and cannot be decreased further
- Raw materials are purchased in bulk using hedging deals, nothing else can be done to decrease them.
- Distribution is done via the regional dealers with whom the client has long-term relationships. This cost is small and stable and can be ignored.
- Inventory levels are high because of customization at Michigan factory. The customers are paying for that and the client is ok to keep inventory high
- **Manufacturing costs are rising! And it is the problem!!!**

Notes for the Interviewer:

- The student shall focus on attacking the client's costs to find the opportunity to save. Ideally the student request for main cost categories and then the Exhibit 1 can be displayed
- If student is stuck, offer him the Exhibit 1 and ask what he sees. The student shall quickly realize (using 80/20 and Top-Down concepts) that the bulk of costs sits in Inventory and Manufacturing, but only Manufacturing cost is rising and shall be addressed.

Freedom Bikes

Manufacturing data

- The client operates two factories: in Michigan (the union state) and Tennessee (the right of labor state)
- Tennessee factory converts raw materials into the pre-assembly kits and ship those to Michigan.
- Employees at Tennessee are not skilled and paid average salaries.
- The client's customers value customization and freedom of choice, so Michigan factory performs customization of bikes ordered by customers' design.
- Workers at Michigan factory are hard to find, highly skilled, have unique skills and well-paid. The client considers them essential to perform complicated manual operations and won't consider relocation of Michigan factory or dismissal of workers

Notes for the Interviewer:

- By providing the Costs data to the student (on his request only!) the student shall realize the factories can not be closed down, outsourcing is not an options (the client values its US-Made image) so the closer look at the costs is required.
- Provide the student with the Exhibit 2. The student shall focus on Chrome-plating as the largest cost-element and also mention he would like to explore Re-work cost, caused mainly by the chrome-plating operations

Freedom Bikes

Chrome-plating

- Chrome-plating is the operation of covering metal parts (such as suspension tubes) with shiny chrome
- In 2008 the client initiated chrome plating operations in-house to react to changes in customers' taste from paint to shiny chrome
- The operation requires only few operators but very complex know-how
- Poor quality of chrome-plating causes 75% of costly rework operations
- The client cannot improve this operation, so outsourcing is an option – provide Exhibit 3

Notes for the Interviewer:

- 80/20 rule dictates the student shall immediately focus on chrome-plating as the source of cost-saving
- After investigating options, the student shall realize the outsourcing is an option
- Tenneco is the best option: it is a US-based company (The client will only accept US-based suppliers!), its quality high and is above 120 that helps eliminate rework and it is located close to Tennessee factory of the client, thus minimizing the transportation costs

Freedom Bikes

Now ask the student to calculate the cost saving effect:

Tennaco operations cost: 50M*110% = 55M

Savings on eliminated rework: 20M*75% = 15M

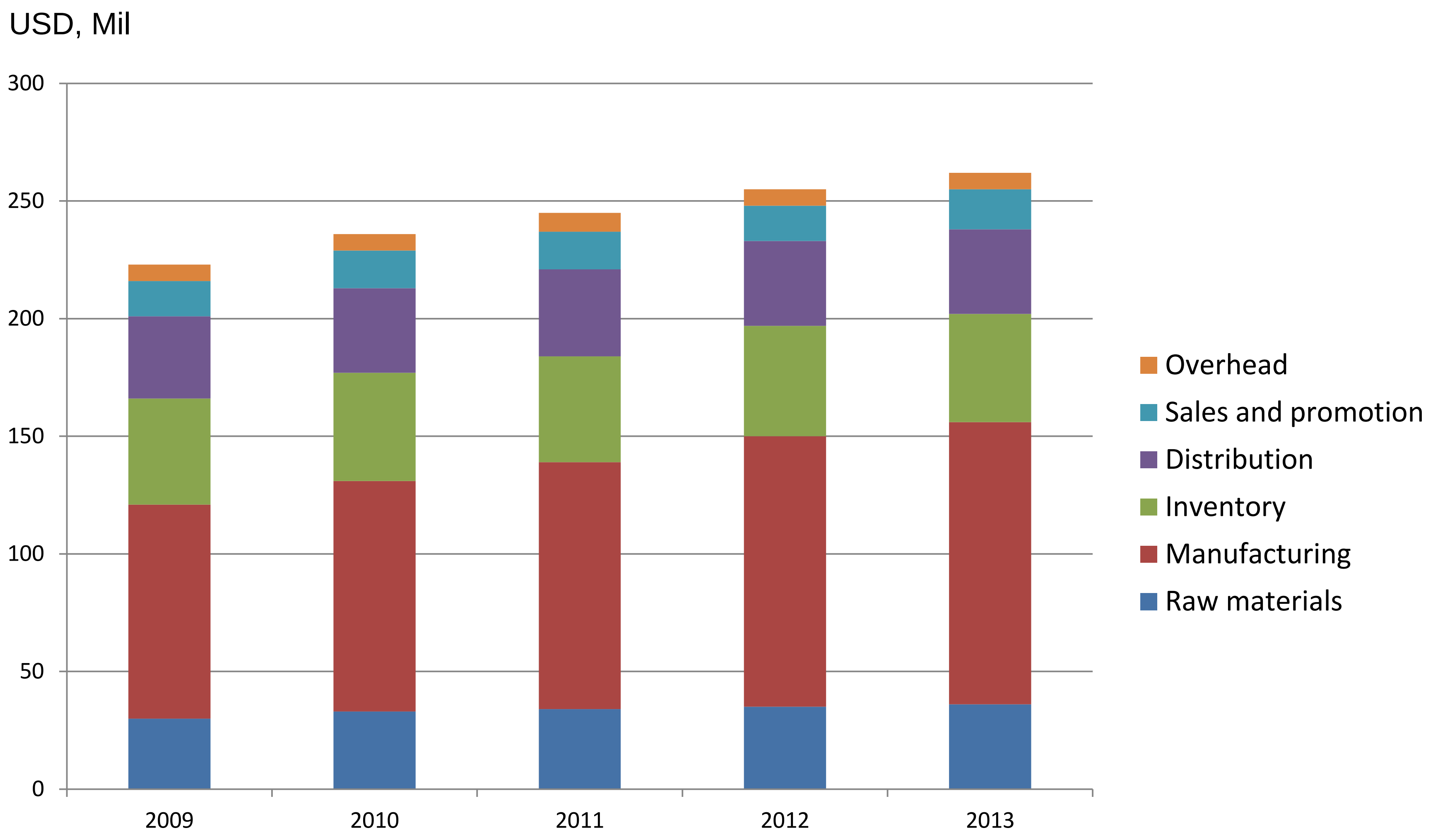
Net effect: 15M-(50-55) = 10M cost saving by outsourcing chrome-plating operations to Tenneco

No further cost study is required, ask the student to wrap-up the case.

The good recommendation will mention:

- Positive effects of improved quality of bikes outlook – important and valued by the customers
- Risks of labor disruptions due to eliminated chrome jobs – mitigated by migration of jobs to Tenneco
- Risk of production disruption – logistics shall account for movement of parts to and from Tenneco

Exhibit 1: Freedom Bikes cost categories



ROSS CONSULTING CLUB

Exhibit 1: Freedom Bikes production process

Tennessee factory

Processing of Raw materials → Production of assembly kits

Michigan factory

Assembly to order of bikes

2013 manufacturing costs, USD Mil

Cost category	Michigan	Tennessee
Workers salaries	16	6
Overhead and administration	1	1
Painting	1	0
Chrome plating	0	50
Raw materials processing	2	23
Re-work*	0	20
Total	20	100

* 75% of re-work expenses caused by chrome plating operations

Exhibit 1: Benchmarking of chrome plating contractors

Supplier	Location	Cost index	Quality Index*
Freedom Bikes	Tennessee, USA	100	100
Magna	Ontario, CAN	95	130
SACI	Shanghai, CNI	45	105
Tenneco	Tennessee, USA	110	140
MetMex	Tijuana, MEX	100	120
Delphi	Michigan, USA	135	145

* Operations with Quality Index above 120 fully eliminate the need for re-work

ROSS CONSULTING CLUB

Case 8: Farsung Electronics

- Type: Profitability
- Difficulty: Medium
- Industry: Retail (CPG)
- Firm Format: N/A

Durable consumer goods manufacture
Ross Original

Difficulty: Medium

Industry: Retail (CPG)

Type: Profitability

Problem Statement

Farsung Electronics (FE) is a consumer goods producing company based in the US.

During the last couple years FE has been loosing market share to its competitors.

The CEO has approached us to help the company tackle the problem of decreasing market share.

Information Provided Upon Request

FE produces home appliance of all types – from dishwashers to irons and frying pans. It has ~30% of US market share. The market has been flat during the last couple of years. Competitors haven’t seen any remarkable growth.

FE has production facilities located in China and the US. Most of the products are produced in China and delivered to the US.

This is an operations focused case. Interviewer should direct interviewee to cost analysis issue. Allow time to prepare initial framework, then present the first slide.

Durable consumer goods manufacture

Step #1
Allow interviewee to create a structure. Try to guide her/him on the cost side of the problem. **Hand out slide #1.** Main takeaways from the slide: ■ Market size has remained relatively constant at $100B. ■ FE has started loosing market share to competitor 2 and competitor 3. **Questions to ask:** ■ *What is the revenue loss for FE?* It has declined from $35B to $28B, a 20% decrease. ■ *Who is the strongest competitor?* Competitor 2 has captured a lot of market share away from FE; Competitors 3 is the fastest growing – its market share has increased by 50%. Revenues have grown from $10B to $15B. Allow interviewee to come with hypothesis why FE is loosing share to competitors. Subsequently present the second slide.

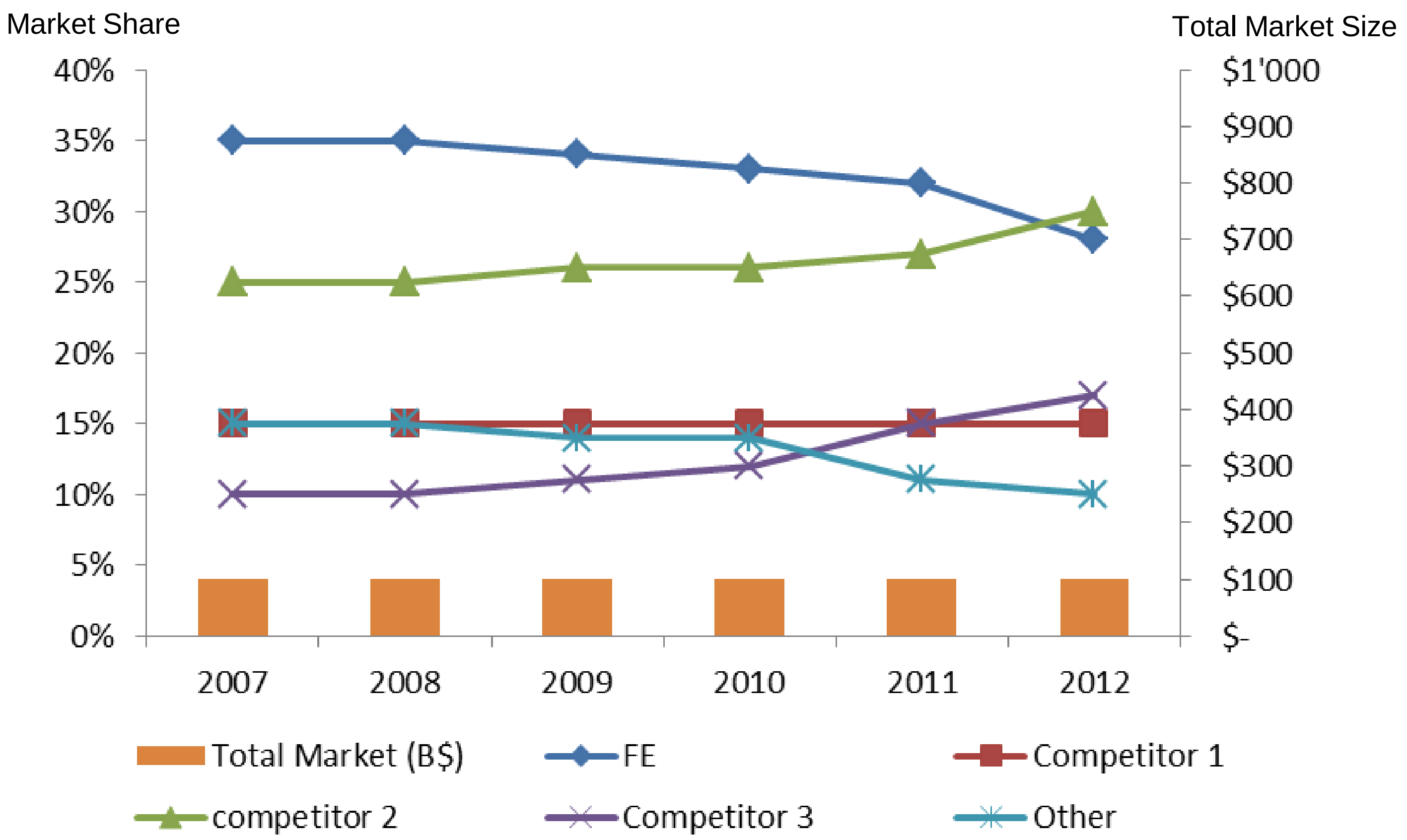
Durable consumer goods manufacture

Step #2,3
Slide 2: **Slide takeaways:** ■ While prices in industry are declining, the prices of FE stay relatively high. ■ Industry costs have progressively declined. Costs for FE have risen over the same period. ■ Ask to come with assumptions why cost are rising. Allow to come with assumptions and then steer the conversation towards demand volatility - Slide#3 **Slide 3:** **Takeaways**: The most volatile products of the company are sold in most volumes. They might drive high inventory cost. The most volatile products are produced in China, and then delivered to the US. Shipping delays may result in lost sales. Long lead times result in increased inventory that drives transportation and inventory cost.

Conclusion

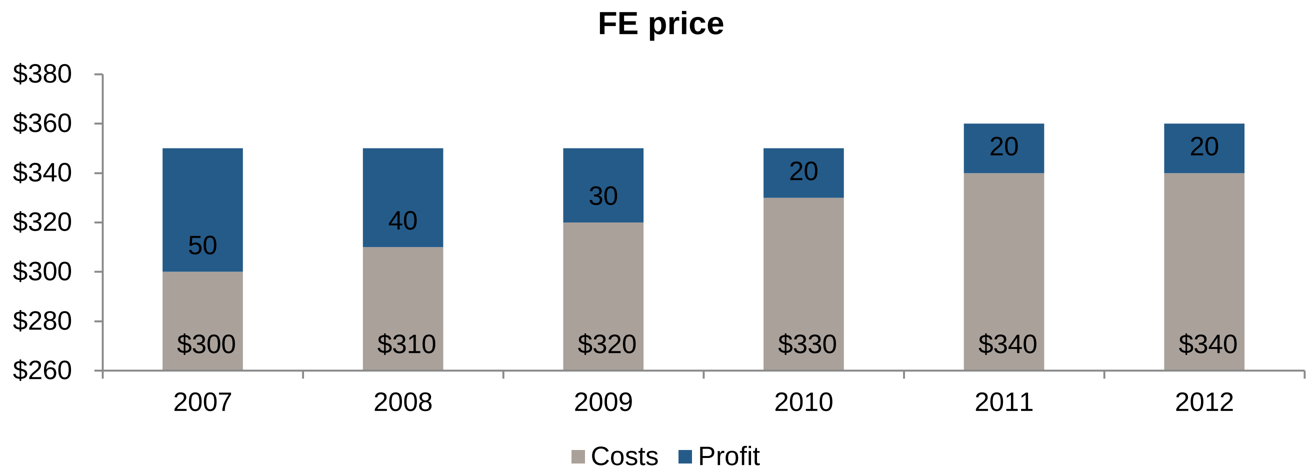
Recommendation	Next Steps
Move production of products with the most volatile demand to the US. This should result in a decrease in inventory cost and prevent the loss of sales.	Risks • Other costs associated with manufacturing will be higher in the US. A detailed analysis of these costs is required. • Significant capital investment required to relocate a manufacturing facility Next Steps • Conduct a full analysis of manufacturing costs in the US • Negotiate long-term contracts with customers (retailers) to decrease demand volatility. • Increase collaboration with buyers, think about integration of unique sales system that would allow to forecast demand and plan sales with greater certainty.

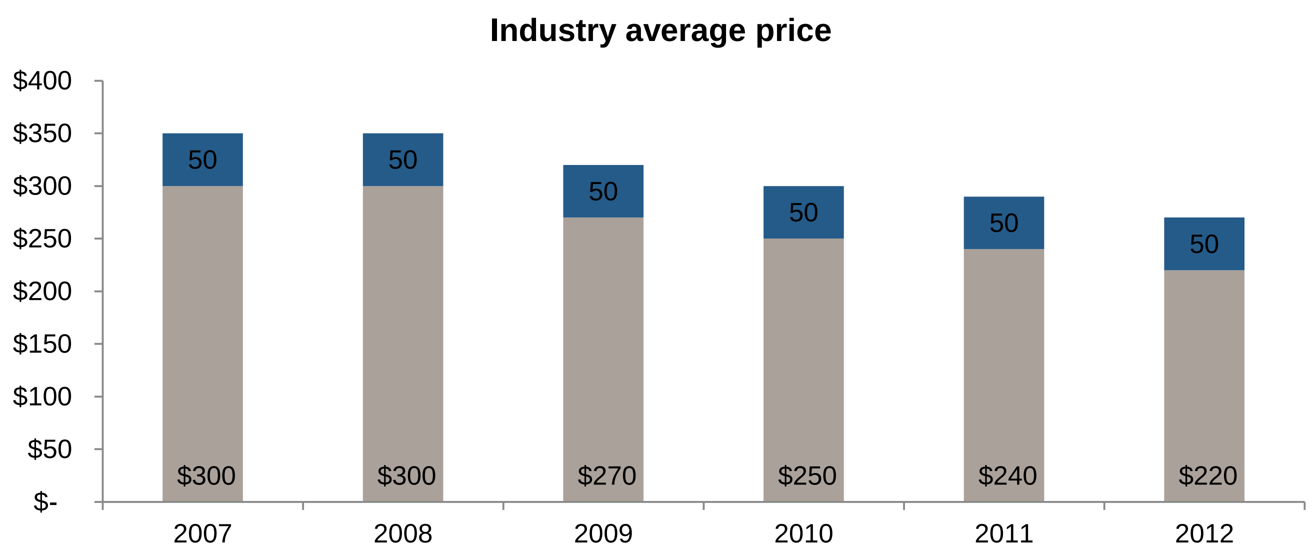
Durable consumer goods manufacture
Slide #1 Total Market in $B



ROSS CONSULTING CLUB

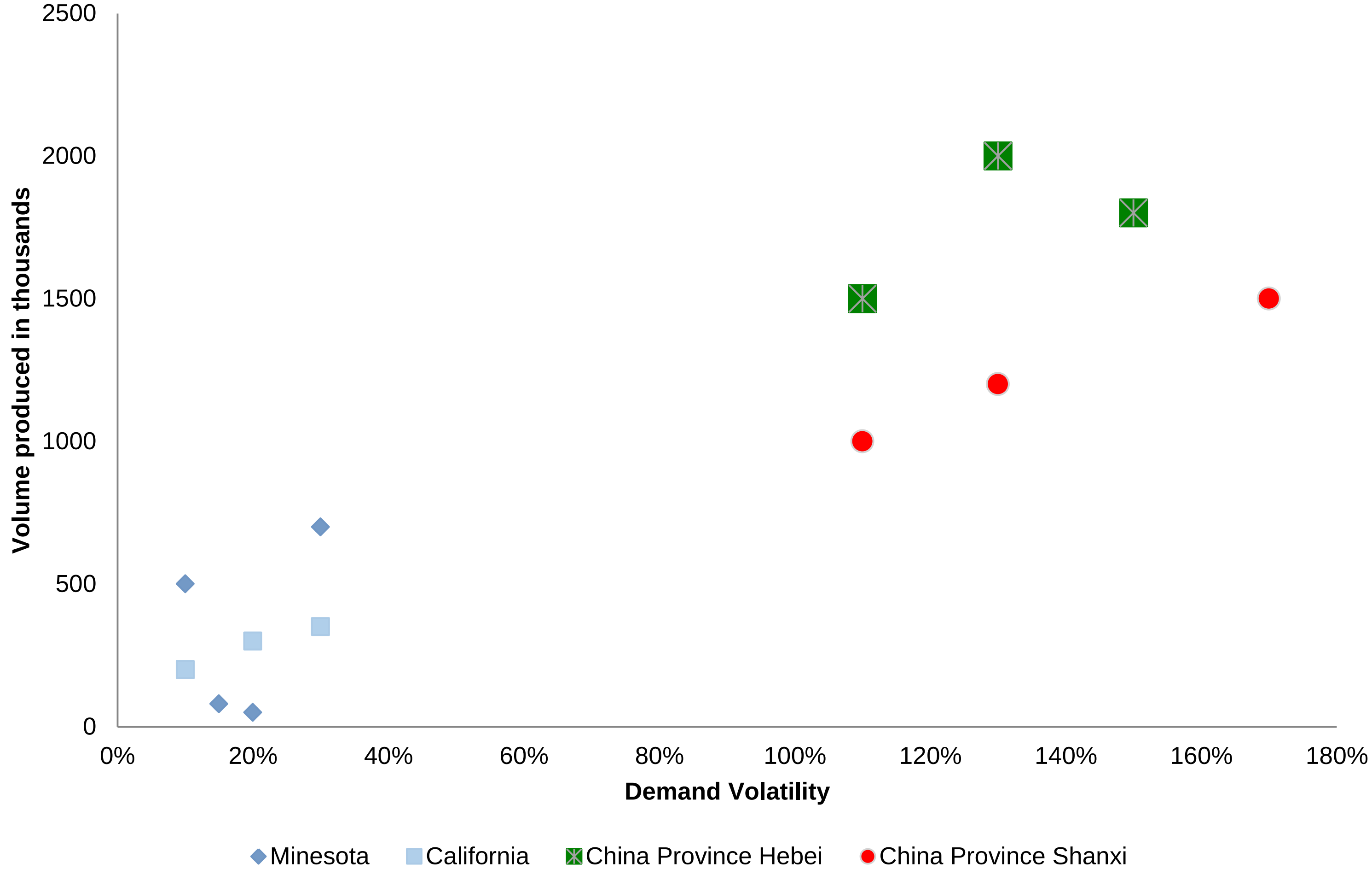
Durable consumer goods manufacture
Slide #2 Total Market in $B





ROSS CONSULTING CLUB

Durable consumer goods manufacture
Slide #3 China v/s US Production



ROSS CONSULTING CLUB

ROSS CONSULTING CLUB

Case 9: Hugo Noos

- Type: Expansion / Profitability
- Difficulty: Low
- Industry: Retail
- Firm Format: N/A

Difficulty: Low

Industry: Retail

Type: Expansion / Profitability

HUGO NOOS goes on-line/ Ross Original

Problem Statement	Information Provided Upon Request
Apparel producing company - Hugo Noos wants to increase profits by opening an online sales channel. They want to increase profit 20%. Current profit is $1B. CEO has approached us to figure out if it is possible and and how they should proceed. Focus only on US market.	HB is a premier apparel band that produces clothes and shoes for men and women of all ages. There are two lines – regular and premium. Regular is a less pricy, more casual, and more young consumer oriented. Premium – higher priced and focuses on business attire. HBN sells through large premium retail stores line such as Macy's and Nordstrom as well as through own retail stores. **(Only on direct request) - Assume that retail stores currently do not sell items online.** Industry is stable. Company has sufficient human, financial and other recourses to go into this business.

Hugo Noos. Ross Original

Step #1

Structure

Allow interviewee prepare the initial structure. It is good if interviewee recognizes that there are at least three ways to start on-line sales – establish own platform, use on-line platform available at existing retailers (Macy's and Nordstrom), or to use existing platforms such as Amazon to start sale.

1. **Step #1 Profitability of establishing own platform**

What information would you need to start analysis?

How would you price products? Should the price stay the same for on-line and retail?

Investment in creation of own online platform - $5M. Includes development of the site, creation and design.

Retail price of a **regular** item is $240 and retail price of **premium** item is $345.

Client decides to decrease the price 20% for regular items and 15% for premium items.

Hugo Noos. Ross Original

Step #1 Solution

Step # 1 Solution:

Revenue:
Regular: will be able to sell 5500 SKU / day @ average price of $200
Premium: 2500 SKU / day @ average price of $300
Assume 350 days in a year
Total revenue: 350* (5.5K*$200+2.5K*300) = $647M

Fixed costs:
Annual service: $25M
Insurance and other costs $3M
Wages: $15M.
Incremental Warehouse cost: $25M
Marketing: $50M

Variable cost:
Regular: $80 / SKU
Premium: $85 / SKU
Delivery cost: $10 per item
Packaging: $3 per item
Total cost = $256M
Total cost: $270M+118M=~$388M. Profit = $259M

Cannibalization Cost:
Due to online sales initiatives profit in regular stores drop 20%. Total profit=1B-200M+259=$1.059B
Cannibalization cost are mainly due to premier items.

<u>Ask what solutions interviewee sees</u>. One of the solutions – don’t decrease price for the products sold on-line, offer them at the same price you offer them in retail stores.

Hugo Noos Case. Ross Original

Step #2 Partnership with another platforms

If the company decides to use existing platforms.
What might change in revenue and cost structure? How would you think about pricing in this case? What are the costs you might think about? Calculate profit in this case.

Solution:
Assume discount for regular line of 20% and no discount for premium items.
In this case:

Regular: will be able to sell 7000 SKU / day @ average price of $200
Premium: 2500 SKU / day @ average price of $345

Total revenue: $790M

Fixed costs:
Annual cost of using platform: $50M
Insurance and other costs $3M
Wages: $5M.
Incremental Warehouse cost: $30M
Marketing: $20M
Total fixed cost: $108M

Variable cost:
Regular: $80 for SKU
Premium: $85 for SKU
Delivery cost: $10 per item
Packaging: $3 per item
Total cost = $313M
Total cost: $313.6M+108M=$421M. Profit = $370M, without cannibalization cost.

Hugo Noos Case. Ross Original

Step #3 Pros and Cons of each way

Ask what are strategic benefits of running own website v/s using existing platforms?

Own platform:

- strategic control of sales channel – **transparency and availability of shelf place**
- opportunity to sell additional staff offered by other retailers – **additional source of revenue**
- control of marketing and sales strategy will allow to avoid brand deterioration – **brand control**

Benefits of existing on-line retailers:

- Will offer database to better manage inventory and marketing campaign
- Marketing savings
- Larger consumer base

Conclusion

Recommendation	Next Steps
It is up to the candidate to decide which way to go, as long as he/she provides good rational. Own web-site will prevent brand deterioration and might offer greater business flexibility in future. However, might result in negative NPV. Partnership with Amazon-like platform might result in higher sales and better sales forecast. However, might result in higher cannibalization, and brand deterioration.	Depending on the strategy, the candidate chooses. **Go with own platform:** Sell premium products at the same price. Decrease price only for regular line. Think about making some items available on-line only to prevent cannibalization. Analyze opportunities for cooperation with other apparel produces that provide supplements for the HN collections. **Partnership:** Contract should include control over prices to prevent cannibalization and brand deterioration. Sigh sales data sharing agreement to strengthen sales forecast.

ROSS CONSULTING CLUB

Case 10: LabCo

- Type: Growth
- Difficulty: Hard
- Industry: Private Equity
- Firm Format: Bain & Co

LabCo
RCC Original

Difficulty: Hard

Industry: Private Equity

Type: Growth

Problem Statement

Our client is a private equity firm interested in acquiring LabCo, a company that manufacturers specialty epoxy countertops for use in laboratories.

Our PE client expects the overall laboratory countertop market to grow at 10% per year and would like you to assess the threat of material substitutes stealing market share.

Information Provided Upon Request

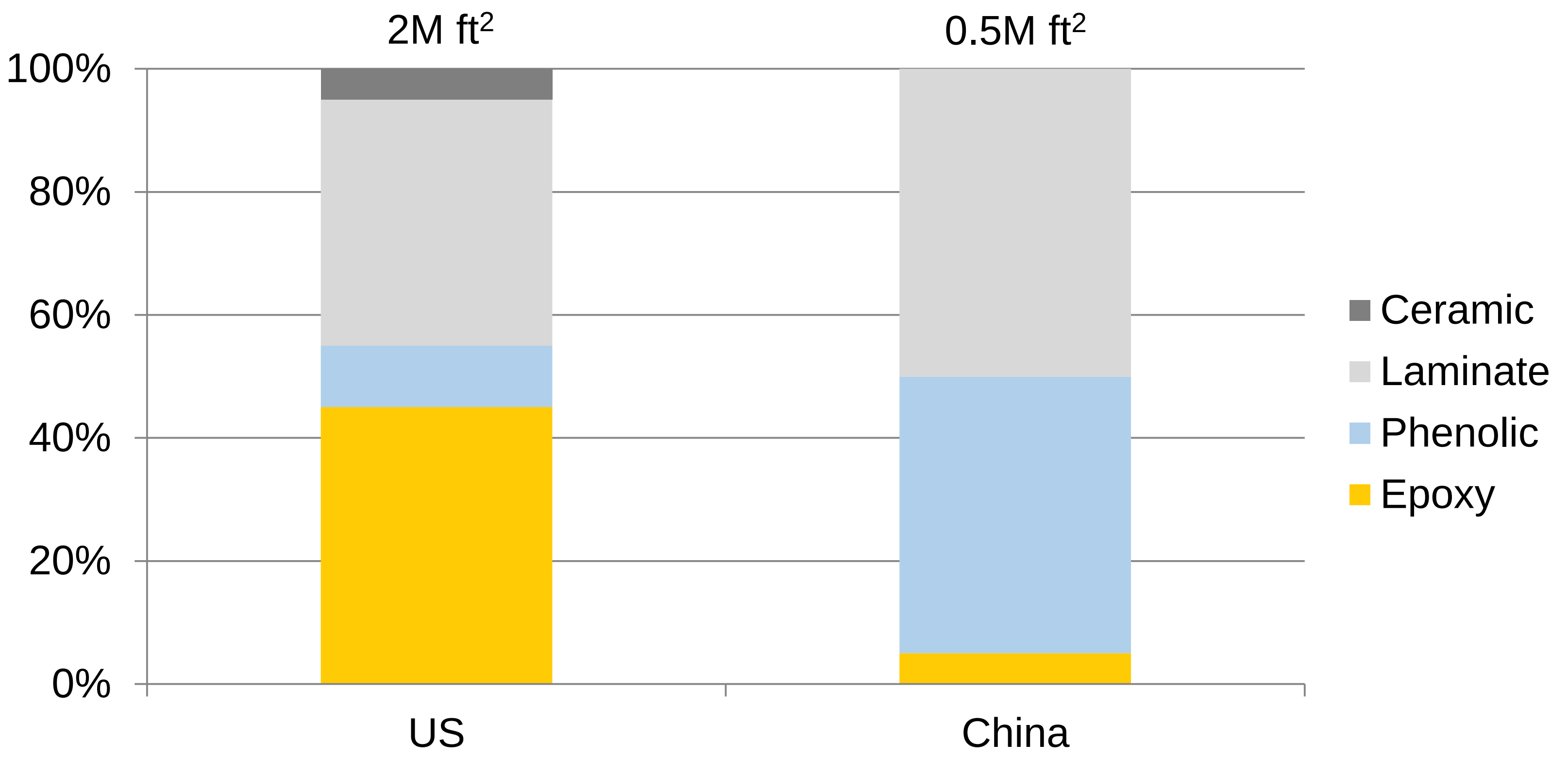
Client:

- This PE firm invests in a variety of construction materials but no synergies exist between LabCo and other portfolio companies
- The PE firm is look to hold the company 5 years

LabCo:

- LabCo manufacturers only epoxy countertops. Other materials include phenolic, laminate, and ceramic
- LabCo is currently the only manufacturer of epoxy countertops
- LabCo has a manufacturing facility in the US and current sells in North America and China (focus for this case)

Exhibit 1
Lab Countertop Material Market Share



ROSS CONSULTING CLUB

Exhibit 2
Material Attributes

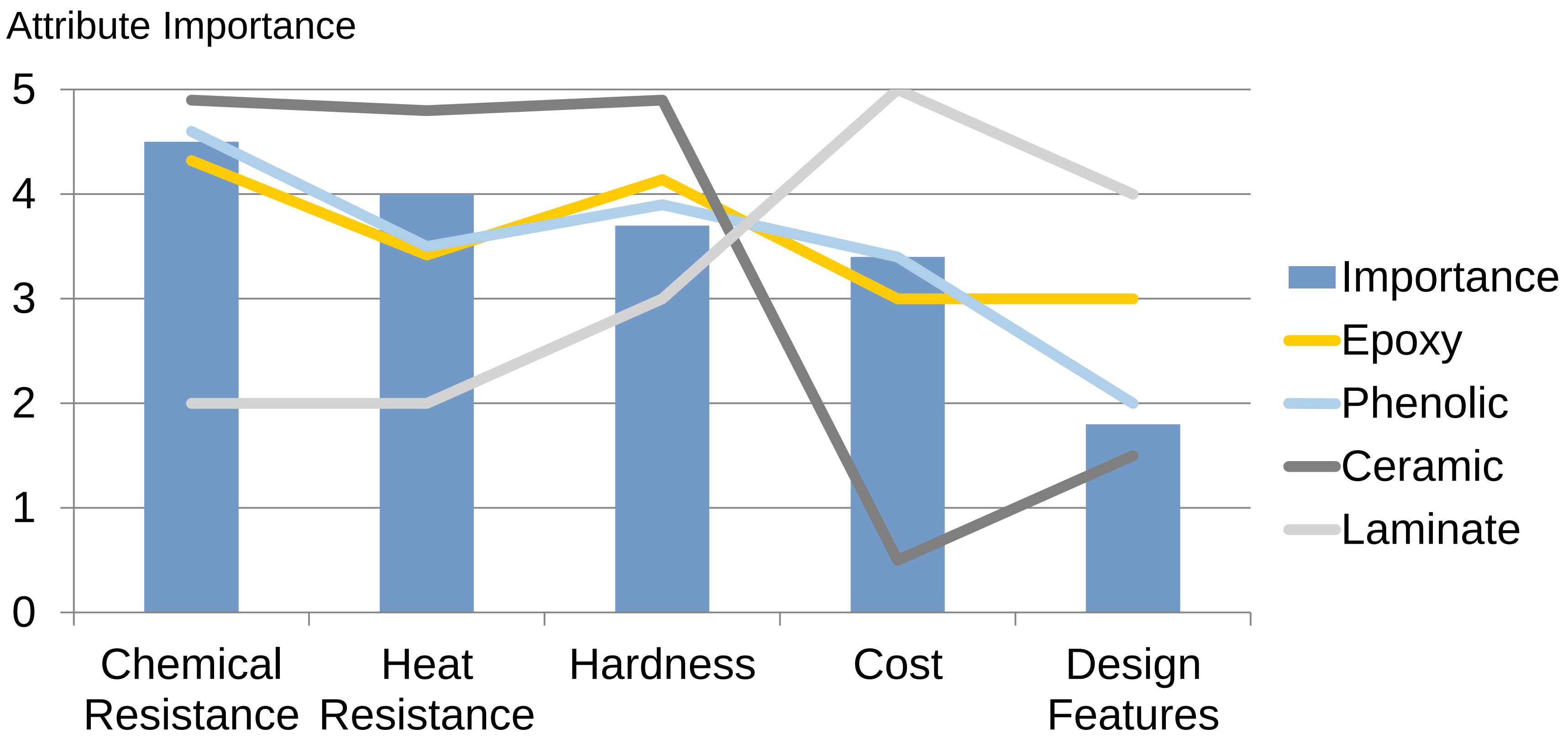
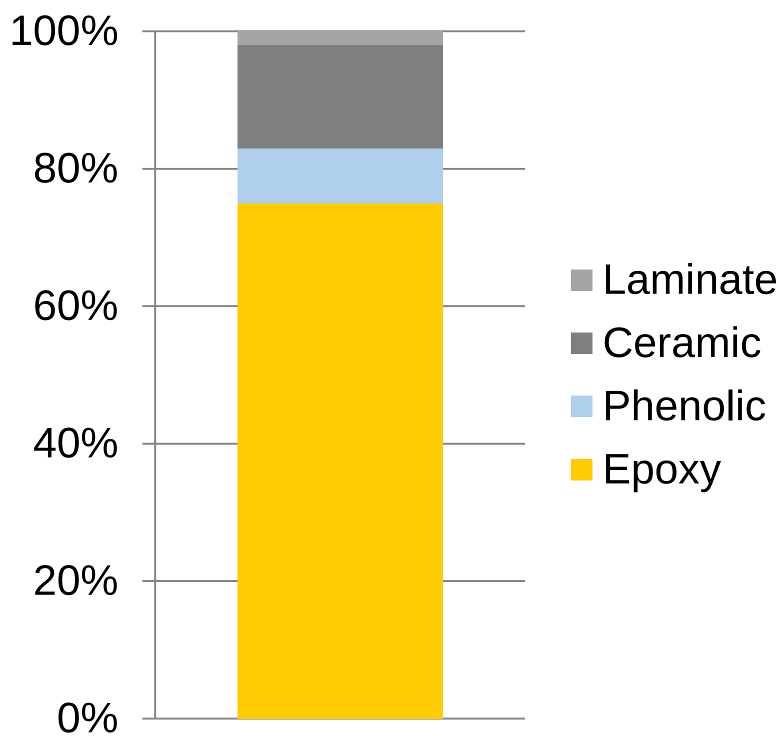


Exhibit 3
Customer Feedback

Customer Survey (n=120)

"In general, what is the best laboratory countertop material?"



Customer Survey (n=120)

"At what price discount would you choose to use phenolic instead of epoxy"

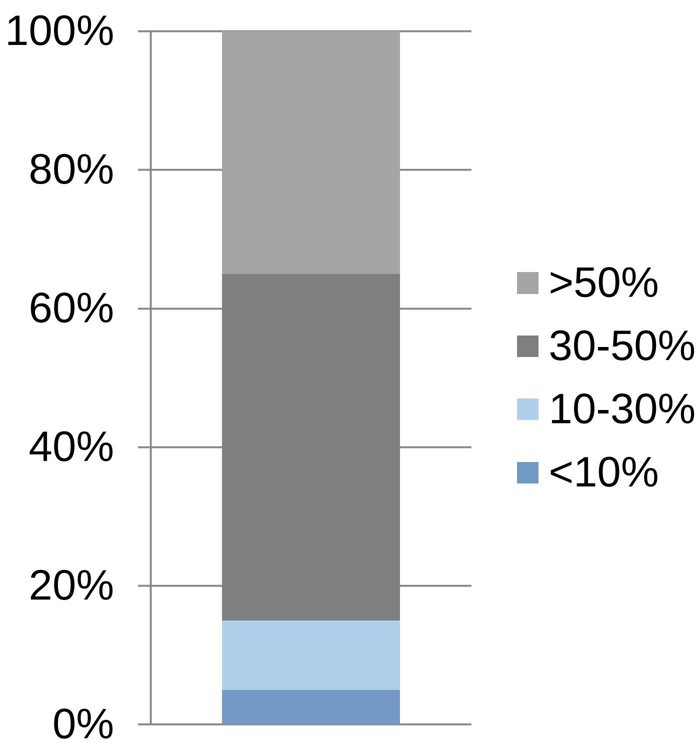
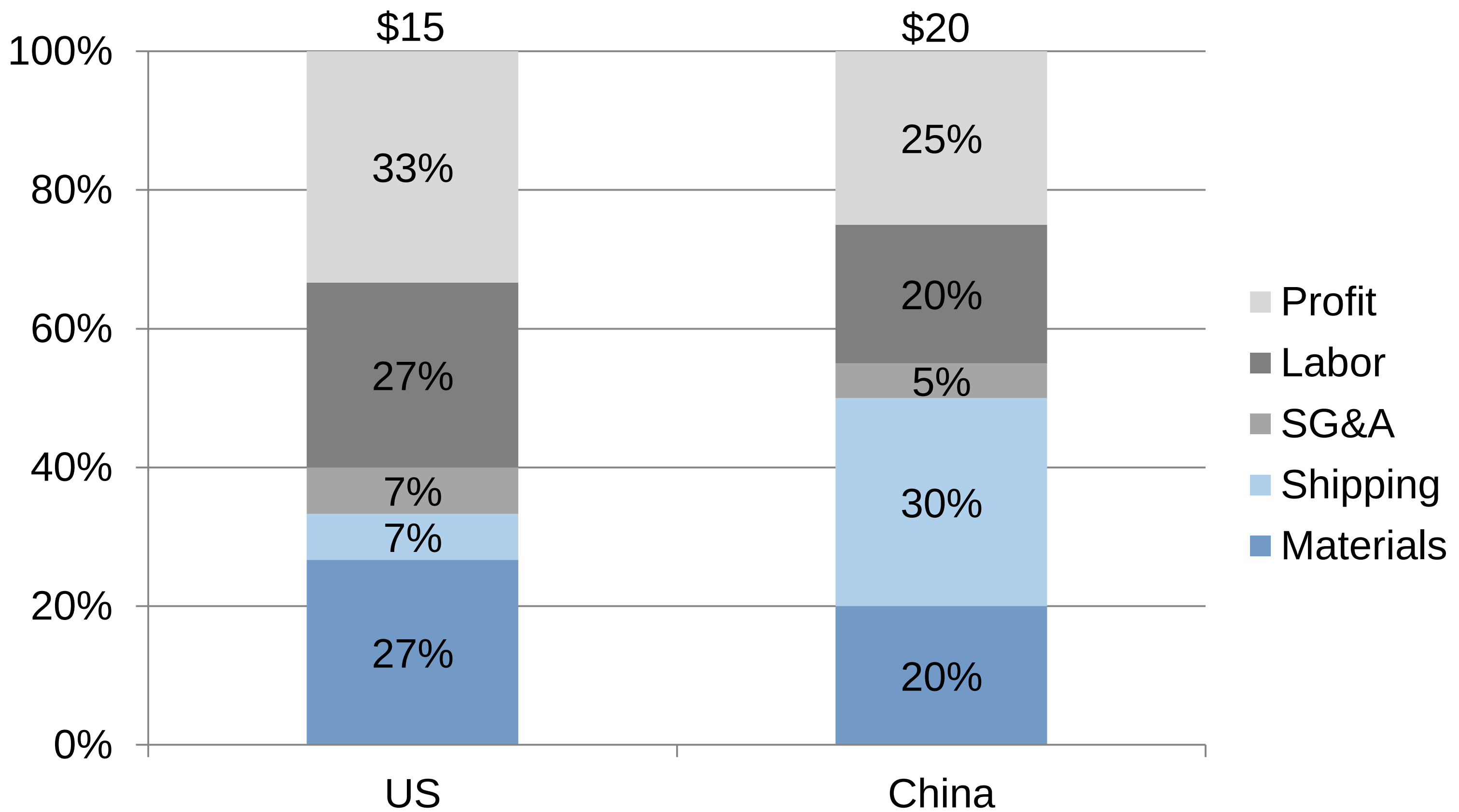


Exhibit 4
Material Pricing

	US Price ($)	China Price (¥)
Epoxy	15	120
Phenolic	12	70
Ceramic	21	240
Laminate	7.5	48

Note: 6:1 ¥:$ conversion rate

Exhibit 5
LabCo Epoxy Cost Structure



Note: All epoxy is currently manufactured in the US at a single facility

Model answer and interview guidance

High level model answer

1. Identify current market position (Exhibit1)
   - Recognize significant differences between US and China markets
   - Market share difference may be caused by different use requirements, pricing differences, customer preferences…

2. Customer preferences (Exhibit 2 and Exhibit 3)
   - Identify Epoxy as a strong performer across most customer preferences.
   - Identify that Epoxy and Phenolic are closest in material attributes, Phenolic poses the greatest threat of material substitute
   - Recognize that although most customers identify epoxy as the best material, it does not have full market penetration, meaning customers are making price-performance trade-offs.

Additional guidance

1. Current market position
   - Market size numbers are annual sales for all laboratory countertops
   - Market has been stable for several years and is not expected to grow

2. Customer preferences
   - Customers are building contractors for high schools, universities, and industrial labs

Model answer and interview guidance

High level model answer

3. Pricing (Exhibit 4 and Exhibit 5)

- Calculate price ratio between epoxy and phenolic, recognize US customers are unlikely to select phenolic while Chinese customers are very likely to choose phenolic based on Exhibit 3. (see math solution)
- High shipping costs result increasing epoxy cost in China.
- All other manufacturing costs are the same – all product is manufactured in a single factory
- Opportunities exist to reduce cost for the Chinese market by manufacturing in China
- Estimate share gain made possible by cost reduction, Exhibit 1 can be used as a reference
- An excellent final recommendation should focus on the whether the PE firm should invest or not. LabCo is the acquisition target, not the client.

Additional guidance

3. Pricing

- Company requires $5/sq. ft. profit
- LabCo has investigated moving manufacturing operations to China and would expect to see a 25% decrease in labor cost.
- A new facility in China would cost $15M
- Local shipping costs for product made in China is $1/sq. ft.
- Assume a discount rate of 10% and value as a perpetuity

Solution

Made→ Sold→	US US	US China	China China	China US
Profit	$5	$5	$5	$5
Labor	$4	$4	$3	$3
SG&A	$1	$1	$1	$1
Shipping	$1	$6	$1	$6
Material	$4	$4	$4	$4
Local Price	$15	120¥	$14*6=84¥	$19
Phenolic Price Discount vs Epoxy	(15-12)/15 = **- 20%**	(120-70)/120 = **- 40%**	(84-70)/84= **- 16%**	No need to calculate

[Increase in Chinese market share] x [total market size (sq ft)] x [profit/sq ft] = annual return

[45%-5%] x [0.5M] x [$5] = **$1M per year**

$15M investment, $1M per year / 10% discount rate = $10M – **DO NOT INVEST**

ROSS CONSULTING CLUB

Conclusion

Recommendation	Next Steps
■ Recommendation – Proceed with the acquisition of LabCo if market growth of 10% is sufficient to justify investment – Epoxy relative secure in US market with strong material performance and customer perception – Limited opportunity exists to grow revenue in China by reducing cost through local manufacturing ■ Risk – Phenolic manufacturers could reduce manufacturing costs, creating a wider price gap, causing customers to select over epoxy	■ Investigate Phenolic cost structure to assess threat of future price reductions ■ Investigate epoxy growth potential in other markets ■ Look for cost reduction opportunities in epoxy manufacturing process ■ Investigate adjacencies in other laboratory surfaces where epoxy could be used (shelving, cabinets, desks, etc.) ■ Further due diligence on management team, organizational structure ■ Investigate cross selling opportunities with other portfolio companies

ROSS CONSULTING CLUB

Case 11: HealthCareCo

- Type: Basic Support Functions
- Difficulty: Hard
- Industry: Healthcare
- Firm Format: McKinsey

Difficulty: Hard

Industry: HealthCare

Type: Basic Support Functions

HealthCareCo
RCC Original – McKinsey Style Case

Problem Statement
Your client is the CEO of a leading diversified healthcare products and pharmaceuticals company - HealthCareCo. The company's principal business is the discovery, development, manufacture and sale of a broad and diversified line of healthcare products. Thinking ahead for the next 5 years, the CEO of HealthCareCo wants to consider cost optimization as one of the important elements of his strategy. He has engaged McKinsey to help him with this effort. NOTE: This is upfront information and not the end of the prompt. Because this is a McKinsey Case, there are specific questions that follow.

Information Provided Upon Request
HealthCareCo has about 50,000 employees in approximately 100 countries around the world. Currently, HealthCareCo has 4 different revenue generating business units namely - pharmaceuticals, medical devices, health foods, and specialized surgery products. The CEO wants to distinguish the firm through innovation in the healthcare and pharma industry in the next 4-5 years There are 3-4 main competitors, client firm can be said to be #2, #3 in the market

Question 0 What would be the key factors that you would consider in preparation of your first meeting with the CEO and his team?

Financial Reports
Understand the company's business, Analyze the Income Statement / Balance Sheet, Important financial ratios, Historical performance, Compare ratios with competitors, similar players in other industries

Value Chain / Company Business / Org Structure:
Because we are taking an overall company view, a good candidate will bring up the concept of a Value Chain. A value chain helps to identify different business drivers and logically separates the individual elements of a firm. This should also account for the different business units
Primary Functions: Inbound Operations, Company Operations, Outbound Operations, Marketing, Sales, Service.
Support Functions: Finance, HR, IT, Legal, Procurement, Facilities etc

Competitors
Who are the competitors in the market
How is HCC different from the other competitors, value proposition, target consumer

Strategy
Understand the overall strategy of the firm and also how it relates to the 4 different Business Units, different geographies
A good candidate will bring up the discussion of cost-based differentiation or value based discussion and will also offer an initial hypothesis that because this is a pharmaceutical / healthcare company, the company will have to invest in R&D and innovation

Market Trends:
Any trends in the healthcare market across the world

Industry Factors / Regulatory / Patents / Other Factors
Considering the global nature of the company's operations, we would also have to factor in regulatory changes
Foreign relations, Taxes, Foreign Exchange implications etc.

Question 1 Give the candidate Exhibit 1 and ask him to offer initial thoughts / hypotheses

Typical Response:

1. The COGS number is at par with the industry. But this could be an area to explore if the company is to create a cost –advantage.
2. R&D costs as compared to the industry benchmarks are lower (as a % of sales). This could imply that the firm does not invest as much in R&D as compared to some of the other competitors. So this could mean either that the firm is a “follower” in this industry and therefore probably competes on costs OR that the firm competes in a different segment of the healthcare, nutritional segment that does not require as much R&D.
3. Business support costs as significantly higher than the industry averages. Given that the CEO wants to focus on cost optimization, this line item offers significant potential to cut costs.
4. Earnings per share are lower as compared to the industry. Assuming everything to be the same for the comparable companies, this should be a cause of concern for the CEO.

Synthesis: It is important to focus on overall cost reduction for the firm, as this will not only boost the competitiveness of the firm, but also free up capital to invest in R&D, if the company wants to differentiate itself in the industry based on innovation. Business Support Functions could play a significant role in helping to reduce costs.

Exhibit 1

Income Statement - HealthCareCo

($ in Millions, except per share data)

Net Sales	$	40,000
Expenses		
COGS	$	15,500
R&D	$	3,500
Business Support	$	12,000
Total Expenses	$	31,000
Other Adjustments*	$	3,000
Gross Profit	$	6,000
Taxes	$	2,400
Net Earnings	**$**	**3,600**
Total Shares		1,800

	HCC	Industry
COGS (% of sales)	39%	40%
R&D (% of sales)	10%	12%
Business Support	30%	25%
EPS**	$ 2.00	$ 2.50

* Includes interest adjustments, Forex loss, loss on extinguishment of debt

** Ignore Preferred Dividends

Question 2 (See Note Below). BRAINSTORMING.

NOTE: First ask if the candidate understands what BSF means. Let them explain what they think about it. Then give this information:

BSF: Functions which are necessary for running the main operations of any firm. Typical BSFs include Finance, HR, IT, Legal, Procurement, Facilities etc. These functions are typically non-revenue generating functions.

Then ask them what would they do now?

Typical answer. Look at the breakdown of BSF. See which ones of those is a problem. Compare numbers with industry benchmarks. **THEN HAND OUT EXHIBIT 2.**

The candidate should quickly comment on two things:

1. **All key BSF functions are worse for the client as compared to industry benchmarks.**
2. **Industry benchmarks costs for BSF functions are 30-40% lower than those for the client.**

IDEALLY, a candidate should proactively answer why he thinks this could be the reason. IF not ask this question:

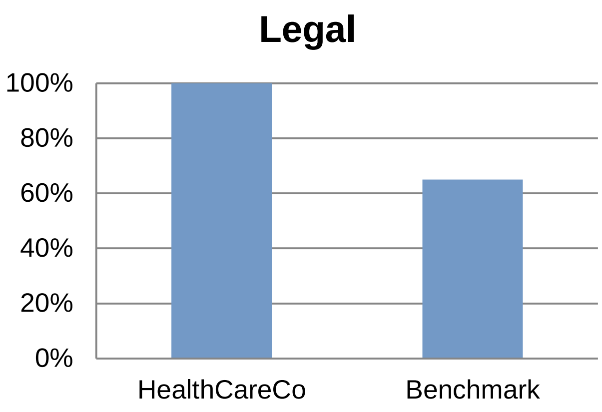
Question 2: Why do you think these costs are high for the client?

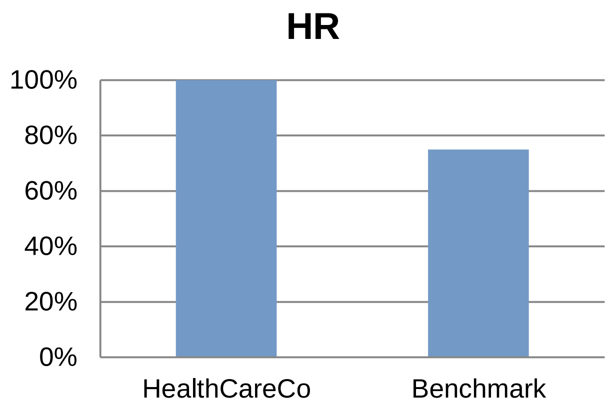
Typical Response:

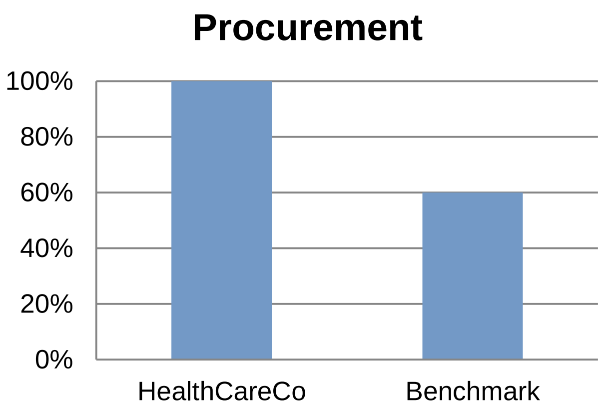
1. The client has grown through acquisitions, each acquiree adds its own BSF FTEs and complexity
2. Geographical complexity / differences
3. Organizational complexity
4. No overlap of tasks between different Business Units / silo's in the business units

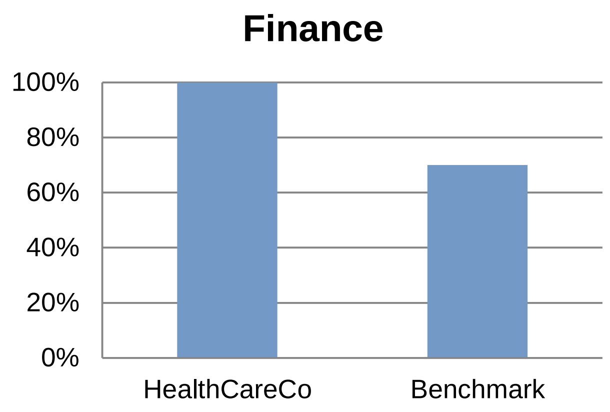
NOTE: Keep asking what else, till the candidate has given 4-5 good answers.

Exhibit 2: Basic Support Function Costs Comparison









Question 3 Assume your team does a further analysis on the type of activities within each of these BSF functions and they find this. (Hand out Exhibit 3).

NOTE:
Transactional activities: Defined as day-to-day activities, low-skill, repetitive
Specialized activities: High skill, specific to each business unit / geography, requires involvement of multiple people etc.

An ideal candidate will try to answer why different departments show difference in Transactional / specialized:

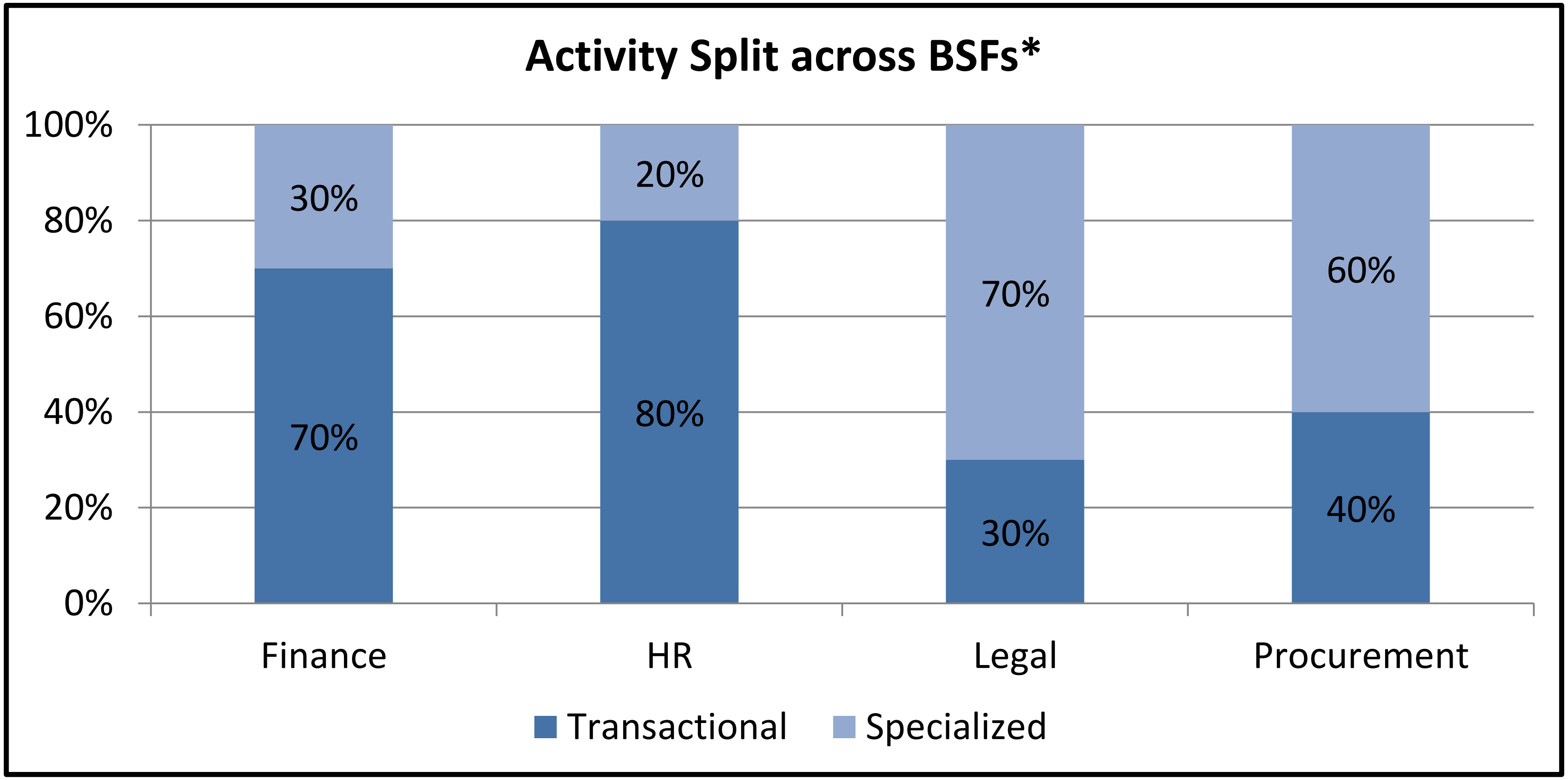
- Procurement / Legal are inherently localized and specialized functions – every location / Business unit has different requirements / laws / regulations.
- Finance and HR have a fairly large number of day-to-day activities: book keeping, payroll, time and expense etc.

Question 3: Can you think of ways to reduce these costs?
Typical responses:

1. Eliminate redundant activities
2. Automate certain activities
3. Improve efficiency – by reducing number of steps in a process
4. Reduce frequency of unnecessary activities
5. **Outsource certain activities (Do not give this away. This is critical for the next part of the case).**

ASK THE CANDIDATE, would he think of outsourcing differently for transactional v/s specialized. Give the candidate a minute to think. If he comes up with an answer, continue with next slide. OR Just move to the next slide if the candidate cannot think why. (Obviously, he doesn't get the brownie points!)

Exhibit 3



Typical Geographical sub-unit of a Business Unit

Question 4 (Hand out Exhibit 4). Some one on your team suggests that this is a way that the client can think about it's outsourcing / consolidation. What do you think about it?

Typical Answer:

This makes complete sense. Here's why:

- Transactional activities can be consolidated at a global level. India / Chile make good options because of:
    - Cheap labor
    - Cheaper costs
    - Availability of labor
    - Expertise in services outsourcing
- Specialized activities can be consolidated at a regional level because:
    - Region specific requirements
    - Similarity of business
    - Laws / Contracts / Regulation
    - Language

Exhibit 4

LEGEND

Outsourced Center – Transactional Activities

Center of Excellence – Specialized Activities

ROSS CONSULTING CLUB

Question 5 Let's say the company goes this route. Ships transactional work to Outsourced centers, and specialized activities to Centers of Excellence. The company also does some IT rationalization efforts How much cost savings will these changes help the company realize: (Hand out Exhibit 5)

NOTE: IT rationalization: Centralizing databases, establishing common platforms etc, renegotiating with vendors etc)

Typical Response:

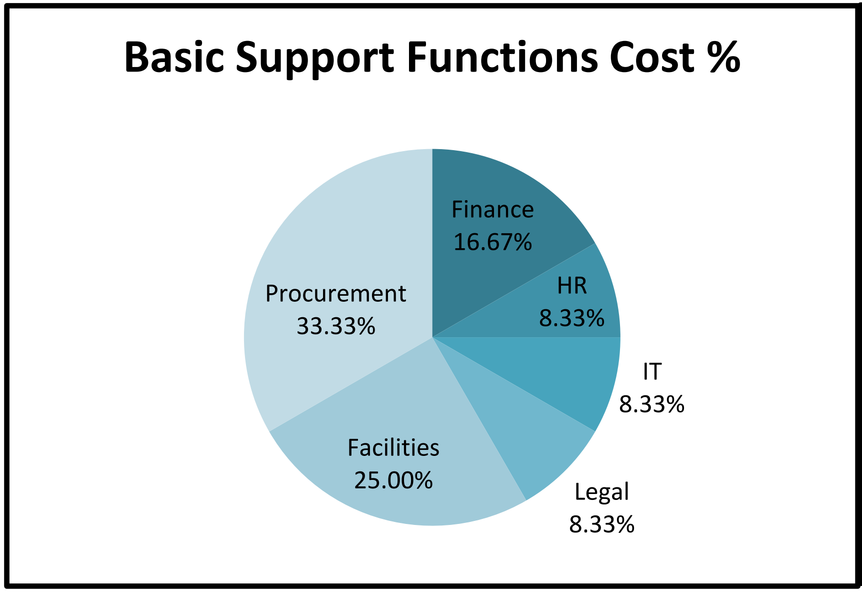
Total BSF	$ 12 Bn	$ Bn	% Tran.	% Spc	CoE Savings	Out-sourced	IT Ratz	Cost Savings ($ Bn)
Finance	16.66%	2	70%	30%	10%	40%	-	0.62
HR	8.33%	1	80%	20%	10%	40%	-	0.34
Legal	8.33%	1	30%	70%	10%	40%	-	0.19
Procurement	33.33%	4	40%	60%	10%	40%	-	0.88
IT	8.33%	1	-	-			30%	0.3
Facilities	25%	3	-	-			-	-
						Total Cost Savings		$ 2.33 Bn

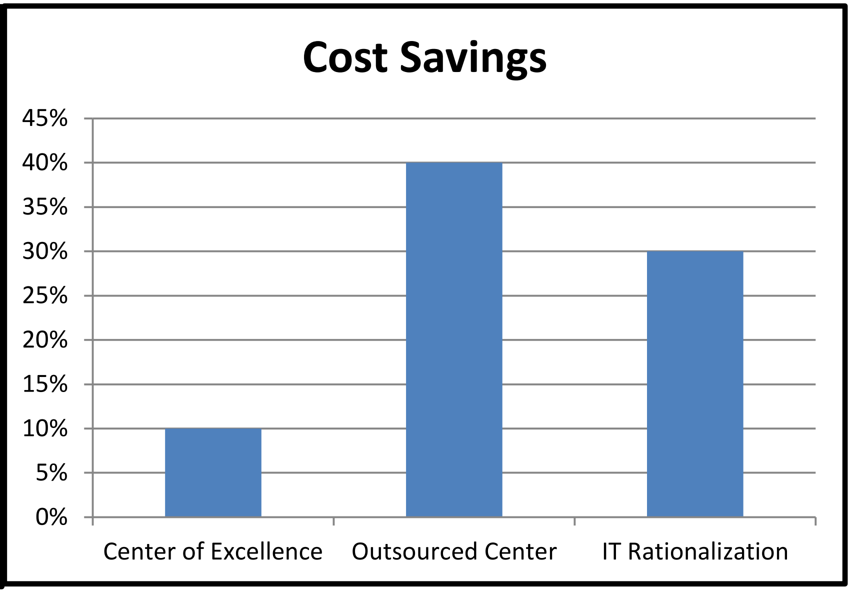
- A quantitatively strong candidate will be quickly able to calculate that 16.33% = 1/6, 8.33% = 1/12, 33.33% = 1/3, 25% = ¼
- Calcluation: Finance Cost Savings = Total Finance Costs*Transactional%*OutSourcedSavings + TotalFinanceCosts*Spec%*CoESavings
- Similarly for HR, Legal, Procurements
- IT cost savings = IT Costs*ITRationalization%
- Cost Savings for Facilities is out of scope for this case

- **An Excellent Candidate will go back to Exhibit 1, and reflect on what effect will this have on the financials. Currently, BSF costs are higher by 5% as compared to the industry (5% of $40 Bn = $2Bn). The savings that we see above are higher than $2Bn. These additional savings can be put into R&D, given out as dividends, and also boost the EPS. All great results from the CEOs stand-point.**

Exhibit 5

- Total BSF Costs: $12 Billion





* Facilities are local, Ignore cost savings coming out of facilities

Conclude Ask for a recommendation

Typical Response:

Recommendation:

The CEO should engage into a large-scale organizational transformation. Specifically to optimize the BSF costs. There are three reasons for this.

1. BSF Costs are higher as compared to industry benchmarks
2. They are hurting the client's position in the market
3. And are critical for the future strategy of the firm – to differentiate itself through innovation

One of the important highlights of this transformation should be the creation of outsourced centers and Centers of Excellence to manage the transactional and specialized BSF tasks. This could give a net run-rate savings of $2.3 Bn in today's terms.

Biggest Risk:

1. Downsizing repercussions
2. Foreign limitations, time for implementation

Next Steps:

1. Do a cost-benefit analysis. How long will this transformation take. How much will it cost
2. Opportunity Costs
3. Find out ways to manage the implications of down-sizing

ROSS CONSULTING CLUB

Case 12: eNP & Co

- Type: Profitability / Divestiture
- Difficulty: Medium
- Industry: Retail
- Firm Format: McKinsey

Title: eNP & Co – Retail Company
Source/Round: McKinsey, Round 2

Difficulty: Medium

Industry: Retail

Type: Profitability/Divestiture

Problem Statement

Your client eNP & Co is a mid-size department store (something like Macy's) that has mainly two categories - apparel and home décor. The department store has seen declining profitability and has called McKinsey to understand what are its strategic next steps?

Information

Additional Information:

- Client has only 1 store and is located in Chicago.
- Home décor - all categories of home furnishing products
- Apparel - Mens, Womens and Children apparel

Information to be provided upon request:

- The apparel business is seeing declining profitability
- Industry for both is growing at a steady rate of 5% to 10%
- The company has only been selling through traditional sales channels. No online channel
- Latest trend: People shop online, people do not like to travel long distances to buy apparel. The store is located in areas similar to where Walmart, K-Mart are located. People shop more around downtown.

Title: eNP & Co – Retail Company

Question 1: What do you think are some of the key drivers we should evaluate?

Key Ideas:

- Try and understand, which of the two categories is driving the profitability decline?
- For that category evaluate a few more details:
  - *Industry details*
    - Is this an industry wide issue?
    - What are the latest trends in the industry?
    - How does the competitive landscape look?
    - Who are our customers and how have their purchase preferences changed?
  - *Economic analysis*
    - Break down of profitability of different product categories
    - Is this a margin issue, or is the company not able to breakeven?
    - Understand the revenue and cost structure of the apparel business and its categories
    - Determine the purchase frequency, profitability per category and compare and contrast the apparel and home décor business
    - Historic performance of eNP
  - *Changes in eNPs at an organization level?*
    - Has there been any recent changes at eNP: suppliers, management etc
    - Has the company looked at expanding its distribution channels to include online?
    - Have we invested or divested in categories?
  - *Changes in and around eNP store?*
    - Has a new competitor placed a store around eNP?
    - Has there been a change in the display at the store?
    - Are we holding the right product categories and styles of apparel in our store?

Title: eNP & Co – Retail Company

Question 2: What is the profitability per square feet per category?

Information to be provided to the interviewee:

Gross Margin:

	Home	Apparel		
	Home Décor	Women	Men	Children
Gross margin per customer	$80	$60	$40	$40
# of customers per week	100	50	40	20
# of purchases per customer	2	2	2	2
Total sq feet occupied in store	2500	1000	750	750

Fixed Cost:

Rent per year	$200,000
Insurance	$150,000
Operation and Maintainence	$175,000
Marketing & Advertising	$250,000

Answer: The gross margin for children's apparel is below the fixed cost per sq. feet. (See answer key)

Title: eNP & Co – Retail Company

Question 3: How many more customers of children's apparel should eNP sell per week to achieve a target average profitability of $200 per sq. feet

Answer: 36 customers -- 80% more than the existing customers per week. Bonus point for interviewee to recognize the percentage increase and the feasibility of such an increase.

Answer key:

Total desired gross margin for children's apparel = $200

Total number of customers of children's apparel to achieve target = $200* 750/($40*2*52) = 36

Increase in customers = 36 – 20 = 16

Cut points if the interviewee provides the total number new customers and not the increase.

Title: eNP & Co – Retail Company

Question 4: Why do you think the Children's apparel category is not doing well?

Key ideas:

1. People who come to buy home décor do not come with the intention to buy clothes for children
2. eNP does not hold the right categories of children's apparel
3. Children's apparel is not strategically placed inside the store
4. Young parents do not have time to go to stores any more. They buy children's clothes online
5. The location is not idea to take an entire family for shopping and hence eNP loses business to better located competitors
6. The company has used traditional forms of media and have not embraced social media
7. Parents like to buy expensive/stylish clothes for their children. eNP does not hold the latest styles
8. eNP has not been allocating the correct marketing budget for children’s apparel. Bulk of the budget is used for home décor

Title: eNP & Co – Retail Company

Question 5: What do you think are some of the strategic alternatives for our client?

Any of the below options is fine as long as interviewee is able to justify the option

- Option 1: Divest from the children's apparel business
  - Business is not profitable
  - Its not intuitive to have a children's apparel store in a home décor
  - Use the shelf space for other profitable categories
  - Risks: Less chance to cross sell between categories
- Option 2: Divest from the apparel business completely
  - Home décor is by far more profitable than any of the apparel categories
  - eNP can be known as an exclusive home décor store, removing any form of ambiguity in the customer's mind about the store
  - Use the shelf space for other profitable categories of Home Décor, including expanding the categories (e.g. perhaps a gallery for top paintings etc.)
  - Risks: Less chance to cross sell between categories. Many people may not come to the store with the intention to buy home décor.

Title: eNP & Co – Retail Company

Question 5: What do you think are some of the strategic alternatives for our client?

- Option 3: Create a separate store for apparel in the city (maybe with a sub-brand) and hold profitable and popular categories of clothing
  - Separate brand removes the confusion for the customers between home décor and apparel
  - Introduce an online channel for sales; build up the ecommerce platform
  - Risks: Increase in rent and other fixed costs. Increase in competition because of change in location

Title: eNP & Co – Retail Company

Exhibit 1: Answer key to question 2

		Home Décor	Apparel		
Gross Margin	All catogories		Women	Men	Children
Profitability per customer		$80	$60	$40	$40
# of customers per week		70	50	40	20
# of purchases per customer		2	2	2	2
Total Gross Margin (assume 52 weeks)		$582,400	$312,000	$166,400	$83,200
Total sq feet occupied		2500	1000	750	750
Gross margin per square feet per category		$233	$312	$222	$111
Gross margin per square feet	$229				
Costs					
Rent per year	$200,000				
Insurance	$150,000				
Operation and Maintainence	$175,000				
Marketing & Advertising	$250,000				
Total Fixed cost	$775,000				
Fixed cost per square feet	155				

(yellow)	Given values
(green)	Calculated values

ROSS CONSULTING CLUB

Case 13: InvestCo

- Type: Profitability
- Difficulty: Medium
- Industry: Financial Services
- Firm Format: N/A

Difficulty: Medium

Industry: Financial Services

Type: Profitability

InvestCo

Problem Statement	Information Provided Upon Request
A large investment company, InvestCo, is considering expansion of its product line to include precious metals investments. The company has hired our firm to provide guidance on this decision.	Primary customer segments include retail investors and institutional investors. Customers are interested in portfolio diversification. Sales of these investments are predicted to be \$150MM in year 1 and double each year for the next 3 years. InvestCo collects 100 basis points in revenue (1 bps = 1/100th of 1%) InvestCo will need to hire 2 new Portfolio Managers (\$1.5 MM per year each) and 6 new Research Analysts (\$250k per year each). InvestCo will require a technology upgrade of \$1MM with \$500k ongoing upkeep per year. Assume cost of capital is irrelevant for this decision. A key competitor has recently expanded into precious metals. The competitor hired 2 new PMs and 3 new RAs at a total cost of \$2.75 MM per year. Tech investment is the same.

Analysis

Profitability					
	Year 1	Year 2	Year 3		Year 4
Sales ($MM)	$ 150	$ 300	$ 600		$ 1,200
Revenue ($MM)	**$ 1.5**	**$ 3.0**	**$ 6.0**		**$ 12.0**
Costs ($MM):					
Portfolio Managers (2)	$ 3.0	$ 3.0	$ 3.0		$ 3.0
Research Analysts (6)	$ 1.5	$ 1.5	$ 1.5		$ 1.5
Technology	$ 1.0	$ 0.50	$ 0.50		$ 0.50
Profit	**$ (4)**	**$ (2)**	**$ 1**		**$ 7**
Profitability	$ (4)	$ (6)	$ (5)		$ 2

Conclusion

Recommendation	Next Steps
InvestCo should expand product line to include precious metals investments. ▪ While not profitable in the first three years, break-even occurs in Year 3, and the company is profitable by Year 4 assuming sales trend continues. ▪ Key competitor already offers this solution for its customers, and customer switching costs are low. InvestCo needs to stave off this competitive threat by offering its own solution. ▪ The competition has a lower cost structure for personnel ($1.75 MM per year). If InvestCo could improve its cost structure, it could be profitable by Year 3.	InvestCo should conduct a benchmarking study to evaluate personnel needs required to offer this solution and to understand how the competitor offers the solution at a lower personnel cost. InvestCo should design this solution as soon as possible to begin marketing efforts and prevent customers from considering switching to the competitor. InvestCo should begin the technology upgrades that are required to ensure the infrastructure is in place when the new PMs and RAs are hired.

ROSS CONSULTING CLUB

Case 14: Cut-N-Edge

- Type: Market Entry
- Difficulty: Medium
- Industry: Personal Care
- Firm Format: McKinsey

Cut-N-Edge Hair Salons
Ross Original

Difficulty: Medium

Industry: Personal Care / Services

Type: Market Entry

Problem Statement

Your client, the owner of Cut-N-Edge, a successful chain of hair salons in a large metropolitan area, believes there is opportunity to grow her business by adding manicure services to her existing salons. Currently the salons offer only premium haircut and styling services. The salons are staffed by trained hair stylists.

Your client wants help understanding whether expanding into manicures is a good idea and, if she were to pursue the expansion, what kind of customer volumes she should prepare for in the first year.

Information Provided Upon Request

- Primary objective is short-term profitability (must be profitable at the end of year one to go forward with expansion).
- The owner will not add space to existing salons but, instead, swap out haircut stations for manicure stations.
- Hair salons are relatively recession-proof. Nail salons see revenue decline in a bad economy but have high margins to buoy them through tough times.
- The majority of the salon's current customers are adult women.
- The salon is open five days per week, Tuesday through Saturday.

Note to interviewer: This case proceeds more like a McKinsey case where the candidate will be asked specific questions throughout.

Solution Guide

Sample Structure

- Will manicure stations be more profitable than hair cut stations by end of year 1?

	Revenues	Costs
Hair Cut	- Types of hair services (cut, style, blowout, dye) - Product sales (styling products, shampoo, etc)	- Labor - Materials (shampoo, conditioner, styling products, hair dye, etc) - SG&A
Manicure	- Different types of manicures (gel, French, regular) - Product sales (lotion, polish) - Associated services (massage, paraffin wax)	- Labor - Materials (polish, dryers, tools, lotion, towels) - SG&A - Investment Cost

- Is this an attractive complementary market for the salon owner long-term?
  - Market size and growth rate: How big is metro market? Growing? Stable in good economy or bad?
  - Customer: Accessing existing customers' demand? What is their willingness to pay (pricing strategy)?
  - Impact on Cut-N-Edge brand: Opportunities for future growth? Maintain premium manicure reputation?
- What kind of customer volumes might the manicure service attract?
  - # of existing customers wanting manicures and hair cuts -- Frequency of manicure customers
  - # of new customers attracted by new service

Solution Guide

Possible Reasons to Consider Expansion

(1) Ask the candidate to brainstorm why the salon might consider this move in the first place. These could include:

- Capture existing customers who already get manicures elsewhere.
- Attract new customers for nail services who might also want salon services.
- Build brand beyond hair cut / styling; create opportunities for additional expansion (e.g., facials, waxing, pedicures, massage, etc.)
- Increase utilization of current hair cut setup while creating and utilizing capacity for the new service.

Solution Guide

Profitability of Hair Cuts vs. Manicures

(2) Calculate the difference in profitability between existing hair cut stations and the new manicure stations.

- Information provided to the candidate: Your client estimates that, on average, she can replace four haircut stations with six manicure stations in each salon. The investment here would be $5000 per salon.
- Calculations:

	Haircut	Manicure
# Stations	4	6
Utilization	50%	80%
Appt. Duration	60 minutes	45 minutes
# Daily Appts	16	48
Avg. Price	$50	$20
Total Revenue	$800	$960
Unit Cost	$35	$10
Total Cost	$560	$480
Total Profit	$240	$480

Synthesis:

Adding manicure stations would yield an incremental $240 in profit per salon per day, recouping the $5000 investment cost after about 21 days of operating.

This assumes eliminating four haircut stations, where in reality some of the volume could be shifted elsewhere in the salon to increase utilization.

Solution Guide

Customer Volume in Year One

(3) Calculate the customer volume the client could anticipate in year one of offering a manicure service.

- Information provided to candidate: Your client anticipates two types of manicure customers: (a) existing haircut customers who will now also pay for manicures and (b) new manicure customers who are attracted by the new service.

Existing customers:

- The 25 current Cut-N-Edge salons see customers for haircuts once every 10 weeks on average (about five times a year). Each salon has approximately 500 regular customers, 20% of whom are likely to add a manicure on to their existing hair cut appointment.
  - 25 salons x 1500 regular customers x 20 percent opt-in x 5 times per year = 37,500 appointments

New customers:

- Initial estimates suggest that for every $100 spent on advertising the new service, the salons would acquire 15 new customers. Their projected advertising budget for year 1 is $15,000.
  - ($15,000 / $100) x 15 new customers = 2250 appointments
- *Total appointments = 39,750 in year one*

Conclusion

Recommendation

- Proceed with adding manicure stations within the Cut-N-Edge salon network for an incremental $240 in profit per salon per day, recouping the $5000 investment cost after about 21 days.
- Cut-N-Edge could anticipate 39,750 manicure appointments in year one.

Next Steps

- Consider gradual rollout across network of Cut-N-Edge salons to ensure success of new offering.
- Survey existing customers to better estimate volume from existing customer segment.
- Conduct pricing exercise to firm up price and expected revenue.
- Conduct interviews and hire new manicurists.

ROSS CONSULTING CLUB

Case 15: Chef's Best Cutlery Co

- Type: Market Growth
- Difficulty: Medium
- Industry: CPG
- Firm Format: McKinsey

Chef's Best Cutlery Co.
McKinsey First Round

Difficulty: Medium

Industry: CPG

Type: Interviewer Led/ Market Growth

Problem Statement

Our client is an international manufacturer of medium and high quality kitchen knives. Chef's Best sells knives in more than 20 countries, with a focus in Latin America, US & Canada, and global emerging economies.

Chef's Best produces five types of knives:

-Steak Knives (Used at the table)

-Butcher Knives (Used for chopping meat)

-Carving Knives (Used for carving slices from large pieces of meat)

-Paring Knives (Used for cutting small fruits & vegetables)

-Chef's Knives (Large all purpose knives)

Chef's Best has had slowing sales growth in the past few years. How can Chef's Best increase revenue growth for the next 5-10 years?

Information Provided Upon Request

- Chef's Best sells primarily through a direct sales method (individual sales people throughout each region).
- Chef's Best sales are largest in Mexico, the US, and Brazil.

Phase 1: Ask candidate to brainstorm and tell you how they would approach the problem. Prod for depth/creativity in framework then move the candidate on to exhibit 1 after 7-10 minutes (next page).

A good framework should include major areas (e.g. product, customer, company, competition) but this is really a test of creativity and ability to derive a logical framework & brainstorming for this question with only ambiguous information. The framework will not be important for the next steps.

Phase 2: Market Overview Exhibit

Exhibit 1 Exercise

- Tell the candidate that you have some information to answer their question on growth and profitability. Hand out Exhibit 1. Ask the candidate to tell you what they have learned from this and what this information means.
  - Look for:
    - Identification of largest profit centers (Mexico & Brazil), etc.
    - Identification of poor growth in Mexico, the largest profit center, etc.
    - Candidate should be able to confidently reach conclusions about important areas to focus on and risk areas using basic review of these factors.
  - Ask Market Share Math question below [This is a test of the candidates ability to do math (with minimal rounding) under pressure. To pass this question the candidate must correctly calculate the answer with minimal mistakes and quickly recover from any mistakes. If the candidate does a good job of sharing their calculations you may offer corrections.]
  - If we have 23% Market share in Mexico, and we grow at the same rate as last year in the next year, what will our market share be in 1 year? Follow calculations and ask candidate to calculate to 1 decimal place. Example calculations:
    - Chef's Co Growth = (-70/100) = (x/7 -1) ➔ -.7 = x/7 -1 ➔ -.7+1 = x/7 -1 +1 ➔ .3 = x/7, x = 2.1
    - Market share = (23%*1.021) / (100% *1.07) ➔ 23.5/107 ➔ Long Division ➔ 21.9%

Phase 3: Product Category Overview Exhibit

Exhibit 2 Exercise

- Tell the candidate that you have some information to answer their questions about what is driving market share changes. Give them Exhibit 2 and ask them if this will help them answer your overall question.
  - Look for:
    - Identification of share losses in all categories
    - Highlight of both channel and share losses in the butcher knives category
    - Prioritization of areas for focus
  - When the candidate identifies their focus areas (or ask them to if they do not), move on to Exhibit 3. This exhibit may only take a few minutes.

Phase 4: Butcher Knives Detail

Exhibit 3 Exercise

- Tell the candidate that you have some information to answer their questions about the Butcher Knives category. Ask them to look at Exhibit 3 and prompt them to tell you how this helps you answer your question if needed.
  - Look for:
    - High overall growth rate (correlating to poor market share performance in Exhibit 2)
    - Acknowledgement of potential of retail distribution vs. Direct sales model that currently accounts for majority of sales.
    - Development of recommendations to invest behind the butcher knives category and drive increased distribution, focus on expanding Recycled Steel distribution, Japanese & General Purpose distribution
    - Generally drawing upon earlier exhibits to developer broader recommendations
  - After about 5 minutes with this slide move the candidate and ask them to prepare you a recommendation slide to present to the Chef's Best CEO.

Conclusion

Recommendation

Candidate recommendations should encompass all 3 exhibits. Ideally they were developed/discovered by the candidate as they progressed through the case.

Examples:

- Focus on growing share in Mexico, US, to retain the core business and avoid losing share and scale economies to competitors
- Invest in emerging markets but recognize that top 3 markets are 60% of sales and cannot be ignored
- Invest in Butcher Knives to expand distribution and address any weaknesses in marketing
- Begin to shift more of the business away from costlier and lower growth potential direct sales model to retail sales (diversify away from declining sales channels)

This case provides a good challenge to force the candidate to think creatively in addition to identifying the most obvious recommendations. The 3 exhibits provide 3 tests of their ability to interpret data, and include one medium difficulty math challenge.

Next Steps

Examples:

- Open negotiations with additional retail distributors to identify next steps towards gaining additional distribution
- Conduct a competitive analysis in Mexico and the US to identify specific causes for lower than market share growth
- Prepare financial plans for increasing investment plans in Butcher Knives

Exhibit 1

Overview of Major Markets

	Revenue	Profits	Market Growth	Chef's Best Index to Market
Mexico	345	69	7	-70
US	242	17	3.2	-53
Brazil	133	28	6.6	21
Poland	106	16	7.9	-75
Argentina	74	19	16.2	48
Russia	60	7	22.1	-59
Malaysia	54	8	10.2	-12
Japan	43	12	4.5	22
Colombia	39	7	13.2	14
Venezuela	33	5	25.8	5

Index to Market Calculated as [(Chef's Best Growth/Market Growth)-1]*100

Exhibit 2

Overview of Product Categories

Market Category	Revenue	Change in Rev. Past 5 Years	Market Driven	Channel Driven	Share Driven
Steak Knives	366	128	136	22	-30
Butcher Knives	243	27	186	-46	-113
Carving Knives	226	59	55	7	-3
Paring Knives	165	36	48	-2	-10
Chef's Knives	97	49	35	19	-5
Total	1096	298	460	0	-161

ROSS CONSULTING CLUB

Exhibit 3

Details of Butcher Knives Category

Chef's Best not Distributed	
10-20% Share	
Over 20% Share	

	General Purpose	Japanese Design	Ever-Sharp	Titanium Edge	Light Weight	Recycled Steel
Chef's Best Sales by Product	25%	23%	14%	9%	18%	11%
Annual Market Growth (past 5 years)	9%	11%	6%	7%	1%	12%
High End Mass market						
Mass Market						
Discount						

Additional recommended cases from past casebooks

Additional Recommended Cases

For additional practice, RCC Casebook team recommends few other cases. List of the recommended cases has been uploaded at the following Ross Consulting Club location:

Ross Consulting Club>>Resources>>Casebooks>> "Recommended Cases" (http://cglink.me/d199252)