MasterTheCase.com

TOP CONSULTING INTERVIEW PREP

The NYU | Stern MBA MCA Casebook: 2017

MCA NYU | STERN

Acknowledgements

The creation of this book was a collaborative effort building on the hard work of many previous classes. Many thanks to all who contributed, including but not limited to the following:

2017-18 MCA Presidents: Ryan Engler, Christopher Larsen
2017-18 VPs of Casing Initiatives: Evan Geilich, Wes Going, Leonard Kuang

2017 MCA Case Competition Winners:

- Jasmine Dyba
- Jenna Charles, David Sedgwick, Jonathan (Yoni) Farber
- Jwalit Patel, Michael Scolnic

2017 MCA Case Competition Runner-Up:

- Rodrigo Vargas

We would also like to thank the following firms for contributing cases for inclusion into the casebook:

2017-18 MCA Sponsors

Platinum

KPMG

pwc strategy&

Gold

BCG The Boston Consulting Group

Deloitte.

EY Building a better working world

Silver

accenture

Capgemini Consulting

Cognizant

ims consulting group

SSA

MCA NYU | STERN

Table of Contents

Industry Overviews

Airlines

Summary

- Low margins, price is often the major competitive factor
- Deregulated in 1978 from government control of fares, routes, increased competition

Trends

- Mergers and consolidation in industry
- Bankruptcy prevalent industry
- Capacity optimization (load factor) and schedule planning critical
- Price, fare competition on competitive routes

Channels

- Airline websites
- Airline sales team (at terminal, kiosks, call centers)
- 3rd party websites
- Travel agents

Players

- Legacy Carriers (Delta, United, American)
- Low cost carriers (mainly domestic)

Product

- Transportation of people and cargo

Customer

- Leisure (price sensitive)
- Business (price insensitive)
- Freight and cargo

Size

- ~$205.1B in sales (2015)
- American, $41B; Delta, $40.7B; United, $37.9B; Southwest, $19.6B (2015)

Revenue Drivers

- *Revenue Passenger Miles* (RPM) = # pax carried x distance flown
- Baggage fees
- In-flight purchases (food, alcohol, entertainment)
- Cargo and mail fees
- Tiered amenities (more legroom, i.e. up-selling)
- Other ancillary fees (reservation changes, etc)

Cost Drivers

- Fuel
- Labor (pilots, ground crew, customer service reps)
- In-flight goods (food, entertainment, etc)
- Marketing
- Insurance
- Legal fees
- Aircraft leases
- Maintenance / equipment
- Gate leases

Key Terminology

- *Available seat miles* (ASMs) – measure of airline capacity = aircraft miles flown x # of seats available for pax use
- *Load factor* – measurement of total aircraft seating capacity sold = revenue passenger miles (RPM) / ASMs
- *Variable pricing* – due to perishable inventory of seats in flights
- *Major airline* – Annual operating revenue > $1B
- *National airline* – $1B > Annual operating revenue > $100M
- *Regional airline* – $100M > Annual operating revenue

Banking & Financial Service

Summary

- Diversified Financial Services firms (e.g. JPMorgan, Citi) which combine insurance, securities, and lending
- Consumer finance firms primarily lend money to consumers (e.g. credit cards, home equity loans, mortgages)

Trends

- Following financial crisis, increased regulation (e.g. Dodd-Frank), which created stricter capital requirements and effectively eliminated proprietary trading
- Demographic shift creating large market for retirement products

Channels

- Physical bank branches, but increasing use of ATM services, online banking
- Banks increasingly offer credit cards and home loans to increase asset base
- Mobile Channel growing rapidly

Players

- Highly competitive, with large national/international banks competing with regional and online banks

Product

- Advisory services, access to equity/debt markets, credit cards, mortgages, loans, insurance, checking/savings

Customer

- Include individual consumers, high net-worth individuals, small to large businesses

Size

- Difficult to measure, but OECD estimates financial services make up ~20% of GDP in developed countries

Revenue Drivers

- Primarily interest and fees / premiums
- Interest revenue is generated by the spread between a bank's borrowing cost and interest charged to lenders
- Fees come from a variety of sources and in an investment bank include trading commissions, M&A fees, or a fee charged against assets under management

Cost Drivers

- Labor / salaries
- Marketing
- Admin and overhead
- Research (whether to buy/sell securities, or suggest a specific merger)
- Losses on investments, such as loan defaults
- Capital required to protect against risks, such as a sudden customer withdrawals (bank runs)

Key Terminology

- *Commercial banking* - a type of financial institution that provides services such as accepting deposits, making business loans, and offering basic investment products
- *Retail banking* - services by a bank to individual consumers, which include savings and transactional accounts, mortgages, personal loans, debit cards, and credit cards
- *Investment Banking* - services to individuals, corporations, and governments such as raising financial capital by underwriting or acting as the client's agent in the issuance of securities
- *Dodd-Frank* - financial reform passed by the Obama administration in 2010 in response to the financial crisis of 2008. Intends to decrease various risks in the U.S. financial system.

Entertainment & Media

Summary

- The industry encompasses the generation and distribution of video, audio, and print media
- Consumer discretionary driven with some segments resistant to downturn

Trends

- Shift in content distribution channels from traditional mediums to digital
- Importance of network effects
- Over the Top (streaming) / video on demand - e.g. Netflix, Hulu

Channels

- Print: traditional, online, mobile
- Television: broadcast, cable, satellite, online, mobile
- Movies: theaters, rentals, online (growth area)

Players

- Highly competitive, with new disruptive entrants including Netflix and Amazon
- Others include Disney, Time Warner, Viacom, Sony

Product

- Film
- Music, video games
- TV shows, news
- Books & Magazines
- Live entertainment

Customer

- Both individual viewers and companies that advertise in ad-driven revenue models
- Network effects important in growing individual viewers

Size

- Biggest markets US & China
- Global revenues of ~$1.5T, split between end consumers ($1T) & advertising spend ($500B)

Revenue Drivers

- Advertising is generally the key revenue driver for media offered at no cost to customers
- Other revenue drivers are subscriptions, licensing fees, and one-time purchases
- Media consumption driven by economic factors, especially inflation
- Some segments, like cable, are resistant to economic downturns

Cost Drivers

- VC include production costs (salaries, technology)
- FC include capital costs (studios, printing presses); overheard, marketing & advertising
- Labor intensive, high cost of talent. Marketing represents large portion of costs, given competition for consumer attention. Investments in digital represent newer but growing cost area

Key Terminology

- *Over the top* - content delivered over the Internet without the involvement of a multiple-system operator (MSO)
- *Omnichannel* – selling or distributing products through multiple channels

Healthcare Providers

Summary

- Industry consists of facilities, distributors, and service providers
- Companies provide medical services that are typically funded by patient's insurance

Trends

- The industry has been consolidating in a already top heavy market
- Healthcare spending has been on the rise (overall decline of health, ACA)
- Drug pricing has come under scrutiny (eg: Martin Shkreli, EpiPen)

Channels

- Hospitals
- Pharmacies
- Urgent care facilities
- Long-term care facilities
- Clinics

Players

- Facilities (HCA Holdings)
- Services (Express Script, Cardinal Health)
- Distributors (McKesson)

Product

- Healthcare services

Customer

- Everyone, but frequency is correlated with age (youth and elderly will require services more often)

Size

- 6.37T (Total Healthcare Industry)
- Express ($44B)
- McKesson ($34B)

Revenue Drivers

- Reimbursement from third-party payers (insurance, government, employers)
- Patient co-pays
- Revenue is heavily dependent on insurance coverage - the ACA led to a boost in industry revenues

Cost Drivers

- Labor costs (doctors, nurses, etc.)
- Supplies (medication, tools, etc.)
- Insurance (malpractice, liability)
- Overhead (rent, administration, etc.)

Key Terminology

- *ACA* – Affordable Care Act (Obamacare)
- *Fee-for-service* - Method of payment in which providers are compensated for each service they perform
- *Fee-for-value* – Method of payment in which providers are compensated for the outcome of treatment

Healthcare Payers (Insurance)

Summary

- Industry provides insurance coverage to both companies and individuals
- Insurance is heavily based on risk measurement and forecasting the inflows and outflows of cash

Trends

- With the uncertain future state of healthcare regulation, insurance companies are holding back from making long term decisions
- In the past few years, there has been a lot of consolidation in the industry

Channels

- Employers
- Healthcare Marketplaces
- Government

Players

- United Health Group, Anthem, Aetna, Humana, CIGNA

Product

- Health insurance coverage

Customer

- Depending on legislation, health insurance coverage may be mandated for everyone

Size

- $800B (2016)
- UHG, $180B; Anthem, $90B, Aetna, $60B; Humana, $55B; CIG, $40B

Revenue Drivers

- Insurance premiums
- Government subsidies
- The main source of revenue is insurance premiums paid by members

- Insurance companies calculate premiums based on risk pools – the costs of the healthy are subsidized by the sick

Cost Drivers

- Payouts to healthcare providers
- Re-insurance (insurance for insurance companies)
- SG&A and legal/regulatory costs

- Insurance companies often negotiate directly with healthcare providers on reimbursement rates. The billed price is typically paid at a discount.

Key Terminology

- *Managed Healthcare Organization* – A system of provider networks implementing a method of delivering and paying for healthcare. Includes HMOs and PPOs
- *Capitation* – an agreement between a healthcare provider and an insurance payer that pays the provider a fixed sum for every patient taken on. Typically occurs within HMOs.

Hospitals/Providers

Summary

- Physician and clinical services account for ~20% of US health expenditures
- Highly affected by healthcare reform
- Increase in Medicaid coverage has driven hospital revenues thru increase in inpatient care and decrease in bad debt

Trends

- Technological advances in delivery have shifted more inpatient to outpatient care
- Fee-for-service model, where payers cover all services performed regardless of impact, has helped contribute to the ballooning of U.S. spend on healthcare

Channels

- Hospitals (acute care, rehabilitation, psychiatric, specialized)
- Outpatient facilities
- Nursing homes
- Assisted-living facilities

Players

- For-profit hospitals
- Non-for-profit hospitals
- Clinics

Product

- Providing healthcare, procedures, drugs, rehab, assisted living

Customer

- Patients
- Insurance companies, government (payers)

Size

- ~$635B (2015) spending on physician, clinical services

Revenue Drivers

- Operating statistics
  - Patient admissions
  - Medical procedures
  - Surgery volumes
  - Length of stay
  - Repeat treatments
- Ancillary sales (food, etc)
- 3rd Party Payer Reimbursement (i.e. Medicaid prescription funding)

Cost Drivers

- Labor (physicians, nurses)
- Overhead (leases)
- Equipment and maintenance
- Pharmacy inventory
- Marketing
- Legal fees
- Administrative fees
- Uncompensated care (bad debt, uninsured individuals, charity care)

Key Terminology

- *Fee-for-service (FFS)* – method of payment in which providers are compensated for each service they perform, regardless of impact; leads to providers over prescribing tests/services which has contributed to large U.S. healthcare spend
- *Medical cost ratio (MCR)* – expense ratio dividing total direct medical costs by revenues from premiums; an indicator of insurance companies' abilities to match premiums with expenses
- *Primary care* – routine heath care (doctor's office / health center)
- *Acute care* – conditions requiring immediate / constant attention

Industrials

Summary

- A large and diverse industry that provides products and services primarily used to produce other goods
- Main sectors: Electrical equipment / components, heavy machinery, construction, aerospace and defense

Trends

- Highly tied to gross domestic product (GDP) growth, production and capacity utilization and other economic indicators
- Greatly impacted by recession, as drop in overall capital and construction spend decreases

Channels

- Primarily B2B – salesforce driven using either internal salesforce or external (i.e. distributor relationships, can be exclusive or non-exclusive)
- Trade shows

Players

- Wide range of players from large manufacturers (e.g. GE, 3M, Boeing) to regional, family-owned players

Product

- Wide variety of products primarily used to produce other products

Customer

- OEM (original equipment manufacturer)
- B2B
- Government

Size

- ~$2.2 trillion in 2016
- Fragmented overall, varying within product category

Revenue Drivers

- Volume (driven by product type and demand)
- Contract length
- Bundling of product and services (e.g. maintenance package)
- Diversity of customer
- Adjacent industry entry
- New technologies and products

Cost Drivers

- Operating expenses
- Outsourcing (quality vs cost)
- Labor (unions)
- Supply chain management
- Channel / distribution management
- Efficiency (utilization)
- Capital investment
- R&D
- Marketing
- Industrial automation

Key Terminology

- *Capacity utilization* – efficiency measure of actual production relative to total potential production
- *Book-to-bill ratio* – measure of underlying demand trends; compares new orders to sales
- *Inventory turnover* – # times inventory is sold in a period
- *Industrial automation* – the system of controls for manufacturing equipment including robotics, sensors and programmable logic controllers; can help reduce costs and improve consistency

Life Sciences/Pharma

Summary

- Top treatment areas are 1) oncology, 2) antidiabetics and 3) pain
- Global Pharma Sales: US (40%), BRIC (23%) and EU5 (14%)
- Big pharma partnering with biotech firms thru acquisition or licensing

Trends

- New technological breakthroughs allow for development of new products
- High growth in emerging markets
- Large consolidation through M&A
- Pressure from scrutiny over high prices
- Aging population in developed countries

Channels

- OTC – Over the counter, no prescription; sold at retail locations (CVS)
- Prescription drugs – sold at hospitals and pharmacies
- B2B – Distributors sell to hospitals and pharmacies

Players

- Originator drug producers: new, patent protected drugs
- Generic drug producers: imitation drugs post-patent

Product

- Drugs targeting various treatment areas
- Success of drug determines success in industry

Customer

- Doctor, 'provider'
- Insurance company 'payer'
- Patients, end consumer
- Government (NIH facilities)

Size

- US consumers spent ~$4245B on drugs in 2015
- Comprised of large (J&J, Pfizer), mid and small cap

Revenue Drivers

- Drug sales
- Doctor's influence
- Government subsidies
- 3rd Party Payer formulary (approved and available to consumers thru insurance)
- 3rd Party Payer Reimbursement (i.e. Medicaid prescription funding)
- FDA approval (3 phases)
- Patent protection

Cost Drivers

- Manufacturing and production cost
- Pre-FDA Approval costs (1 in 5,000 compounds discovered reaches shelves, <33% of marketed drugs recoup R&D expense)
- R&D (~15% of sales)
- Sales and marketing (~30% of sales)
- Regulatory and legal costs
- Fees and discounts (law mandated rebates to Medicaid beneficiaries)

Key Terminology

- *'Patent cliff'* – expirations of significant patents worth $255B in pharma sales from 2011-2015, which hurt sales and pressured R&D budgets of former patent holders
- *Formulary* – list of approved medicines by payer to its customers
- *'Breakthrough Therapy'* – FDA designation permitting faster approval for significant advances in needed areas
- *First to Market* – best advantage for drug company; on average has a +6% market share advantage 10 years after launch

Oil & Gas

Summary

- Oil & Gas is a stage based industry
- Upstream: Drilling and extracting raw oil
- Midstream: Transporting the raw oil
- Downstream: Refining and selling the finished petroleum products

Trends

- Outlook for consumable fuels industry remains negative as the world shifts away from non-renewable energy
- Heavily consolidated industry
- Majority of market share is tied to upstream operations

Channels

- Gas Stations
- Wholesale Gas Distributors
- Utility Companies

Players

- Exxon Mobil, Chevron, Occidental Petroleum
- The 3 have a combined market share of 50%

Product

- Gasoline, Oils, Fuel
- Petroleum Products

Customer

- Main customers are vehicle operators
- Almost everyone will use some form of gas/oil

Size

- $4.4T (2017)
- Exxon Mobil (29.5%)
- Chevron (15.7%)
- Occidental (4.6%)

Revenue Drivers

Upstream
- Crude Oil Prices

Midstream
- Transportation Fees

Downstream
- Sale of Gasoline, Oils, Fuel, and other Petroleum Products

Cost Drivers

Upstream
- PP&E
- Surveying Fees
- Maintenance
- Labor
- Insurance

Midstream
- PP&E
- Crude Oil
- Transportation
- Storage

Downstream
- PP&E
- Crude Oil
- Transportation Fees

Key Terminology

- *Organization of Petroleum Exporting Countries (OPEC)* – An intergovernmental organization that accounts for ~44% of global oil production and ~73% of the worlds proven oil resources. The are a legal cartel that effectively controls the price of oil.
- *Oil Futures* – A contract made to purchase oil at a predetermined price at a specific time. Used to hedge against the price of oil.
- *Crude Oil* – The naturally occurring, unrefined petroleum product that is refined into gasoline and other products

Private Equity & Venture Capital

Summary

- PE and VC firms invest in and help manage / guide businesses with the goal of profits from company growth resulting in profits from a sale / exit
- PE and VC funds are illiquid, alternative investments generally only available to high net-worth / accredited investors

Trends

- 2016 deregulation lets ordinary investors fund startups and private investments, growing crowdfunding platforms
- Companies waiting longer to go public; number of IPOs down from early 2000s
- Valuations close to 10 year highs
- Tech and Biotech see largest investment

Channels

- There are not distribution channels in the conventional sense, but PE/VC capital reaches companies through:
- Direct equity investments, leveraged Buyouts (LBOs), mezzanine capital, growth capital, distressed investments,

Players

- PE: largest include KKR, Carlyle, Blackstone, Apollo
- VC: largest include Sequoia, Andreesen Horowitz, Accel

Product

- Funds often have strategies, which include venture capital (startups), growth capital, mezzanine, LBOs, distressed, real estate, etc.

Customer

- Investors include pension funds, insurance companies, high net-worth individuals, sovereign wealth funds, corporations

Size

- Globally about $2.5T, but closer to $4.5T when including private debt, real estate, infrastructure, etc
- U.S. VC market ~$30B

Revenue Drivers

- Return on investments, or carried interest, is the share of profits kept by the fund. Wide variation/risk and long timeframe, but large upside
- Management fee – a small fee (~1-2%) charged to pay administrative expenses, salaries, rent, etc.

Cost Drivers

- Losses on investments – PE portfolio of companies typically smaller than VC, but both designed to reduce risk through diversification
- Labor expense (few and highly paid employees)
- Investment expenses, including legal, consultants, travel, admin expenses

Key Terminology

- *Carried interest*, or carry, in finance, is a share of the profits of an investment paid to the investment manager in excess of the amount that the manager contributes to the partnership, specifically in alternative investments
- *Distressed investment* – an investment into a company that is near or going through bankruptcy
- *Leveraged buyout* - the purchase of a controlling share in a company by its management, using outside capital
- *Mezzanine capital* - subordinated debt or preferred equity that represents a claim on a company's assets which is senior only to common shares
- *Portfolio company* – company that a PE/VC fund has invested in

Retail

Summary

- Price promotions lower profit margins
- Industry follows the economy, consumer disposable income drives demand
- Specialty retailers now offer service to differentiate themselves

Trends

- Omnichannel retail growing through e-commerce development or acquisition
- Online sales growing (~9% of all retail sales). Brick and mortar sales still dominate but with shrinking footprint

Channels

- Brick and mortar: Department, Big box stores; Discount retailers; malls; popup shops
- Online, Mobile (21% of digital sales, 2016)

Players

- Department stores
- Discount retailers
- Wholesalers
- Online retailers

Product

- General merchandise
- Consumer goods
- Food and drug
- Home improvement
- Apparel, and more

Customer

- B2B (wholesalers, government contractors)
- B2C (individual customers)

Size

- ~$4.8 trillion in sales in 2016

Revenue Drivers

- Consumer spending (store/website traffic with average ticket price)
- Brand strength (importance dependent on product, i.e. luxury vs commodity)
- Promotions, discounts
- Membership fees
- Private label brands – offer own products with better margins

Cost Drivers

- Cost of Goods Sold
- Labor (wages)
- Overhead (rent and utilities)
- Marketing
- Inventory management
- Supply Chain (sourcing and transportation)
- R&D

Key Terminology

- *Sales per square foot* – Avg revenue / square ft sales space; efficiency measure
- *Inventory turnover* – # times inventory is sold in a period
- *SKU* – stock keeping unit, specific ID code for a product
- *Same store sales* – sales from stores open > 1yr; performance comparison of established stores over time
- *Seasonality* – most retail sales done in the fourth quarter
- *Omnichannel* –selling products through multiple channels

Technology

Summary

- Broad description including software, hardware, online services, and storage.
- May also include companies producing servers, semiconductors, communications equipment, IT services, software and application development

Trends

- Cloud computing, using shared services in a rent instead of own model
- A shift towards lighter, mobile software
- Consolidation through M&A activity, and huge capital expenditures, led by Apple, Amazon, Google, and Facebook

Channels

- Business/Enterprise: Primarily through a direct sales force
- Retail: Varies widely across this broad industry description, but typically direct-to-consumer for the largest companies

Players

- Online services: Apple, Amazon, Facebook, Google
- Hardware: Apple, Samsung, Google, AMD, Intel
- Software: Microsoft, IBM

Product

- Online services: Security, productivity, platforms
- Hardware: Computers, smartphones, servers
- Software: search, storage

Customer

- Generally, large companies make up biggest share of customers, then small/medium businesses, then retail/consumers

Size

- Varies based on industry definition, but likely over $3T. As of 2016, Apple was 9th largest company in world by revenue, with $215B

Revenue Drivers

- Online services: to consumers, services often free, so dependence on ad revenue. Subscription model also common, more in B2B
- Hardware: firms often seek to create ecosystems through apps, accessories
- Software: licensing model, exponential growth curve

Cost Drivers

- Large R&D expenses, product development
- Component manufacturers important and large expense in hardware business
- Software: lower operational and variable costs following product launch
- IT, infrastructure, labor also large costs

Key Terminology

- *Big Data* - extremely large data sets that may be analyzed computationally to reveal patterns, trends, and associations, especially relating to human behavior and interactions.
- Software as a service (SaaS), is a business model in which software is centrally hosted and licensed on a subscription basis.
- *Cloud computing* - the practice of using an internet hosted remote servers to store, manage, and process data

Firm Overviews

A.T. Kearney

A.T. Kearney is an American global management consulting firm that focuses on strategic and operational CEO-agenda issues facing businesses, governments and institutions around the globe

Unique Firm Aspects:

- McKinsey spin-off, founded in 1926, partner owned
- Historical strength in operations, supply chain, and strategy
- Strong focus on growing, being most admired firm, diversity
- Generalist model; consultants have option to designate industry/ functional affinity relatively early. Networking important for staffing.
- Industry expertise: Consumer & Retail, Industrial, Public Sector. Financial Services & Private Equity growing quickly.

Recruiting Tips:

Touch: Med to High;
ATK typically hosts multiple events (corporate presentation, lunch & learn, happy hour) and encourages candidates to reach out to learn about the firm. NYU presence at ATK was limited but is now quickly growing.

Firm-Specific Facts:

Case Names: Cases
Career Path: Analyst (pre-MBA) → Associate → Manager → Principal → Partner
# of Consultants: 2,300 +
Offices: 60 in 40 countries
US Locations: 8 – Chicago (HQ), New York, Boston, SF, etc.

Interview Process:

- First Round (On-campus)
  - Conducted by manager or principal
  - Two 45 minute cases, 1 behavioral and 1 case
- Second Round (In office)
  - Two behavioral interviews with case-like questions, with at least 1 conducted by partner
  - Written case; 1 hour preparation, 30 min presentation to 2 managers or above

Accenture

Accenture is a global professional services company providing a range of strategy, consulting, digital, technology & operations services and solutions.

Unique Firm Aspects:

- One of the largest professional services firms in the world
- Generally known for as a leader in tech services (IT, digital, and tech consulting), they have recently expanded their strategy and consulting divisions
- Regional staffing model, with mix of local and travel projects within region
- Networking important for case staffing

Recruiting Tips:

Touch: Low:
Accenture does not typically host many events on campus. To set up touch points with Accenture consultants, contact the campus recruiter.

Firm-Specific Facts:

Case Names: Cases
Career Path: Consultant → Manager → Managing Director
# of Consultants: 1,000+
Offices: 200+ cities in 55+ countries
US Locations: 50+ Locations in most US states

Interview Process:

- First Round (On campus)
  - One 45 minute behavioral interview
    - Large emphasis on "why Accenture?"
- Second Round (At office)
  - One 45 minute behavioral interview
  - One 45 minute case interview

Bain & Company

BAIN & COMPANY

Bain is a global management consulting firm that works with top executives to help them make better decisions, convert those decisions to actions and deliver sustainable success.

Unique Firm Aspects:

- Bain is a generalist firm
- Bain follows a home-staffing model – consultants will typically work with their base office colleagues on cases
- Industry Expertise: Bain has a strong presence in all industries, but has is especially strong in the private equity space
- Ranked #1 on Glassdoor's Best Places to Work in 2017

Recruiting Tips:

Touch: Low:
Bain typically hosts multiple encourages recruits to reach out to learn about the firm but they do not require multiple touch points with the firm.

Firm-Specific Facts:

Case Names: Cases
Career Path: Consultant → Case Team Leader → Manager → Principal → Partner
# of Consultants: 1,000+
US Locations: 10
Atlanta, Boston, Chicago, Dallas, Houston, Los Angeles, New York, Palo Alto, San Francisco, Washington D.C.

Interview Process:

- First Round (On-Campus)
  - Two 30 minute interviews consisting of a few short behavioral questions and a case interview
- Second Round (In Office)
  - One 45 minute behavioral interview
  - One 45 minute verbal case interview
  - One written case interview (60 minutes prep, 45 minute discussion)

M C A NYU STERN

Boston Consulting Group (BCG)

BCG is a global management consulting firm and one of the world's leading advisors on business strategy. BCG advises across industries in value creation, strategy, innovation, operations, and digital transformation.

Unique Firm Aspects:

- Regional staffing model
- Low leverage ratio; Principals and Partners work 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
- Leader in thought leadership, social impact
- Expertise: generalist strategy firm with heavy focus on transformations and large-scale change; large investment in digital

Recruiting Tips:

Touch: Medium. BCG hosts several events on campus, including corporate presentation, lunch & learn, and happy hour. Developing relationships via MCA and OCD resources can be helpful.

Firm-Specific Facts:

Case Names: Projects
Career Path: Associate → Consultant → Project Leader → Principal → Partner
# of Consultants: 6200
Offices: 88 offices, 48 countries
US Locations: 16, including NY, NJ, DC, Boston, Chicago, SF

Interview Process:

- First Round (On-Campus)
  - Two 45 minute interviews
  - Each interview consists of ~15 min behavioral, ~25 min case
- Second Round (At Office)
  - Two 45 minute case interviews typically conducted by senior representatives

Cognizant

Cognizant is a world-leading professional services company, transforming business, operating and IT models for the digital era.

Unique Firm Aspects:

- Strength in technology, data analytics, operations
- Professional services business provides pipeline of clients
- Accelerated promotion track available to top performers
- National staffing model
- End-to-end solutions provider

Recruiting Tips:

Touch: Low touch. Cognizant hosts a corporate presentation, but does not host as many events as other management consulting firms.

Firm-Specific Facts:

Case Names: Cases
Career Path: Senior Consultant → Manager → Senior Manager → Director → Senior Director
# of Consultants: 3,000+
Offices: 50+
US Locations: 37+

Interview Process:

- First Round (On-Campus)
  - One 30 behavioral interview
  - One 45 minute case interview, often technology focused
- Second Round (At Office)
  - Two 30 minute interviews consisting of behavioral, resume/experience, and mini-case questions

Deloitte

As a global firm, Deloitte consulting specializes in strategy and implementation across a number of industries and functions

Unique Firm Aspects:

- National staffing model
- Work across 30+ industries and 8 sectors
- Designate preferred practice with application
  - Strategy & Operations
  - Technology (Deloitte Analytics and Deloitte Digital)
  - Human Capital
- Opportunities in strategy and implementation with focus on executable strategy

Recruiting Tips:

Touch: Highest; Continued interaction throughout the semester is encouraged (participation in on-campus events and beyond)
Focus: Personal impact, Cultural fit (desire to be at the firm), Quant skills (data dump)

Firm-Specific Facts:

Career Path: Consultant (MBA) → Senior Consultant → Manager → Senior Manager → Partner, Director
# of Consultants: 20,000+
Offices: 600+ in 150+ countries
US Locations: 80+

Interview Process:

- First Round (on campus)
  - 30 minute behavioral interview
  - 30 minute case
- Second Round (At office)
  - 30 minute behavioral interview
  - 60 minute case
  - 90 minute group case

EY

EY (formerly Ernst & Young) is a multinational professional services firm that provides audit, tax, advisory, and transaction advisory services (TAS). They are one of the Big Four accounting firms.

Unique Firm Aspects:

- Historically, EY has recruited at Stern for two groups: Operational Transaction Services (OTS) and Financial Services Organization (FSO) Advisory
    - OTS is focused on completing operational due diligence and integration consulting work
    - FSO is focused on consulting for financial service clients
- EY also has a variety of specialized consulting groups that are nested under both their advisory and TAS lines.

Recruiting Tips:

Touch: Low to Mid:
EY did notice recruits who made an effort to get to know the firm. Excess networking is not required by can improve chances of receiving an offer.

Firm-Specific Facts:

Case Names: Cases
Career Path: Consultant → Manager → Director/Partner
# of Consultants: 1,000+
Offices: 700+ in 150+ countries
US Locations: 50+
Locations in every US state

Interview Process:

- First Round (On-Campus)
    - One 30 minute behavioral interview
    - One 30 minute case interview
- Second Round (At Office)
    - One 30 minute behavioral interview
    - Two 30 minute case interviews
    - One 90 minute group case interview

IBM

IBM is an American multi-national technology company that for more than a century has been dedicated to every client's success and to creating innovations that matter for the world.

Unique Firm Aspects:

- Unique value proposition due to firm history and focus; strong emphasis on Watson and data analytics capabilities
- Strength in digital and technology consulting, due to wider business
- IBM consistently ranked as one of world's most valuable brands, most innovative companies, and as the leader in technology consulting and outsourcing
- Relatively small management / strategy consulting practice (by number of employees)

Recruiting Tips:

Touch: Medium/Low:
IBM typically hosts a corporate presentation and coffee chats, but not as many networking events as some other on-campus recruiting firms. Opportunities across consulting and product management.

Firm-Specific Facts:

Case Names: Cases
Career Path: Senior Consultant → Managing Consultant → Associate Partner → Partner
# of Consultants: 1,000+
Offices: Global Business Services is in 5 locations: NYC, Austin, SF, D.C., Chicago

Interview Process:

- One round only (Off-Campus)
  - One 30 minute behavioral interview
  - One 30 minute case interview
  - Networking event / tour of the office the night before interviews

KPMG

KPMG's Management Consulting practice leverages the firm's resources across its global network of firms and practices to help clients deal with ambiguity and complexity

Unique Firm Aspects:

- Large firm with three main service lines, Audit, Tax, and Advisory (where consulting sits). Work ranges from risk consulting to M&A and tends to be more operational in nature
- National staffing model
- Work across 6 verticals: Retail, Energy, Financial Services, Healthcare, Industrial Manufacturing and TMT
- Global brand and varied capabilities offer great training opportunities and vast project exposure.

Recruiting Tips:

Touch: Medium to low; Continual interaction not needed for interview, although knowledge of firm is important during the interview
Focus: Leadership abilities, Entrepreneurial drive, Problem solving skills, Personal impact

Firm-Specific Facts:

Career Path: Consultant (MBA) → Senior Consultant → Manager → Senior Manager → Partner
# of Consultants: 50,000+
Offices: 600+ in 150+ countries
US Locations: 87

Interview Process:

- First Round (on campus)
  - Conducted by consultant or engagement manager
    Two 45 minute interviews, behavioral and case
- Second Round (At office)
  - Conducted by manager or above
  - Three 45 minute interviews, behavioral and case

L.E.K. Consulting

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

Unique Firm Aspects:

- Office-based consulting model reduces travel frequency (~90% of consultants in office daily) and shortens project length (4-8 weeks)
- ‘Case Team’ structure allows for immediate leadership opportunity, every consultant manages a team of Associates from day one
- Generalist model, but have the ability to ‘dedicate’ to specific industry relatively early (~1 year)
- Work across 16 industry groups and 4 functional capabilities
- Industry expertise: Private Equity, Airlines, Healthcare, Medtech

Recruiting Tips:

Touch: Med to High;
On campus recruiting events are growing, but limited. As a result, taking initiative to network is needed to get on the interview list
Focus: Analytical skills, Leadership ability

Firm-Specific Facts:

Career Path: Associate → Consultant (MBA) → Manager → Managing Director
# of Consultants: 1,000+
Offices: 22 in 14 countries
US Locations: 5
Boston, New York, San Francisco, Chicago, Los Angeles

Interview Process:

- First Round (Phone Interview)
  - Conducted by consultant or manager
  - Two 30 minute cases, 1 market sizing and 1 more qualitative focused case; behavioral discussion prior
- Second Round (At preferred office)
  - Conducted by manager or above
  - Two 30 minute cases, similar to First Round
  - Written case; 1 hour preparation, 30 min presentation

McKinsey & Company

McKinsey & Co is a global management consulting firm focusing on high profile studies to create lasting improvements for leading businesses, governments and institutions

Unique Firm Aspects:

- National staffing model
- Work across 22 industry practices and 12 functional practices
  - Functional practices specialized, can either apply as generalist or to a functional practice
  - Functional practices include Marketing & Sales, Operations, Digital McKinsey, Implementation
- Build Your Own Path culture emphasized – pick your type of cases
- Vast amount of resources – own analytics and graphics capabilities

Recruiting Tips:

Touch: Lowest;
Candidates are selected based on resume, application doesn't require cover letter.
Focus: Leadership abilities, Entrepreneurial drive, Problem solving skills, Personal impact

Firm-Specific Facts:

Career Path: Associate (MBA) → Engagement Manager → Associate Principal → Partner
# of Consultants: 9,000+
Offices: 120+ in 60+ countries
US Locations: 33 in 5 regions

Interview Process:

- First Round (At New York Office)
  - Conducted by consultant or engagement manager often from designated functional area
  - Two 45-60 minute cases, 15 minute PEI (personal experience interview) + 30 minute case
- Second Round (At preferred office)
  - Conducted by engagement manager or above
  - Three 45-60 minute cases, with 15 minute PEI

Parthenon

Parthenon is a strategy consultancy committed to bringing unconventional yet pragmatic thinking to deliver actionable strategies for real impact in today's complex business landscape

Unique Firm Aspects:

- Although owned by EY, Parthenon functions as an independent firm. There is no cross staffing between the firms
- Parthenon follows a generalist model for staffing consultants
- After the first year at the firm, consultants are double staffed – they will simultaneously work on two projects at a time
- Low travel requirements, consultants frequently work remotely
- Industry expertise: Private Equity, Education, Healthcare, Retail Consumer Products

Recruiting Tips:

Touch: Extremely Low

Historically, Parthenon has not recruited on campus at Stern. Use MCA and OCD resources to find contacts at the firm.

Firm-Specific Facts:

Case Names: Projects
Career Path: Consultant → VP → Managing Director → Partner
# of Consultants: 900
Offices: 34 in 20 countries
US Locations: 6 – Houston, Boston, New York, San Francisco, Chicago, Los Angeles

Interview Process:

- First Round (Phone Interview)
  - Two 30 minute cases
- Second Round (At Office)
  - One 30 minute behavioral interview
  - One 30 minute case interviews
  - One 90 minute group case interview

PricewaterhouseCoopers (PwC)

PwC focuses on audit and assurance, tax and consulting services. PwC Advisory addresses clients' most complex and interesting opportunities that are imperative to business success.

Unique Firm Aspects:

- PwC's acquisition of Strategy& created some uncertainty regarding the application process and strategy for the two firms
- PwC has four distinct industry verticals: Financial Services, Health Care, Product and Services, Public Sector
- Not a generalist model; full-time hires join a specific industry group
- Strong emphasis by the firm on internal networking events to help employees develop relationships both within and across verticals
- "Big Four" accounting firm

Recruiting Tips:

Touch: Medium:
PwC typically hosts multiple events, including corporate presentation, coffee chats, and a case competition. As of 2016, candidates can apply to one or both of PwC and Strategy&, but can only interview with one.

Firm-Specific Facts:

Case Names: Cases
Career Path: Associate → Senior Associate → Manager → Director → Partner
# of Consultants: 46k+ advisory staff
US Locations: 80 offices, not all contain advisory staff

Interview Process:

- First Round (On-Campus)
  - Three 45 minute interviews consisting of a few short behavioral questions and a case interview
- Second Round (In Office)
  - One 45 minute partner interview, conducted virtually

Strategy&

strategy&
Part of the PwC network

PWC's Strategy& is a team of practical strategists, collaborative by nature, committed to helping its global clients solve their toughest problems and seize their greatest opportunities

Unique Firm Aspects:

- Formerly Booz & Company, combined with PWC in March 2014
- High level strategy work differs from PWC's Management Consulting wing, though work can overlap
- National staffing model
- Work across 16 industry practices and 6 functional practices
  - Designate preferred functional practice in application and interview for position within that specific practice
- Apprenticeship Model fosters mentorship and on the job training

Recruiting Tips:

Touch: Medium
Networking important to get an interview, with plenty of opportunities on-campus (e.g. case competition)
Focus: Leadership skills, analytical ability, innovative thinking

Firm-Specific Facts:

Career Path: Associate (MBA) → Senior Associate → Principal → Vice President, Partner
# of Consultants: 3,000+
Offices: 60+ in 25+ countries
US Locations: 12

Interview Process:

- First Round (on campus)
  - Two 45 minute interviews consisting of 15 minute behavioral and 30 minute case
  - Conducted by an associate or senior associate
- Second Round (At preferred office location)
  - Three 45 minute interviews, similar to first round format
  - Conducted by partners and directors
- *Note: Can apply to PWC and Strategy& but only interview with one*

MCA NYU STERN

Cases

MCA

NYU STERN

WiFi in the Sky

Author: Jasmine Dyba (Stern '18)
Case Style: Interviewer Led

Difficulty: Medium

Case Prompt:

Your firm has won an RFP to help a domestic airline carrier examine their in-flight connectivity (IFC) strategy. With 80% of US-based aircraft already outfitted with IFC technology and competitive pressures rising, offering WiFi service is becoming table-stakes. Your client has yet to enter the game, but they know it's something they need to consider to stay competitive. What are some of the key things the client should think about when assessing their go-to-market strategy for IFC?

Case Overview:

Industry: Airline

Case Type: Market Entry

Concepts Tested:

- New product launch
- Breakeven

Overview Information for Interviewer:

- Candidates are likely to spend the bulk of their time on break-even analysis
- The difficulty in the case lies in recognizing the implications of different business models, and thinking creatively about how to triangulate data to uncover critical information
- Candidates should not get caught up on the specifics of WiFi technology or how it works, but rather, consider high level implications of investing in nascent technology

WiFi in the Sky: Case Guide

Clarifying Info:

- Th airline flies primarily domestic routes within the continental US, as well as select flights to Canada, Mexico, and the Caribbean
- IFC includes only WiFi connectivity. In-flight entertainment (IFE) is delivered via an on-board server through a separate system, but the two can be integrated into one user experience
- The airline's main objective is to stay competitive
- RFP = request for proposal
- Airline has 90 planes and services ~30K flights per year

Interviewer Guide:

- **A good framework will consider**:
  - **ROI and/or profitability**
    - Price and pricing model (free, ad-supported, pay per data usage, pay per time, pay by speed tier, subscription service, etc.)
    - Market demand (take rate, market segments)
    - Costs (upfront investment, ongoing costs)
  - **Vendor contract structure** (revenue/business model, split of investment costs and Opex, branding, contract length, technology)
  - **Product/user experience** (built-in screens v. BYO-screen, white-label v. vendor-branding, speeds available, interoperability with in-flight entertainment, add-on services like calling or texting)
  - **Technology** (speed, bandwidth, latency, availability when flying over water)
  - **GTM** (rollout timing, marketing, crew training, ad sales)

- **Necessary Information that should be given only when specifically asked for by interviewee:**
  - IFC is typically installed and managed by an outside vendor, either through a branded service (e.g., gogoAir) or a wholesale, white label solution (e.g., Row44). Contracts are typically 10+ years long.
  - Different vendors use different technologies, which vary in quality
  - Total bandwidth is shared across passengers, so the more passengers buy a session, the slower the service (some carriers intentionally charge high prices to limit usage and ensure better service)

WiFi in the Sky: Question 1

Question #1:
There is a wide range of potential business models and your client wants to better understand them before making a vendor decision. Your analyst pulled these benchmarks on what two competitors are doing today (**Exhibit 1**). What are your thoughts on these two models?

Notes to Interviewer:

- Candidate should recognize that these are not the only two possible models, and good candidates will consider other possible structures. Further, candidates should not limit themselves to discussing only the elements listed in the exhibit - strong candidates will consider other critical features of the model (see examples below)
- A simple way to assess these models is to discuss the pros and cons of each:
  - **Competitor 1's Model**
    - Pros: less operational burden on airline, potential for customer experience continuity (e.g., allow subscriptions across airline carriers), limited costs
    - Cons: limited control over pricing (high price could drive low take rates and anger customers), brand fit considerations
  - **Competitor 2's Model**
    - Pros: control over pricing, control over user experience, potential for better ROI, easier to integrate with airline's other products (e.g., in-flight entertainment system)
    - Cons: more operational burden on airline, higher costs
  - **Other considerations**: who will pay for the initial investment, what is the ongoing cost structure, potential to adopt more than one model across the fleet, technology limitations (vendors don't come equal)

Interviewer Guide to Exhibit 1

	Competitor 1	Competitor 2
Airline description	Major domestic and international carrier with 65% fleet IFC coverage	Domestic discount carrier with 90% fleet IFC coverage
Branding	Vendor-branded	Airline-branded
Pricing (for customers)	Determined by vendor, average $25/session	Determined by airline, Free
Revenue model	Revenue share	Wholesale

Notes to Interviewer:

- Clarifications (if candidate asks):
  - Assume 1 session buys a passenger WiFi connectivity for the duration of the flight

- The Exhibit is intentionally missing critical information (e.g., cost structure, technology, product features, interoperability with in-flight entertainment system). If candidate limits discussion to the elements in the table, ask the candidate if they think there are any other important considerations.

WiFi in the Sky: Question 2

Question #2 (Math Question):

After some initial analysis, the client has decided to partner with a white-label IFC vendor to outfit all 90 of its planes. The airline and vendor will share the initial investment, and then the airline will pay the vendor a per-session fee to cover operating expenses. The airline wants you to figure out what percentage of their passengers need to purchase a session for the airline to break even in 2 years. They have provided you with some useful data (*hand out* **Exhibit 2**).

Math Solution:

- To calculate the initial investment:
  - Airline share of investment = $250K x 40% = $100K per plane
  - Total investment = $9M (solution below):
    - Wide body = 10 planes x $100K/plane = $1M
    - Narrow body = 80 planes x $100K/plane = $8M
    - Total = $1M + $8M = $9M
- To determine total passengers in 2 years:
  - Wide body = 300 seats x 2,500 flights/yr x 2 yrs = 1.5M passengers
  - Narrow body = 100 seats x 27,500 flights/yr x 2 yrs = 5.5M passengers
  - Total = 1.5M + 5.5M = 7M passengers in 2 yrs
- To determine % take rate needed:
  - Set up the following equation and solve for [take rate]:
  - 7M passengers x [take rate] x $10/session = $9M
  - [Take rate] = 12.9% (*A strong candidate will express a reaction to this outcome and offer implications*)

Math Information:

Wait for the candidate to ask for these data-points:

- Capex = $250K per plane (airline will cover 40% of it)
- Margins = $10 per session

Assumptions:

- Seat occupancy rate* = 100%
- All aircraft will be outfitted at the same time*
- Ad revenues already baked in to the margin figures
- 1 WiFi session covers entire flight

**Advanced candidates will bring these up on their own*

MCA NYU STERN

Interviewer Guide to Exhibit 2

	Wide body	Narrow body
Fleet Size	10	80
Seats per Aircraft	300	100
Total Fleet Flights per Year	2,500	27,500

Notes to Interviewer:

- Wide body = aircraft large enough to accommodate two passenger aisles
- Narrow body = a single-aisle aircraft

WiFi in the Sky: Question 3

Question #3:

Market research tells us that take rates are only between 5 and 10% today for paid connectivity, so your client is concerned about being able to hit the break-even targets. What do you think are the key drivers of IFC take rate?

Notes to Interviewer:

- This is a correlation question, not a causation question. So the case is essentially asking: what variables might be correlated with higher take rates?

- **Sample take rate drivers:**
    - *Flight characteristics: flight length, flight time (red-eye vs daytime), other entertainment systems*
    - *Product characteristics: price, speeds available, quality of service, number of connected devices*
    - *Passenger characteristics: age, gender, income, cabin class, business/leisure*

- *Push the candidate to brainstorm as many drivers as they can and to hypothesize which way the variable would have to swing to drive higher take rate*

WiFi in the Sky: Recommendation

Recommendation:

- The airline should partner with a wholesale, white-label vendor to retain control over pricing and the user experience
- Roll-out across aircraft should be gradual, with a potential pilot program to optimize pricing, user experience, etc.
- Roll-out should prioritize newer planes that cover routes with high expected take rates

Risks:

- Due to large upfront investment, contract is likely to be 10+ years long, so smart vendor selection is very critical
- Difficult to strike balance between maximizing revenue and maintaining sufficiently low take rate to ensure higher speeds
- Technology is still nascent, potential for poor user experience

Next Steps:

- Vendor selection and contract negotiation
- Aircraft prioritization
- Pilot launch

Bonus: Guide to an excellent case

- Strong candidates will:
  - Recognize the tradeoffs around vendor selection (e.g., the vendor who agrees to your business model may have inferior WiFi technology)
  - Consider user experience, technological limitations, implications of long contract renewal cycles, and operational complexity of rolling out IFC
  - Complete the break-even exercise quickly enough to get through all 4 case questions

WiFi in the Sky: Exhibit 1

Exhibit #1: Competitive Benchmarking

	Competitor 1	Competitor 2
Airline description	Major domestic and international carrier with 65% fleet IFC coverage	Domestic discount carrier with 90% fleet IFC coverage
Branding	Vendor-branded	Airline-branded
Pricing (for customers)	Determined by vendor, average $25/session	Determined by airline, Free
Revenue model	Revenue share	Wholesale

WiFi in the Sky: Exhibit 2

Exhibit #2: Key Stats

	Wide body	Narrow body
Fleet Size	10	80
Seats per Aircraft	300	100
Total Fleet Flights per Year	2,500	27,500

GGC Health

Authors: Jenna Charles, David Sedgwick, Jonathan (Yoni) Farber (Stern '18)
Difficulty: Hard
Case Style: Interviewee Led

Case Prompt:

Our client, GGC Health, operates eight Ambulatory Surgical Centers (ASC) on the east coast. GGC Health has consistently been a profitable organization, but over the past two years, their ASCs' cumulative revenues have been flat at $400 million/year. The CEO of GGC Health is concerned about this and has hired your firm to increase revenues by 15%.

Case Overview:

Industry: Healthcare

Case Type: Revenue growth

Concepts Tested:

- Brainstorming
- Revenue computation
- Growth strategy

Overview Information for Interviewer:

- Dismiss any questions about cost, keep the focus on revenue growth
- Pricing increases are not possible
- Candidate should drive towards increasing the number of patients through same site volume increases or opening new ASCs

GGC Health: Case Guide

Clarifying Information:

- ASCs are modern health care facilities focused on providing same-day surgical care, including diagnostic and preventive procedures.
- ASCs are seen as a more convenient alternative to hospital-based outpatient procedures.
- Physicians can perform surgeries at hospitals or ASCs.
- Physicians generally dictate where the surgery is performed.
- Timeline: ASAP
- Target revenue: $60M (15% * 400M)
- Business Model: ASC revenue is equal to the number of procedures performed in the facility by the expected reimbursement per procedure.

Interviewer Framework Guide:

Increase revenue of existing ASCs (*see brainstorm for detailed tree*)

- Number of patients per doctor
- Number of doctors per facility
- Increase procedures per facility, either in volume or in type of surgery
- Types of patients (high reimbursement vs. low reimbursement patients)

Increase revenue by developing new ASCs

- Analyze the market
  - Opportunities for partnership with existing physician groups/hospitals
  - Patient demographics for common ASC surgeries (ortho, dermatological etc.)
- Analyze competitors
  - Existence of competing ASCs
  - Strength and reputation of hospitals/ groups
- Regulatory/Technological
  - Reimbursement criteria of health plans (fee for service vs. value based care)
  - Technology/service expectations of ASC

GGC Health: Question 1

Question #1 (when candidate asks about expansion):

- I'm glad you brought up external expansion. We have done research and targeted three cities GGC Health could enter: Charlotte, Indianapolis, and Nashville. The Charlotte ASC location would have 30 doctors, Indianapolis would have 25, and Nashville would have 16.
- Assuming GGC Health has management capacity to open only one new ASC immediately, can you provide a recommendation of which city to enter?

Solution:

- Multiply # of Doctors in each city by breakdown of specialty in each city

City	# of Doctors
Charlotte	30
Indianapolis	25
Nashville	16

% of Dr./ specialty	Ortho	Neuro	Gastro
Charlotte	80%	10%	10%
Indy	40%	40%	20%
Nashville	50%	25%	25%

# of Dr's per specialty per city	Ortho	Neuro	Gastro
Charlotte	30*.8=24	30*.1=3	30*.1=3
Indianapolis	25*.4=10	25*.4=10	25*.20=5
Nashville	16*.5=8	25*.25=4	16*.25=4

Information:

- Give the candidate Exhibit #1
- The candidate should create their own 3x3 chart and calculate the number of doctors per specialty per city
- An excellent candidate will recognize that Nashville can be immediately eliminated (Indianapolis has more doctors of every practice)

MCA NYU STERN

GGC Health: Question 2

Question #2 (when candidate asks # of patients):

- Say the following: orthopedic brings in 15 patients per doctor per month, neurology is 10, gastroenterology is 12
- Candidate needs to ask about reimbursement rates, when they do give them Exhibit 2

Solution:

	# of Patients/yr.	Rate/patient	Revenue/Dr./Yr:
Ortho	15*12 =180	5K	900K
Neuro	10 * 12 =120	25K	3M
Gastro	12 * 12 =144	15K	2.16M

	Ortho	Neuro	Gastro	Total
Charlotte	24*900K = $21.6 M	3 * 3M = 9M	3 * 2.16M = 6.48M	**37.08M**
Indianapolis	10 * 900K = $9M	10 * 3M = $30M	5 * 2.16M = 10.8 M	**49.8M**
Nashville	8 * 900K = $7.2M	4 * 3 M = $12M	4 * 2.16 M = 8.64M	**27.84M**

Information:

- Calculate # of patients/year, then * by rate to calculate revenue/Dr/year.
- Then calculate revenue per city per specialty and then sum for total revenue.
- Candidate should identify that Indianapolis is the most attractive option, but alone, revenue falls short of the 15% target.

GGC Health: Question 3

Question #3:

- Probe the candidate until they identify that Indianapolis does not achieve the desired revenue growth. Once they realize this, ask them to brainstorm how GGC Health could increase revenues at their current 8 ASC locations?

Notes to Interviewer:

- This is a brainstorm opportunity for the candidate to see how to get the additional $10M needed.
- Candidates should be structured and organized during this brainstorm exercise. Topics should include:
  - Increase the number of patients visiting the ASC
    - Increase the number of patients brought in per doctor
    - Make ASC preferred place for doctors, by offering more control over the environment, better scheduling, enhanced efficiency, and better patient outcomes
    - Prioritize high volume doctors
    - Provide doctors with a higher share of profits for hitting certain targets
  - Increase the number of doctors per ASC
    - New procedures (and new physicians doing those procedures)
    - Improved physician outreach (sales/marketing efforts)
  - Product mix
    - Prioritize high reimbursement surgeries (that bring in more money per patient)
    - Add new high reimbursement surgeries
  - Type of patient: Medicaid/Medicare accepted? Increase patients who get higher reimbursements

GGC Health: Question 4

Question #4:

- Our team thinks there is an opportunity to increase the number of doctors per ASC. GGC Health's ASC sites do not currently offer urology, but we believe they can add 2 urology doctors to all current ASC sites. Can you calculate the additional revenue from this?
- Candidate will need to ask for the number of patients. Tell them that each doctor will bring in 8 patients per doctor per month.

Solution:

- Total number of urologists: 8 sites * 2 urologist/site = 16 urologists
- Total number of patients per year: 16 urologists * (8 patients/doctor/month * 12 months/year) = 1,536 patients
  - After calculation tell candidate to round to 1,500
- Total revenue: 1,500 patients * $8,000/surgery = **$12M**

Information:

- Candidates should still have Exhibit 2 and realize they have the reimbursement rate.
- Additional revenue is only applied to the current 8 ASC sites.
- Incremental same site revenue plus new Indianapolis ASC meets $60M revenue target.

GGC Health: Recommendation

Recommendation:

- The candidate should articulate that to meet the revenue target our client should (1) open a new ASC in Indianapolis for $49.8M and (2) increase revenue in current ASC facilities through adding urology surgeries for $12M. Candidate can reference other existing site revenue growth opportunities identified during case.

Risks:

- No costs were considered in adding a new facility or procedure
- Indianapolis market entry is not on the east coast and unfamiliar to management
- ASC capacity to accommodate new surgeries
- Not being able to steal expected market share
- Physicians not bringing in expected number of patients

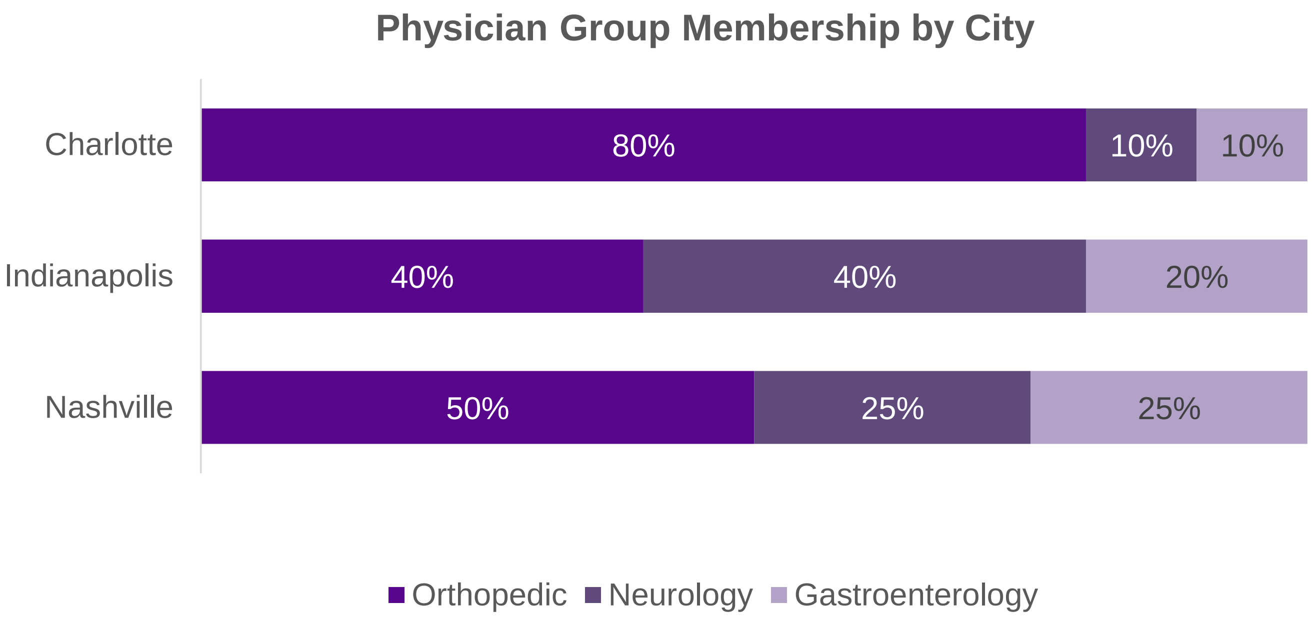
Next Steps:

- Cost/Benefit analysis for the Indianapolis location
- If still proves lucrative, begin construction on new ASC center in Midwest
- Add urology surgeries to current ASC's ASAP
- Consider other types of surgeries to add
- Consider expanding into more than one location in the future

Bonus: Guide to an excellent case

- Always keep in mind the goal of the case – to increase revenue by 15% ($60M)
- Eliminate Nashville as an expansion opportunity quickly
- Recognize that opening up one location by itself will not meet the CEO's revenue targets and independently return to framework for alternative revenue ideas
- Brainstorm extensive solutions to increase revenue in current ASC's to demonstrate healthcare knowledge

GGC Health: Exhibit 1



GGC Health: Exhibit 2

Average Reimbursement Rates Per Patient by Specialty

Physician Specialty	Reimbursement Rate per Patient
Dermatology	$4,000
Gastroenterology	$15,000
Neurology	$25,000
Orthopedic	$5,000
Pain Management	$6,000
Urology	$8,000

MJ Wineries

Author: Jwalit Patel and Michael Scolnic (Stern '17)
Difficulty: Medium
Case Style: Interviewer Led

Case Prompt:

Our client MJ Wineries produces wine in the Sonoma valley in California. MJ Wineries specializes in growing Chardonnay grapes and has won numerous awards for their famous full-bodied Chardonnay. Although MJ Wineries market share in Chardonnay remains strong, profitability has recently declined.

The CEO has hired your firm to recommend ways to immediately improve profitability.

Case Overview:

Industry: Wine

Case Type: Profitability

Concepts Tested:

- Brainstorming
- Revenue growth
- Market trends

Overview Information for Interviewer:

The case focuses mainly on brainstorming and seeing the range of ideas a candidate can come up with

There is little to no Math required for the case, so if the candidate is calculating unnecessary numbers than guide them to discuss qualitative points

MJ Wineries: Case Guide

Clarifying Information:

- The year date is currently January 1st, 2017; you can assume 2016 has just concluded
- It typically takes nine months to produce a bottle of Chardonnay from the time the grapes are planted to the time the wine can be un-corked but the wines get better as they age
- MJ Wineries only produces wine in Sonoma Valley produced from grapes grown at one large 3,000 acre vineyard
- Wine production is a very-capital intensive industry but MJ Wineries owns the equipment they use to produce wines
- There are some major wine producers like Charles Shaw but tens of thousands of small producers

Interviewer Guide:

- **A Good Framework Will**:
  - Cover diverse profitability issues from both a cost and revenue perspective

- **Necessary Information that should be given only when specifically asked for by interviewee:**
  - Customer segments
    - Liquor stores are primary distribution source
    - Restaurants
    - Bars/Nightclubs
    - Super Markets
  - US Market share (Millions of $)
    - Chardonnay: 2,500
    - Cabernet Sauvignon: 2,000
    - Merlot: 1,050
    - Pinot Grigio: 800
    - Pinot Noir: 300
    - All other wine types are less than 300m individually
  - Average profit margin on Chardonnay is 20%

MJ Wineries: Question 1

Question #1:
What could be impacting profitability at MJ Wineries?

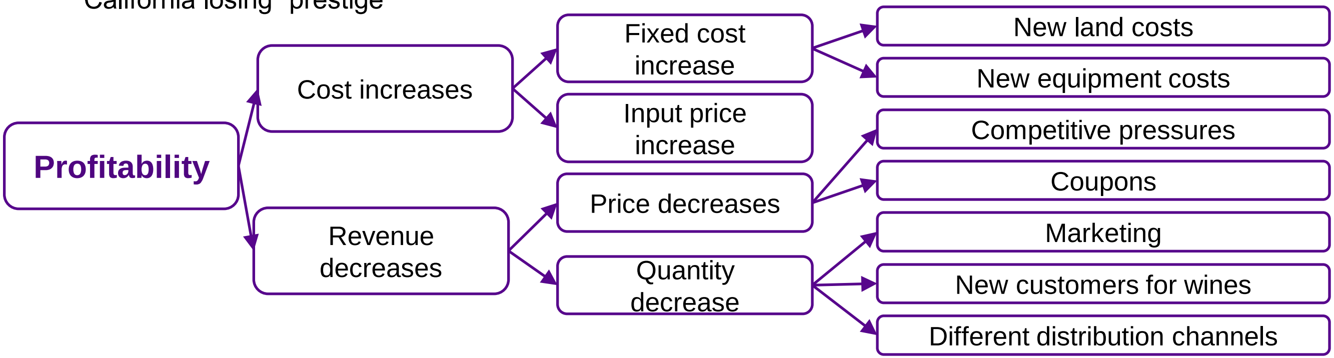
Notes to Interviewer:

Market

- New market entrants taking share from MJ
- Chardonnay losing popularity amongst types of wine
- Wine losing popularity to other types of spirits
- Other regions taking share from California, California losing "prestige"

Company

- Managerial capabilities to produce wines
- Brand recognition problems/lack of recent awards
- Financing issues/cost of capital increases



MJ Wineries: Question 2

Question #2:

Which grape variety should MJ wineries consider for producing its new wine?

Notes to Interviewer:

- Hand over Exhibit 1 and Exhibit 2
- Candidate should notice that customer preference is shifting from white wine to red wine. Hence MJ wineries should consider diversifying outside of white wine (Chardonnay)
- While candidates can justify other choices as well, **Merlot is the best choice for MJ wineries** because:
    - Red wine is a growing customer preference
    - Merlot has strong consumption growth at around 10%
    - California is known for Merlot production, so climate and soil type are suitable
    - Merlot matches with any food type, which can be used for marketing efforts
    - Profit margins are medium for Merlot, but other factors should compensate for it

MJ Wineries: Question 3

Question #3:

MJ Wineries has taken your advice and decided to focus on producing Merlot

What are some pros and cons for MJ Wineries to consider when moving into the Merlot market?

Notes to Interviewer:

Pros

- Merlot is a very popular wine in America and has experienced fast growth
- Often sells at a higher price point than Chardonnay
- Increased number of varieties could insulate against changes in consumer preferences
- Growing multiple varieties of grapes could provide benefits in case one crop is negatively impacted by the weather
- Brand recognition for Chardonnay could carry over for Merlot

Cons

- Merlot is a red wine and is not produced exactly the same way as Chardonnay
- Chardonnay is an accepted wine from Sonoma but there are fewer successful California Merlots
- A new variety brings a different competitive set and it could be hard to gain market share
- It may take time to establish a track record in winning Merlot because of the long lead time between growing grapes and selling wine

MJ Wineries: Question 4

Question #4:

After carefully considering producing Merlot, MJ Wineries wants to prepare a contingency plan in case they aren't able to correct profitability issues by introducing a new wine

What are some other ways MJ Wineries could increase revenue without introducing a new type of wine?

Notes to Interviewer (possible answers include):

- Produce some other type of alcohol like beer or whiskey
- Focus on other aspects of the winery business like giving tours, expanding the tasting room, hosting weddings at the winery, etc.
- Sell off a portion of the winery's land to another winery or a developer and purchase a portion of the grapes from another vineyard
- Produce wine for small batch producers with excess production capacity
- Age the wine for longer in order to drive up the price for longer-aged vintages
- Create furniture like bars and coffee tables out of old wine barrels to sell via high-end furniture producers
- Use the land to grow an alternative crop that may produce more money like avocados or mushrooms
- Invest in new technologies to increase the yield of grapes to produce more wine or sell excess grapes
- Turn the winery into a school for aspiring wine producers to come learn how to make wine from a real working winery
- Work in partnership with popular wine magazines or critics like Robert Parker to increase the prestige of existing Chardonnays
- Offer hot air balloon rides from the winery so guests could see scenic Sonoma Valley

MJ Wineries: Recommendation

Recommendation:

- MJ Wineries should expand into producing Merlot wines
- This will allow them to capture a greater market share of the overall wine market
- It will also help them diversify risk in case Chardonnay becomes less popular or the grape crop fails

Risks:

- Although growth rates look promising now wine tastes are fickle and Merlot may not keep growing
- Consumer preferences may shift towards beer as the craft brewing movement grows making an investment in wine bad

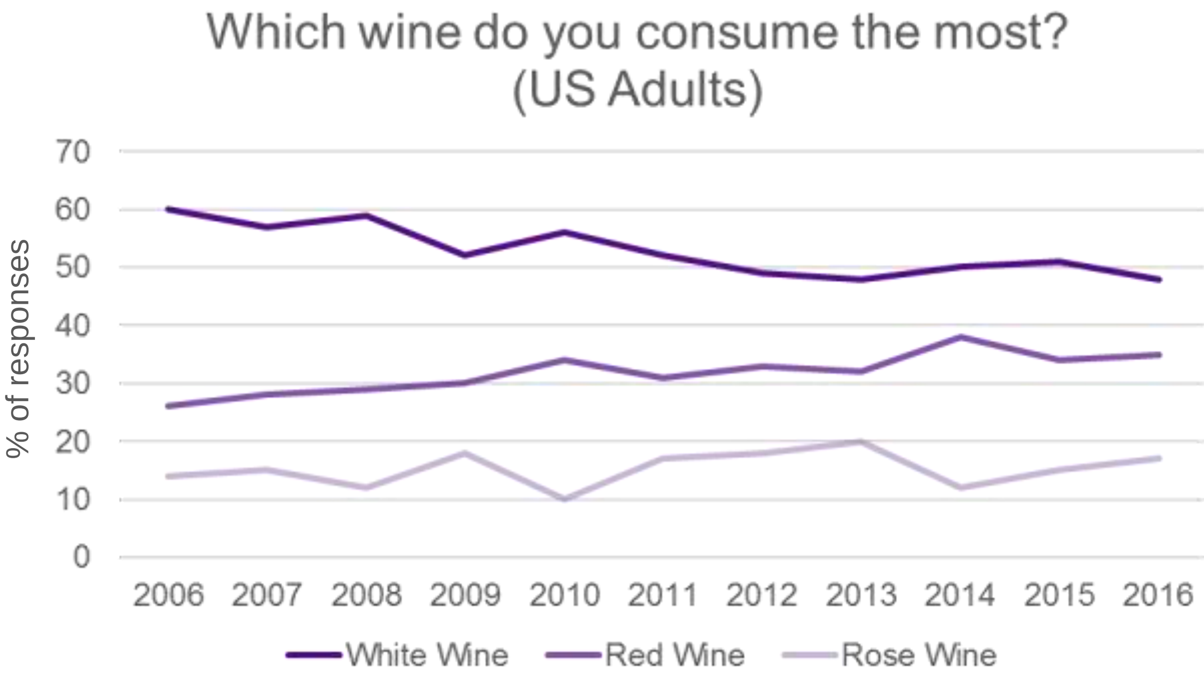
Next Steps:

- Begin developing the capabilities for producing Merlot by planting new grapes
- Purchase additional needed equipment for producing Merlot wine

Bonus: Guide to an excellent case

- Identifies additional ideas from the brainstorm as relative contingency plans such as offering weddings at the winery
- Focuses on difficulties of producing a product without well-defined attributes i.e. what is a good wine is largely a matter of preference
- Discusses the benefits of being a small vs. large wine producer

MJ Wineries: Exhibit 1



MJ Wineries: Exhibit 2

Grape Variety	Wine Type	Key Locations	Food Pairing	Consumption Growth	Profit Margin
Chardonnay	White	France, California	Fish and Chicken	2%	20%
Riesling	White	Germany, Eastern USA	Chicken and Pork	12%	15%
Sauvignon Blanc	White	New Zealand, France	Seafood and Poultry	4%	10%
Syrah	Red	Australia, France	Red meat	2%	18%
Merlot	Red	France, California	Any food	10%	15%
Cabernet Sauvignon	Red	France, Chile	Red meat	1%	10%
Pinor Noir	Red	France, Italy	Japanese dishes	12%	8%

FlashPro

Author: Rodrigo Vargas (Stern '17)
Difficulty: Medium
Case Style: Interviewer Led

Case Prompt:

Your client is FlashPro Inc., a San Francisco based technology company that develops and sells wearable and mountable action cameras. FlashPro's CEO believes that the company's growth has stagnated and has hired your firm to remedy that issue.

Case Overview:

Industry: Technology

Case Type: Growth Opportunities.

Concepts Tested:

- Math
- New Market Assessment

Overview Information for Interviewer:

- This case test the interviewee's ability to deal with large sets of data and focus on the key components of profitability.
- It also tests the interviewee's creativity in figuring out ways to grow revenues and profit.

FlashPro: Case Guide

Clarifying Information:

- The company is public. It sells its products in the US and internationally.
- Their main product is CamPro; a mounted camera mainly used when playing action sports. It has also recently started being used in other recreational activities.
- FlashPro does not manufacture its products, it contracts with manufacturers in China.
- FlashPro sells its products through 3 channels: Distributors, Retail and FlashPro's Website
- The industry is highly competitive and customers are very loyal to each brand

Interviewer Guide:

- **A Good Framework will include**:
  - Market Analysis: Competitors, Customers, Substitutes, Suppliers, etc.
  - Profitability tree indicating components of revenue and costs.
  - Costs should include COGS, R&D, G&A and Sales & Marketing.
- **Necessary Information that should be given only when specifically asked for by interviewee:**
  - The Camera Price is $250
  - The COGS have remained steady at 50% of total sales.
- Over the last 5 years, 60% of camera sales have come from the U.S. The split is expected to be similar in 2017.

.

FlashPro: Question 1

Question #1:

Hand out Exhibits 1-3.

What is FlashPro's expected Gross Profit for 2017?

Math Solution:

Revenues:
U.S. Camera Sales= (16,000 * (0.85) * (0.30) * 250) = 1,020,000
Addressable Market * Penetration * FlashPro's Market Share * Price
International Camera Sales = 1,020,000 * (0.40 / 0.60) = 680,000
U.S. Sales * (%Sales International / %Sales U.S.)
Total Revenue = (1,020,000 + 680,000) = **1,700,000**

COGS
1,700,000 * 0.50 = **850,000**
Total Sales * COGS %Sales = COGS

Gross Profit
1,700,000 – 850,000 = **850,000**
Total Sales – COGS = Gross Profit

(amounts in thousands)

Math Information:

Camera Price = $250

Camera Sales Distribution:
U.S. = 60%
International = 40%

COGS = 50% of Sales

These trends are expected to continue in 2017.

FlashPro: Question 2

Question #2:
FlashPro wants to understand what are their revenue growth prospects at this moment (keeping everything constant) and analyze other alternatives that could help boost their top line.

Notes to Interviewer:

- The purpose of this question is to test the candidate's creativity and ability to come up with different ways to grow top line.
- A good candidate should mention important insights from Exhibits 1, 2 and 3; market limited growth in the US and fierce competition that hinders gain of market share.
- The candidate will start listing different ways FlashPro can increase sales. An excellent candidate will provide a organized framework that includes the following:
    - Product Mix (4'ps): Advertising, Product Attributes, Channels, Price, etc.
    - New Markets (Product Line Expansion, New Geographies, etc)
        - Organic (Developed in house)
        - Inorganic (M&A)
- If necessary, point candidate into considering new geographies and hand out Exhibit 4.

FlashPro: Question 3

Question #3:
Hand out Exhibit 4.
From an economic perspective what is the most attractive country to enter and what things should FlashPro consider before entering?

Notes to Interviewer:
A good candidate would calculate the expected revenue on year 3 and determine which of the alternatives is the best option.

An excellent candidate will consider the sale channel distribution and would assume margins are higher on FlashPro's website since there is no intermediary, and lower on the distributor and retail channels.

The best alternative is Argentina because it provides the highest revenue at the third year and the sales channels seem to provide higher margins.:
Argentina $1,165 , Japan $1,013, Australia $932, and Sweden $951

Things to consider before entering:
The candidate should provide a few examples of things that should be considered before entering: customer habits, local competition, regulation, country's economic and geo-politic situation, logistics, etc.

FlashPro: Recommendation

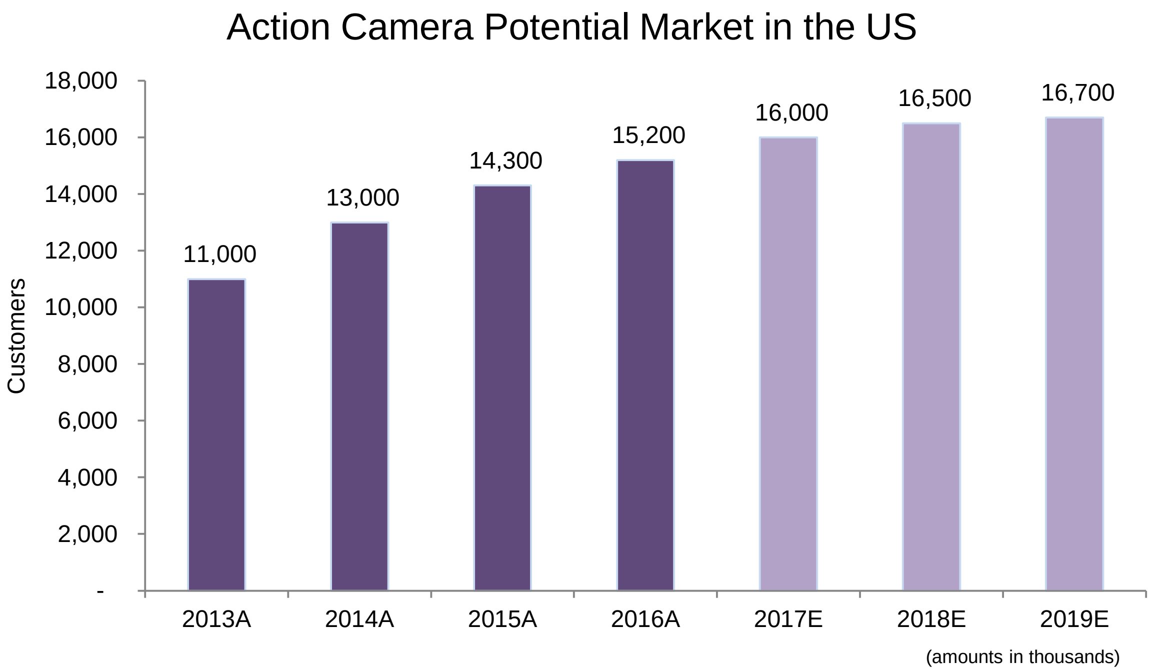
Recommendation:
- FlashPro should enter Argentina, in 3 years it has the largest market and best sales channels margins.

Risks:
- Did not consider costs related to entry into markets.
- The year 1 market share assumptions may be a bit aggressive, FlashPro may have trouble getting achieving those assumptions.

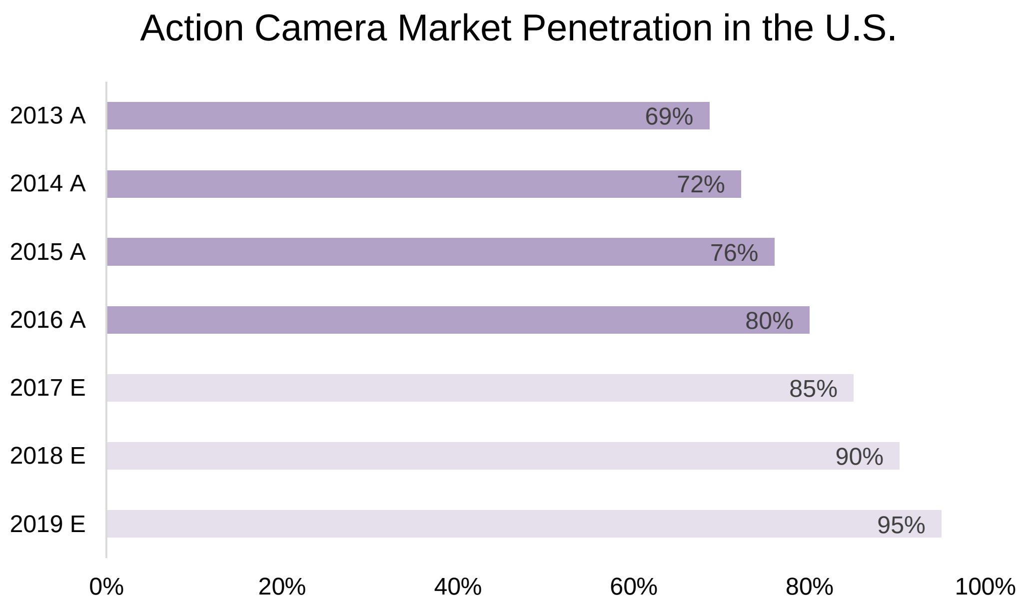
Next Steps:
- Continue doing research into expansion into the Argentinian market.
- Start planning a marketing campaign for Argentina that includes advertising, sales channels, promotion and logistics.

Bonus: Guide to an excellent case
- A good candidate will have a complete brainstorm and consider multiple expansion options.
- An excellent candidate will recognize that the analysis is incomplete and that there are other costs to be factored in.

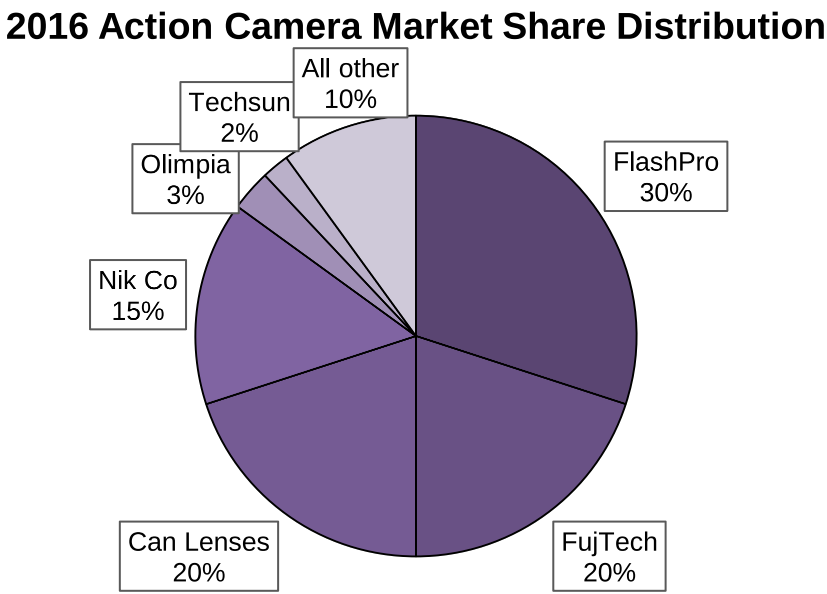
FlashPro: Exhibit #1



FlashPro: Exhibit #2



FlashPro: Exhibit #3



Market Share distribution is the same in the US and worldwide and has remained steady for the last 5 years.
FlashPro is the only company offering wearables

FlashPro: Exhibit #4

	Argentina	Japan	Australia	Sweden
Current Camera Market Size (Total Revenues)	$ 2,500	$ 3,500	$ 3,500	$ 2,500
Flash Pro's Expected Market Share at Year 1	35%	25%	20%	25%
Expected Annual Growth Over the next 3 years	10%	5%	10%	15%
Sale Channel Distribution:				
Distributors	20%	40%	20%	40%
Retail	30%	50%	30%	50%
FlashPro's Website	50%	10%	50%	10%

After year 3, the expected market annual growth for all countries is 5%

(dollar amounts in thousands)

Bike Helmets

Case Style: Interviewee Led

Difficulty: Medium

Case Prompt:

Your client is a private equity firm is considering purchasing a firm that makes bicycle helmets. You have been hired to help advise whether or not to make the acquisition.

Case Overview:

Industry: Manufacturing

Case Type: Investment Decision

Concepts Tested:

- Market Sizing
- Valuation

Overview Information for Interviewer:

This case is designed to see how the candidate thinks. The candidate needs to make assumptions and justify them throughout.

There is no "correct" answer for this case. A good candidate will identify and weigh factors that are both for and against the investment and decide which decision makes more sense.

Bike Helmets: Case Guide

Clarifying Info:

TARGET COMPANY

- The company only sells its products in the U.S.
- The company currently has an estimated market share of 60% of helmets sold in the U.S.
- The company has had a string of ineffective CEOs
- The company's helmets have an average price of $30
- Helmet prices are not expected to change in the future
- If candidate asks about price, tell them they will get that information later

MARKET

- The market is in the mature stage, not many new entrants
- U.S. regulations require all riders under the age of 18 to wear a helmet

PE FIRM

- Holds companies for an average of 7 years
- Has an return target of 10%/yr
- Also owns a bicycle manufacturer (possible synergies unknown)

Interviewer Guide:

A good framework will consider:

- **Value of Target Company**
  - Valuation Method (NPV, comparables)
  - Revenue/Cost/Profit
  - Growth
- **Market Size**
  - Top-down (starting with population) will be more common, but there may be bottom-up approaches too
- **Timing**
  - Consider the timeline of value creation
- **Ownership Synergies**
  - Consider possible synergies with other companies in the PE firm's portfolio

Bike Helmets: Market Sizing

Sample Market Size:
This is only an example. As long as candidate can back up their assumptions, let them continue with their own numbers.

Variables	Source	Calculations
U.S. population	Assumed	320M
% of population that rides bikes	Assumed	50%
% of riders that wear helmets	Assumed	50%
# years to replace helmet	Assumed	2
Total market size in # helmets	(US pop.) x (% bike riders) / (years to replacement)	40M / yr
Average helmet price	Given	$30
Total market size in $	# market size x price	$1.2B / yr

Once candidate has gotten the market size, guide candidate into valuing the company using comparable recent sales. When candidate asks for data, give them Exhibit #1.

Interviewer Guide to Exhibit 1

	Company X	Company Y	Company Z
Year	2008	2013	2015
Revenue @ Sale Year	$700	$1,500	$1,200
Price	$350	$1,000	$1,800
Price/Rev. Ratio	*1:2*	*2:3*	*3:2*

(amounts in millions)

Notes to Interviewer:
Candidate should automatically calculate price/revenue ratio. Then the candidate can choose how many/ which comparable companies to use. Challenge candidate on their choices – as long as they can justify their selection, the answer is "correct".

Candidate should notice that the Price/Revenue ratio has been increasing over time.

After this, the candidate should have an estimate as to what the target company can be bought at. They should then look to calculate the what the company could be sold at.

Bike Helmets: Divesting the Company

Notes to Interviewer:

Next, the candidate should look into calculating how much the company could be sold for. The candidate should remember that our client is a PE firm that holds investments for an average of 7 years with typical returns of 10%.

When the candidate attempts to find a way to calculate the price the company will be sold at, tell them that they've already done some previous research and have determined that the company will be able to be sold in 9 years with an annual return of 9%.

If candidate does not bring up synergies with other companies in our client's portfolio, push them in that direction. After some discussion, ask for a overall recommendation.

Bike Helmets: Recommendation

Support for Buy:

- Safe and stable industry
- With prior mismanagement, there may be potential to increase return
- Synergies possible with bicycle company in portfolio
- Ability to invest a lot of money

Support for No Buy:

- Return is lower than average
- Hold period is longer than average
- Not much potential for growth in mature industry

Next Steps:

If buy:

- Do further due diligence

If no buy:

- Look for alternative investments
- Negotiate lower selling price

Bonus: Guide to an excellent case

- A great candidate will be able to support their conclusion while also considering the issues that may arise. They will clearly state why one side has more support than the other.

- A great candidate will also keep in mind that the client is the PE firm and not the bike helmet manufacturer.

Bike Helmets: Exhibit 1

Exhibit #1: Recent Sales of Similar Manufacturing Companies

	Company X	Company Y	Company Z
Year	2008	2013	2015
Revenue @ Sale Year	$700	$1,500	$1,200
Price	$350	$1,000	$1,800

(amounts in millions)

Drinks Gone Flat

Case Style: Interviewee Led

Difficulty: Easy

Case Prompt:

The beverage department of a regional supermarket has seen a drop in revenue over the last year and has hired your firm to determine the cause of the decline and recommend ways to reverse the trend.

Case Overview:

Industry: Retail

Case Type: Revenue

Concepts Tested:

- Pricing
- Brainstorming

Overview Information for Interviewer:

- This is an interviewee-led case. Interviewer should let the interviewee drive the case, and offer up information / exhibits as interviewee asks
- The case is a good test of time management of the interviewee. It can be completed in under 15 minutes.
- A good candidate will remain high level, only drilling deeply after having determined the interviewer has the asked-for information and not wasting time where there is no information

Drinks Gone Flat: Case Guide

Clarifying Information:

- Client is a leading regional grocer within the southeastern U.S.
- Competitive landscape has not changed in the last year
- Revenue decline is specifically within the beverage segment
- Client wants to find the cause of the declining revenue and recommendations for how to stop the decline

Interviewer Guide:

A Good Framework Will:

- Focus on revenue and its levers of price and quantity, staying away from costs
- Contain creative recommended options for brainstorming discussion to reverse the revenue decline trend (4P's)

Necessary Information that should be given only when specifically asked for by interviewee:

- Exhibit 1
  - Provide when interviewee asks specifically for revenue / sales numbers segmented by beverage product category
- Exhibit 2
  - Provide after interviewee determines revenues are only declining in sodas and asks for further segmented information by brand

Interviewer Guide to Exhibit 1

	Gallons (MM)*		Price / gallon ($)*		Cost / gallon ($)	
Category	2014	2015	2014	2015	2014	2015
Sodas	100	120	0.9	0.7	0.3	0.3
Waters	20	22	0.7	0.65	0.2	0.2
Others	11	10	4	4.5	3.9	3.9

Notes to Interviewer:

- Revenue calculations:
  - Sodas – 2014:100 x .9 = $90; 2015: 120 x .7 = $84; Change = -$6M
  - Waters – 2014: 20 x .7 = $14; 2015: 22 x .65 = $14.3; Change = +$0.3M
  - Other – 2014: 11 x 4 = $44; 2015: 10 x 4.5 = $45; Change = +$1M
- Interviewee should notice that decline in beverage revenue is only from decline in sodas, and prompt the interviewee to drive the case to further segmenting soda revenues

Interviewer Guide to Exhibit 2

	Gallons (MM)*		Revenue ($M)*	
Category	2014	2015	2014	2015
Brand A	50	30	50	30
Brand B	25	30	25	30
Value Brand	25	60	15	24

Notes to Interviewer:

- Interviewee should notice the decline in revenue for Brand A and the Value Brand, but only a decline in volume for Brand A. Should prompt the interviewee to calculate the price change for each of the brands
  - Brand A – 2014 and 2015 price of $1
  - Brand B – 2014 and 2015 price of $1
  - Value Brand – 2014 Price: 15/25 = $0.60; 2015 Price : 24/60 = $0.40

Drinks Gone Flat: Brainstorming

Question #2:
The client would like to hear your recommendations for how to reverse the decline in revenue of the beverage segment.

Notes to Interviewer:
A great candidate will not need prompting of this question, and will drive the case forward remembering that recommendations for reversing the declining revenue were a part of the prompt

- Upon determining that the value brand is causing the overall decline in the beverage segment, a great candidate will move the case forward with recommendations

Objective for the interviewee would to be able to provide a number of recommendations and stay organized while doing so

- Possible option would be to organize brainstorming recommendations around 4P's
    - Price
    - Promotion
    - Product
    - Placement

Drinks Gone Flat: Recommendation

Recommendation:
- Adjust price of Value Brand

- Improve differentiation from Brand A and Value Brand

Risks:
- Alienating value brand customers with price change

- Alienating suppliers of Brand A or B with any price changes of those brands

Next Steps:
- Explore pricing strategies for value brand
- Explore bundling opportunities to increase sales of other brands
- Explore marketing activities to differentiate value brand from brands A and B
- Explore shelf placement of value brand vs brands A and B

Bonus: Guide to an excellent case
- In an excellent case, the interviewee will efficiently drive the case, taking insights from each exhibit and moving the case forward with no prompting of the interviewer

Drinks Gone Flat: Exhibit 1

Exhibit #1: Revenues and Costs by Beverage Category

	Gallons (MM)*		Price / gallon ($)*		Cost / gallon ($)	
Category	**2014**	**2015**	**2014**	**2015**	**2014**	**2015**
Sodas	100	120	0.9	0.7	0.3	0.3
Waters	20	22	0.7	0.65	0.2	0.2
Others	11	10	4	4.5	3.9	3.9

* Average per store

Drinks Gone Flat: Exhibit 2

Exhibit #2: Sodas by Brand

	Gallons (MM)*		Revenue ($M)*	
Category	**2014**	**2015**	**2014**	**2015**
Brand A	50	30	50	30
Brand B	25	30	25	30
Value Brand	25	60	15	24

* Average per store

EnerForce

Author: Jeremy Wimmer and Alan Voyles (Stern '15)
Difficulty: Medium
Case Style: Interviewer Led

Case Prompt:

A U.S. energy conglomerate is considering the acquisition of a publicly traded wind turbine manufacturer, EnerForce, with manufacturing locations in China and Vietnam. Should the conglomerate acquire EnerForce?

Case Overview:

Industry: Energy

Case Type: Valuation

Concepts Tested:
- Market evaluation
- Valuation
- Profit calculations

Overview Information for Interviewer:

This case is an interviewer led profitability, valuation and strategy case. The interviewer should take charge with the questions that follow after the candidate has relayed his/her framework.

The first two questions are qualitative, while the last two are quantitative. For the quantitative questions the candidate should walk through the necessary calculations in a structured manner

EnerForce: Case Guide

Clarifying Information:

1 GW = 1,000,000 KW

Interviewer Guide:

A Good Framework Will:

- Consider a method to calculate the value of the company:
  - DCF
  - Comparables
- Take into account market factors:
  - Market size
  - Regulations
  - Growth/decline of market
  - Recent energy trends
- Look at financials
  - Revenue/costs

In this case, most of the background information is provided through the exhibits.

Exhibits 1,2 and 3 are provided along with Question #2.

EnerForce: Question 1

Question #1:
When advising on the potential acquisition, which pieces of information would you look to acquire and review? Where would you find these pieces of information?

Notes to Interviewer:

Response can include the following and interviewer should probe the candidate to relay as comprehensive a list as possible. Strong candidates will structure their brainstorming in mutually exclusive and collectively exhaustive categories:

Company Information

Financials
- Past profitability (from financial statements)
- Financial health of the target (from financial statements)
- Revenue and cost breakdown by product (may not be available but could ask market experts)

Operations
- Current product range (from customers and/or target website)
- Target's customer list (from target testimonials or may be public information for utility customers)
- Location of target's plants (most likely public information)
- If target is sought by competitors (may not be available but prior bids may have been made public)
- Supply chain (may not be available but client may share some suppliers)

Market Information

- Market conditions (from market experts)
- Tariffs on exports (from government websites)
- Technological specifications (from market experts)
- Customer preferences (from market experts)
- Competitors and their market shares (from market experts or industry reports)

EnerForce: Question 2

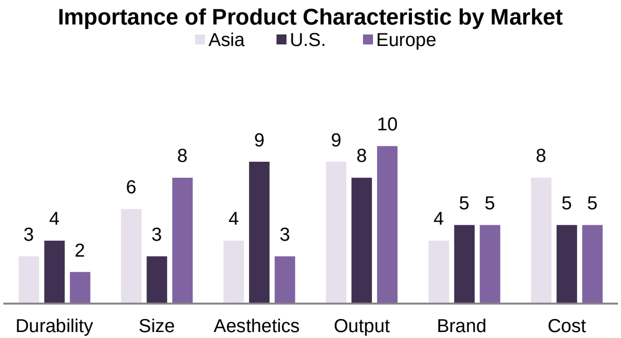
Question #2:

Can you walk me through the following three charts? Which market is the most attractive for EnerForce's upcoming product, the EnerForce 100 KW Turbine, in the next year? (Show candidate Exhibits 1,2 and 3 at the same time)

Notes to Interviewer:

See following pages for interviewer guides to exhibits

Interviewer Guide to Exhibit #1



Notes to Interviewer:

- Output and costs are important to Asia
- Aesthetics and output are important to the U.S.
- Size and output are important to Europe
- Durability isn't really important in any market

Interviewer Guide to Exhibit #2

Market	# of Total Competitors	Industry Rank – 100 KW EnerForce Turbine					
		Durability	Size	Aesthetics	Output	Brand	Cost
Asia	9	#2	#6	#7	#4	#7	#7
US	4	#2	#3	#2	#1	#4	#4
Europe	6	#3	#1	#6	#2	#3	#3

Notes to Interviewer:

- Based on what we know about preferences (Chart 1) and ranking on key attributes against competitors (Chart 2), EnerForce's turbine is suitable for both the U.S. and Europe markets
- It is not comparable to competitors in the Asian market
- This could mean that there are competitors in Asia which are not yet in Europe. These competitors could threaten EnerForce if they enter

Interviewer Guide to Exhibit #3

Market	Incremental Yearly Demand (GW)	Projected Annual Growth Rate
Asia	4.5	2%
U.S.	5	9%
Europe	6	-13%

Notes to Interviewer:

- U.S. and Europe are the biggest markets currently
- U.S. market becomes biggest next year due to growth rates

EnerForce: Question 3

Question #3:

How many units would you predict EnerForce could sell in each of the three markets? Please clearly state your assumptions.

Notes to Interviewer:

To calculate Enerforce's sales, the candidate will multiply the number of turbines needed in each market next year by the projected market share in each market. The candidate should be able to deduce market share information from a combination of Exhibits 1 and 2

Market	Demand (GW)	GW / KW	KW / Turbine	# of turbines in market this year	Market growth rate	# of turbines in market next year	Assumed market share	Expected EnerForce turbine sales next year
Asia	4.5	1,000,000	100	45,000	2%	45,900	10%	4,590
U.S.	5	1,000,000	100	50,000	9%	54,500	50%	27,250
Europe	6	1,000,000	100	60,000	3%	52,200	40%	20,880

EnerForce: Question 4

Question #4:
Assume plant capacity in China of 2,000 turbines/year and in Vietnam of 3,000 turbines/year, price per turbine of $100K, and 15% profit margin. Assume a 10% discount rate. Should EnerForce be acquired for a price of $700M?

Notes to Interviewer:
Assuming the capacity of both plants is maximized, production would be 5,000 turbines/year. Let's assume EnerForce is able to sell all 5,000 turbines/year. We would need to multiply this by $100K to derive sales revenue. Sales revenue multiplied by the 15% profit margin would give us profit/year. Profit/year divided by the discount rate would give us the projected valuation of EnerForce (assuming this is their only product)

Calculations:

- 5,000 turbines/year * $100k turbine = $500M/year
- $500M/year * 15% profit margin = $75M/year
- $75M/10% discount rate = $750M value price
- Acquisition go/no go should be determined via whether the asking price for EnerForce is higher or lower than the derived valuation

EnerForce: Recommendation

Recommendation:

Acquire EnerForce given a valuation of $750M and a price of $700M although an understanding of EnerForce's other products (if any) and assets is most likely necessary prior to acquisition.

Risks:

- **Competitive response:** already saw that competitors in Chinese market entering other markets could be a serious threat
- **Country specific costs**: to reach 5,000/turbines a year would need access to US or Europe; there could be tariffs or there could be quotas in these countries
- **Customers**: there might not be support in U.S. and Europe for renewables due to the indebtedness of Western governments
- **Technology**: competitors could develop technology to make EnerForce products obsolete rendering the acquisition overvalued due to the assumption of perpetuity

Next Steps:

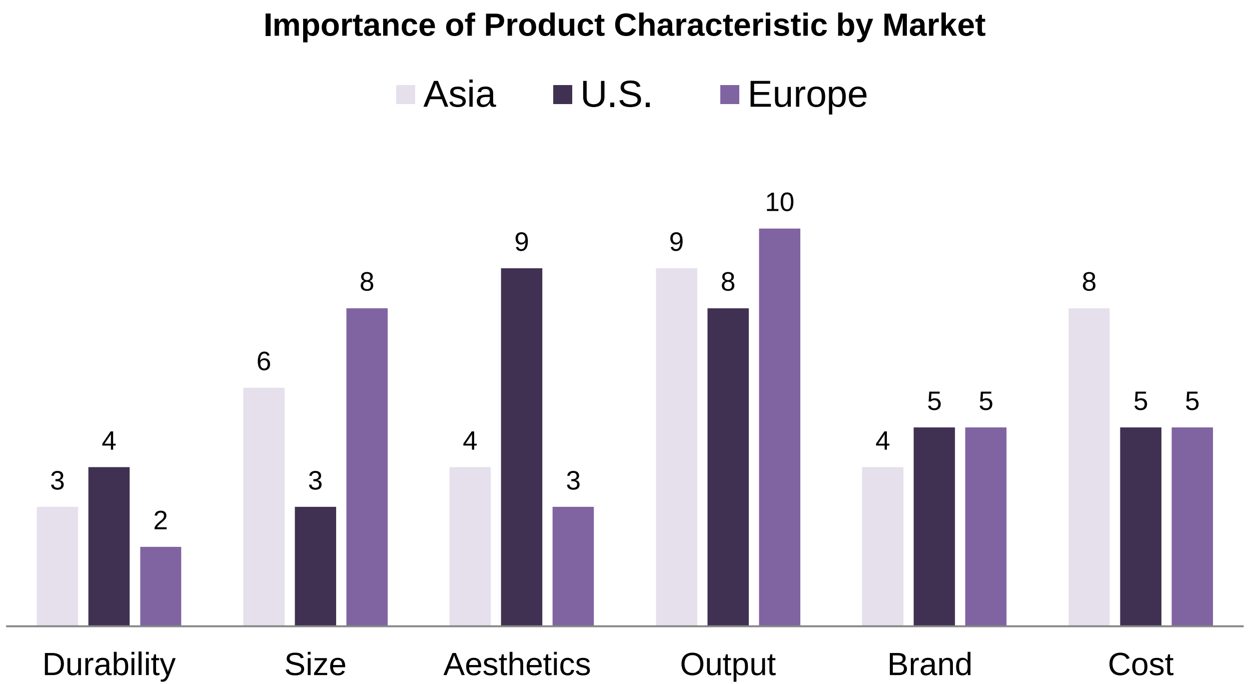
- Due diligence to prepare for the acquisition of EnerForce
- Further understand EnerForce's other products and assets
- Investigate competitive landscape in more detail, with a focus on the competitors in China

Bonus: Guide to an excellent case

- Strong candidates will identify that there are competitors in China which may not currently be in the U.S. and European markets and that these competitors represent a significant long-term threat
- Other threats associated with the acquisition should also be mentioned by a superior candidate at the end of the case

EnerForce: Exhibt #1

Exhibit #1: Customer Survey



EnerForce: Exhibt #2

Exhibit #2: Competitive Landscape

Market	# of Total Competitors	Industry Rank – 100 KW EnerForce Turbine					
		Durability	Size	Aesthetics	Output	Brand	Cost
Asia	9	#2	#6	#7	#4	#7	#7
US	4	#2	#3	#2	#1	#4	#4
Europe	6	#3	#1	#6	#2	#3	#3

EnerForce: Exhibt #3

Exhibit #3: Market Size and Growth

Market	Incremental Yearly Demand (GW)	Projected Annual Growth Rate
Asia	4.5	2%
U.S.	5	9%
Europe	6	-13%

Regional Jet Market

Author: Jeremy Wimmer and Alan Voyles (Stern '15)
Difficulty: Medium
Case Style: Interviewer Led

Case Prompt:

While the market for long-haul jet manufacturers is a duopoly between Boeing and Airbus, the market for regional jet manufacturers is currently a duopoly between Bombardier of Canada and Embraer of Brazil. However, the market appears to be in for a period of transition due to at least two new entrants, Competitor "R" of Russia and Competitor "C" of China.

What do you think will happen to the international market for regional jet manufacturers in the next five years?

Case Overview:

Industry: Airlines

Case Type: Industry Analysis

Concepts Tested:

- Brainstorming
- Profitability Calculations

Overview Information for Interviewer:

The interviewer should take charge with the questions that follow once the candidate relays his or her framework. The interviewer should provide the candidate with all the charts at once.

The candidate should pick and choose the charts that are relevant to answer each question.

This case ends with the final question and there is no need to ask for a final recommendation.

Regional Jet Market: Case Guide

Clarifying Information:

Interviewer Guide:

A Good Framework Will:

- Factor in market trends:
    - Growth/decline
    - Demand/size
    - Regulations
- Take into account new entrants:
    - Competitive structure (present and future)
    - Impact on supply
    - Changes in relevant Porter's Five Forces (buyer power, supplier power, rivalry)
- Examine the products:
    - Any competitive advantage? (commodity/specialized product)
- Examine financials:
    - Impact on revenue/profitability of industry and firms

A strong candidate will be able to swiftly pick the information from charts that is required to respond to the various questions.

If the candidate is taking too long the interviewer can refer the candidate to the specific chart that contains the required information.

Regional Jet Market: Question 1

Question #1:

What advantages and disadvantages would you expect Russian and Chinese jet manufacturers to have compared to their competitors?

Notes to Interviewer:

- Interviewer should probe the candidate to go beyond these lists. Interviewer should be looking for the candidate's ability to draw on his/her general business acumen to develop these lists.
- Additionally the candidate should put some structure to the response. A basic structure is to talk through advantages first, and then move to disadvantages.
- Sample response:

Advantages

- State backing
- Lower cost of production
- Access to home markets which may be growing faster than developed markets

Disadvantages

- Poorer reputation for safety
- Trouble with certification in developed countries
- Lack of R&D strength

Regional Jet Market: Question 2

Question #2:

What is the expected cost per plane for each manufacturer in 2014?

Notes to Interviewer:

- Candidate should use Exhibits #1, #2, and #3
- Candidate should recognize that labor and parts are variable costs and should be allocated as a % of full capacity
- SG&A and Advertising should be fully allocated
- Candidate should recognize that a manufacturer cannot produce more than its capacity

Variables		Source (given in case unless stated)	Bombardier	Embraer	R	C
Labor	VC	(demand)/(capacity) x (Cost)	1.0	0.5	0.6	0.15
Parts		(demand)/(capacity) x (Cost)	1.5	1.0	0.4	0.1
SG&A	FC	Copied from Exhibit #3	1.2	1.2	0.5	0.75
Advertising		Coped from Exhibit #3	1.3	1.05	0.9	1.0
Total Cost ($B)		**(labor) + (parts) + (SG&A) + (advertising)**	**5.0**	**3.75**	**2.4**	**2.0**
Cost per plane ($B)		**(total cost)/(annual demand)**	**0.05**	**0.05**	**0.06**	**0.1**

Regional Jet Market: Question 3

Question #3:

What is the expected cost per plane for each manufacturer in 2017?

Notes to Interviewer:

- Candidate should use Exhibits #1, #2, and #3
- The candidate should sum up cost at full capacity for each manufacturer (Exhibit #3)
- The candidate should then divide this by the number of planes at capacity (Exhibit #1) to obtain cost per plane

Variables	Source (given in case unless stated)	Bombardier	Embraer	R	C
Labor VC	(demand)/(capacity) x (Cost)	1.0	0.6	0.75	0.375
Parts	(demand)/(capacity) x (Cost)	1.5	1.2	0.5	0.25
SG&A FC	Copied from Exhibit #3	1.2	1.2	0.5	0.75
Advertising	Copied from Exhibit #3	1.3	1.05	0.9	1.0
Total Cost ($B)	**(labor) + (parts) + (SG&A) + (advertising)**	**5.0**	**4.05**	**2.65**	**2.375**
Cost per plane ($B)	**(total cost)/(annual demand)**	**0.05**	**0.045**	**0.053**	**0.0475**

Regional Jet Market: Question 4

Question #4:
What can you interpret from the current and future cost per plane of the Chinese and Russian competitors?

Notes to Interviewer:

- Currently, the new entrants cannot compete on a cost per plane basis due to a lock of demand necessary to sufficiently amortize fixed costs
- It may be possible that their governments are providing subsidies and tax breaks that are not being taken into account
- By 2017, their cost per plane is much more in line with the current market conditions

Regional Jet Market: Question 5

Question #5:
Assume you are advising Bombardier. They are considering entering the larger long-haul jet market to fuel bottom-line growth. What are the risks with this strategy?

Notes to Interviewer:

- Saturated market
- Need to develop different technology
- Competitive response (perhaps Airbus or Boeing enter regional jet market)
- Capacity constraints

Regional Jet Market: Question 6

Question #6:
What do you see being the drivers of demand for future growth in the airline manufacturing industry?

Notes to Interviewer:

New Technology:
- Fuel efficiency
- Range
- Safety

New Regulations:
- Existing planes are retired quicker
- Environmental regulations
- Subsidies to make any part of the air travel value chain cheaper
- Subsidies for airplane manufacturing

New Demand:
- Customers from emerging countries having more disposable income
- Increase in the price of substitutes such as trains
- General economic growth causing more consumption from developed countries

Regional Jet Market: Exhibt #1

Exhibit #1: Capacity (# of jets)

	2013	2014	2015	2016	2017
Bombardier	100	100	100	100	100
Embraer	90	90	90	90	90
R	60	60	60	60	60
C	100	100	100	100	100

Regional Jet Market: Exhibit #2

Exhibit #2: Projected Annual Demand (# of jets)

	2013	2014	2015	2016	2017
Bombardier	100	105	105	100	100
Embraer	70	75	85	75	90
R	5	40	50	50	50
C	10	20	30	35	50

Regional Jet Market: Exhibt #3

Exhibit #3: Cost Breakdown ($B)

Cost breakdown at full capacity	Bombardier	Embraer	R	C
Labor	1.0	0.6	0.9	0.75
Parts	1.5	1.2	0.6	0.5
SG&A	1.2	1.2	0.5	0.75
Advertising	1.3	1.05	0.9	1.0
Total	5.00	4.05	2.40	3.00

BankCo

Author: Wayne Atwell (Stern '15)
Difficulty: Hard
Case Style: Interviewer Led

Case Prompt:

Our client is BankCoCard, a US credit card subsidiary of the major international bank BankCo. They have a rapidly growing $16 billion dollar credit card portfolio. BankCoCard is interested in lowering their cost of funds for their credit card program by starting an online bank.

BankCoCard would like to know if they should start an online bank and if so, should they launch a savings or a checking account for their new online bank.

Case Overview:

Industry: Financial Services

Case Type: Profitability

Concepts Tested:

- Math
- Strategy

Overview Information for Interviewer:

- This is a interviewer led case. It is important to do the case in the proper order.
- State the information above and allow the candidate to design a framework.
- Next ask the candidate brainstorming questions.
- Finally, the candidate should calculate the account level profitability and market size.

BankCo: Case Guide

Clarifying Information:

- BankCoCard wants to launch both a savings and checking account, but their budget only allows for the IT team to build one product this year
- Whichever product is not selected will be launched the following year
- The savings and checking accounts are expected to take the same time to build and will cost the same amount to build: $10 million
- The current cost of funds is 4% for the credit card portfolio
- Interest rates are not expected to change for the next several years
- Assume all deposits can be lent, no reserves are required
- The online bank will only operate within the US

Interviewer Guide:

Brainstorming

- Ask all of the questions in the “Key elements to analyze” section.
- These questions are a brainstorming exercise covering product launch, revenues & costs, and account acquisition

Math Question 1:

- The online bank will lend the deposits to the credit card portfolio at a 3% interest rate.
- What is the lifetime profit of a single checking account verses a savings account?
- Provide the candidate Exhibit #1.

Math Question 2:

- Calculate the total lifetime profit of accounts opened in the first year.
- Provide the candidate Exhibit #2.
- After total profit is calculated, ask the candidate if they are suspicious of any of the assumptions/data.

BankCo: Question 1

Question #1:
What upfront costs will there be to launch an online banking product?

Notes to Interviewer:

- Infrastructure
  - Website
  - Servers
  - Call center
- Designing the product
- Training call center employees
- Marketing
- Etc.

BankCo: Question 2

Question #2:
What are the ongoing revenues and costs of a savings account?

Additional revenues and costs of a checking account not mention in the savings list?

Notes to Interviewer:

Savings

Revenues: Interest from credit card portfolio
Costs: Interest paid to customer, call center, fraud, marketing, statement mailing

Checking

Revenues: Overdraft fee, account fees, interchange, ATM fee
Costs: Debit card transaction processing, ACH transaction processing, ATM reimbursement

BankCo: Question 3

Question #3:
What are possible ways of acquiring new accounts for online banking products? (Keep asking for more until candidate has gotten 4)

Notes to Interviewer:

- Online advertisements
- Search engine optimization
- Partnerships
- Affiliate marketing
- Cross-Sell current credit card customers
- Billboards
- Sponsor events
- Tabling at major events
- Etc.

BankCo: Question 4

Question #4:
The online bank will lend the deposits to the credit card portfolio at a 3% annual interest rate. What is the lifetime profit of a single checking account verses a savings account?
Provide the candidate Exhibit #1.

Notes to Interviewer:
A strong candidate will try to discount the future cash flows and ask for a discount rate. Tell them that it is not necessary.

Savings:
Revenue = $5,000 * 3% * 5 years = $750
Costs =($5,000 * 2% + $1.50 * 12) * 5 years + $50 = $640

Savings Lifetime profit = $750 - $640 = $110

Checking:
Revenue = ($2,000 * 3% + $20 * 10%) * 10 years = $620
Costs = $2,000 * 0% + $2.00 * 12 * 10 years + $100 = $340

Checking Lifetime profit = $620 - $340 = $280

BankCo: Question 5

Question #5:
Calculate the total lifetime profit of all accounts opened in the first year for both the savings and checking products. BankCo expects to capture 10% of the market for online accounts of whichever product they launch.
Provide the candidate Exhibit #2.
After total profit is calculated, ask the candidate if they are suspicious of any of the assumptions/data from the case.

Notes to Interviewer:

Savings:
Accounts in First Year = 20,000,000 * 10% = 2,000,000
Savings Lifetime profit: 2,000,000 * $110 = $220,000,000

Checking:
Accounts in First Year = 15,000,000 * 10% = 1,500,000
Checking Lifetime profit: 1,500,000 * $280 = $420,000,000

Suspicious Assumptions: Anything that sounds reasonable and is supported by the candidate is acceptable including, capturing 10% of market in the first year, the average deposits, life of the account, account acquisition cost, etc.

BankCo: Recommendation

Recommendation:

- BankCoCard should start an online bank, launching the checking account in the first year and savings account in the following year
- Launch the checking product because it will generate almost twice as much lifetime profit
- The market for online checking accounts is growing faster than the market for online savings accounts

Risks:

- BankCoCard could capture less than 10% of the market
- Reputation risk
- Acquisition cost could be higher than expected
- Product is not differentiated from competitors
- Regulatory risk associated with online banking

Next Steps:

- Meet with regulators
- Survey potential customers to aid in product development
- Collect industry reports to confirm assumptions
- Interview industry experts
- Host focus groups
- Hire IT staff
- Design website
- Request additional budget for both products
- Build call center

Bonus: Guide to an excellent case

- A strong candidate will mention competitive response and time value of money / discount rate.
- A strong candidate will not only note that the checking market is growing faster, but will also attempt to calculate the CAGR. Checking CAGR is 20%, Savings CAGR is 10%.
- An especially talented candidate will recall that the objective of BankCoCard is to lower cost of funds for the credit card portfolio. They will calculate that the savings account will generate $10 billion in deposits, while the checking account will only generate $3 billion. Using that as supporting evidence, they would recommend the savings product over the checking product.

Made to Measure

Author: Aatman Chaudhary (Stern '15)
Case Style: Interviewer Led

Difficulty: Easy

Case Prompt:

Our client owns a designer shoe-store that makes high end made to measure shoes for customers.

The high-quality product has gained popularity rapidly and the client wants to ramp up production, however, the highly-skilled labor that our client employs is hard to come by.

Our client wants us to help them figure out how to increase output without adversely affecting quality.

Case Overview:

Industry: Leatherworking

Case Type: Business Improvement

Concepts Tested:

- Operations
- Math

Overview Information for Interviewer:

The case requires the candidate to explore the process involved in making the shoes. The solution lies in a change in the process, deploying resources in a more effective manner.

The interviewer should direct the candidate towards asking about the process and existing internal resources rather than external solutions.

Once the solution has been arrived at, the interviewer can move on to asking the candidate to calculate the maximum weekly output.

Made to Measure: Case Guide

Clarifying Information:

- There are no additional skilled shoemakers available in the market
- The shoe-making process has 3 stages, cutting, stitching and finishing
- Currently there are 15 workers, each of whom take an average of 12 hours to produce one pair of shoes
- Each shoemaker performs all three steps of the process under the current system
- Different shoemakers have different skill-sets, provide the exhibit to highlight this point, prompt the candidate about this point if she/he does not arrive to it on their own
- If the candidate asks whether the process can be changed to one where shoemakers perform specific tasks, say yes

Interviewer Guide:

This case is a simple process reworking. The challenge for the candidate is to ask enough questions about the process to identify the fact that the resources (i.e. the labor) are not being utilized in an optimal manner.

The exhibit is a result of a survey and groups the different employees into groups based on their skill sets. The table provides the number of hours a group of employees takes for each task.

The key for the candidate is to identify that by getting the workers to perform specialized tasks, the average time per pair of shoes can be reduced from 12 hours to 9 hours, thereby increasing the output.

For the math question, a calculation guide has been provided for the interviewer.

Made to Measure: Case Guide

Key Elements to Analyze:

The Process

- Understanding the process is critical, the candidate should ask questions regarding how the shoe is made, and catch the fact that the process can be altered.
- Provide Exhibit #1 when the candidate asks about the process and different activities involved.
- The interviewer should drive the focus of the discussion to the process rather than external measures by clarifying that no outside labor is available and there is currently no technology that we can use to boost output.

Specialization

- The candidate should be able to grasp that there is clearly a misalignment of skills and tasks, and that introducing specialization is a way to boost the output without compromising quality.
- The interviewer should encourage discussion on the process and what alterations to the process are feasible and which aren't, prompting the candidate if necessary.

Made to Measure: Question 1

Question #1:
Once the candidate has arrived at the solution, if time permits, they should be asked to calculate the new output level, and the total new profit per week, based on the assumptions provided. Please note that this section should be explored only if time permits and the candidate has arrived at the solution.

Math Solution:

The calculations are relatively straightforward, the critical part is the first step, which involves calculating the new output level. This should be done assuming that under the new system the average time taken for a pair of shoes drops from 12 hours to 9.

The per pair hours and the total available hours and the total number of employees are enough to calculate the output level, which can then be followed by the cost calculations. Please refer to the calculation guide after the exhibit.

Math Information:

Employees work 9 hours a day, 5 days a week

Price : $300/pair

Material cost: $ 40/pair
Shipping: $ 10/pair
Employee wages: $15/hour
Fixed costs: $ 1000/week

Made to Measure: Question 1

Calculation Guide:

Parameter	Units	Value
Output Calculations		
Hours per pair in new system	Hours	9
Hours per week per employee	Hours	45
Per week output per employee	Pairs	5
Total employees	Number	15
Weekly output	Pairs	75
Profit Calculations		
Shoe selling price	$/pair	300
Materials and delivery cost	$/pair	50
Gross profit per pair	$/pair	250
Total gross profit per week	$	18,750
Employee cost per hour	$/hour	15
Total employee cost	$	10,125
Weekly fixed costs	$	1,000
Weekly profit	$	7,625

Made to Measure: Recommendation

Recommendation:

- The process should be changed into one where each group of employees does a specific task.
- This will reduce the average time per pair of shoes to 9 hours, enabling the client to scale up the operation within the specified constraints

Risks:

- Any process change, especially heavily entrenched processes are fraught with risk.
- Employees may be used to the old system and there may be bumps in the road in implementation.
- There may also be one time costs associated with implementing these changes, especially if it involves a layout change in the workshop

Next Steps:

- Monitor the process as time progresses, consider implementing the change in phased manner, using a pilot group to test whether there are substantial gains to be made, and identify hiccups early.
- This may result in a smoother implementation, however the gains could be slower in coming.

Bonus: Guide to an excellent case

- An excellent case would be market by a candidate who focuses and quickly understands the process. An exceptional candidate should be able to move quickly from the exhibit to the solution, and leave enough time for the calculations.

Made to Measure: Exhibit 1

Exhibit #1: Employee Survey

Hours per activity	Group 1 (5 employees)	Group 2 (5 employees)	Group 3 (5 employees)
Cutting	3	5	4
Stitching	4	4	3
Finishing	5	3	5
Total Hours	12	12	12

These numbers are a result of survey conducted among the 15 employees at the client's workshop.

The groups essentially are a result of the fact that different employees specialize in particular aspects of the process.

Sunshine Power

Author: Andrew Gouge (Stern '15)
Difficulty: Medium
Case Style: Interviewee Led

Case Prompt:

You are a consultant who has been engaged by "Sunshine Power", owner of a coal power station on the Sunshine Coast of Australia. 6 year's ago Sunshine Power commenced a pilot project with "SunSteam", a solar tech company. SunSteam technology allows your client to reduce the quantity of coal it consumes by using sunlight as an additional heat source.

The $3.5M AUD pilot, involving one SunSteam array, experienced many technical difficulties at first but has just broken even. Recently, SunSteam proposed to expand the pilot by constructing four additional SunSteam arrays. Your client has very specific project investment criteria and is not sure if they should accept the SunSteam proposal.

Case Overview:

Industry: Utilities

Case Type: Profitability

Concepts Tested:

- Profitability calculations

Overview Information for Interviewer:

This case is a cost efficiency problem - an upfront fixed investment results in lower operating cost.

1. Provide ONLY exhibits 1 and 2 up front and read case prompt to interviewee.
2. Candidate may only view the Exhibits, no other case material.
3. Answer clarifying questions with information provided. All other information is "Unknown"
4. Provide exhibit 3 only when asked about the cost or price of coal.

Encourage the candidate to do additional brainstorming on risks & benefits of the project.

Sunshine Power: Case Guide

Clarifying Information:

Cost of expansion?

- Unknown – make assumption based on case prompt ($3.5M per array)

Output of One SunSteam Array?

- Steam produced by array equated to 0.2% saving in annual coal quantity consumed on avg.

Annual Consumption of Thermal Coal?

- Plant operates 24hours a day at 100% output capacity. Prior to pilot plant consumed 4 million metric tons of Thermal Coal Per Annum

Array Operating costs?

- SunSteam is easy to maintain, and is maintained by existing on-site staff (assume Op Cost = $0)

Client Investment Criteria?

- Payback must be less than 5 years, based on internal <u>cost savings</u> only

Interviewer Guide:

Exhibit 1 – SunShine Power Station Plan

- "Simple sketch of SunShine Power Station site showing proposed plans for expansion"

Exhibit 2 – SunSteam Technology

- "Illustrates SunSteam technology, note inputs and outputs"
- "SunSteam technology is actually very simple, using mirrors to focus sunlight to boil water and create steam. Usually coal is burnt in a boiler to create steam"

Exhibit 3 – Price of Thermal Coal Last 5 years

- "Spot Price of Thermal Coal over last 5 years"

Sunshine Power: Key Elements

Fixed Investment Costs:

- Construction cost of one array = $3.5M AUD
- Construction cost of four arrays =
- $14M AUD
- Total Fixed Cost to be repaid over 5 years = $14M AUD

Volume of Coal Saved:

- One Array = 0.2% Coal Saving
- Four Arrays = 0.8% Coal Saving*
- Annual Consumption of Coal = 4,000,000 Metric Tons.
- Quantity Saving = 4,000,000 x 0.008 = 32,000 Tons per year**

Breakeven Price of Coal:

- E.g. Total for 5 years. Fixed cost divided by coal quantity saved in total.
- 14,000,000 / (32,000 x 5) = $87.50
- OR: Per Year saving requirement divided by quantity saved.
- 2,800,000 / 32,000 = $87.50

Notes to Interviewer:

- Calculating fixed investment per year for the 5 years is also possible:
- $14M / 5yr = $2.8M per year
- Therefore Cost Saving must be greater than $2.8M per year.

Notes to Interviewer:

* Allowable to assume original array is considered in the payback.
Therefore coal quantity saving = 1% per year

**Math Shortcut – candidate can calculate 0.1% then double 3 times.

Notes to Interviewer:

- Note: that $87.50 is the break even price.
- Alternately Candidate can pick a price of coal e.g. $90 and demonstrate positive return.

Sunshine Power: Recommendation

Recommendation:

- Based on current price of coal (Approx. $83) achieving payback will not be possible.
- Payback time criteria is satisfied based on a calculated break even price of coal of $87.50.
- If coal prices are expected to rise above $87.50 over 5 years on average, as seen over 4 of the 5 past years, then payback criteria will be achieved.

Risks:

- Price volatility of coal is the fundamental risk in achieving payback criteria. The higher the price of coal the faster the payback on the project.
- Technical difficulties with new array could delay payback time as they did with the pilot.

Next Steps:

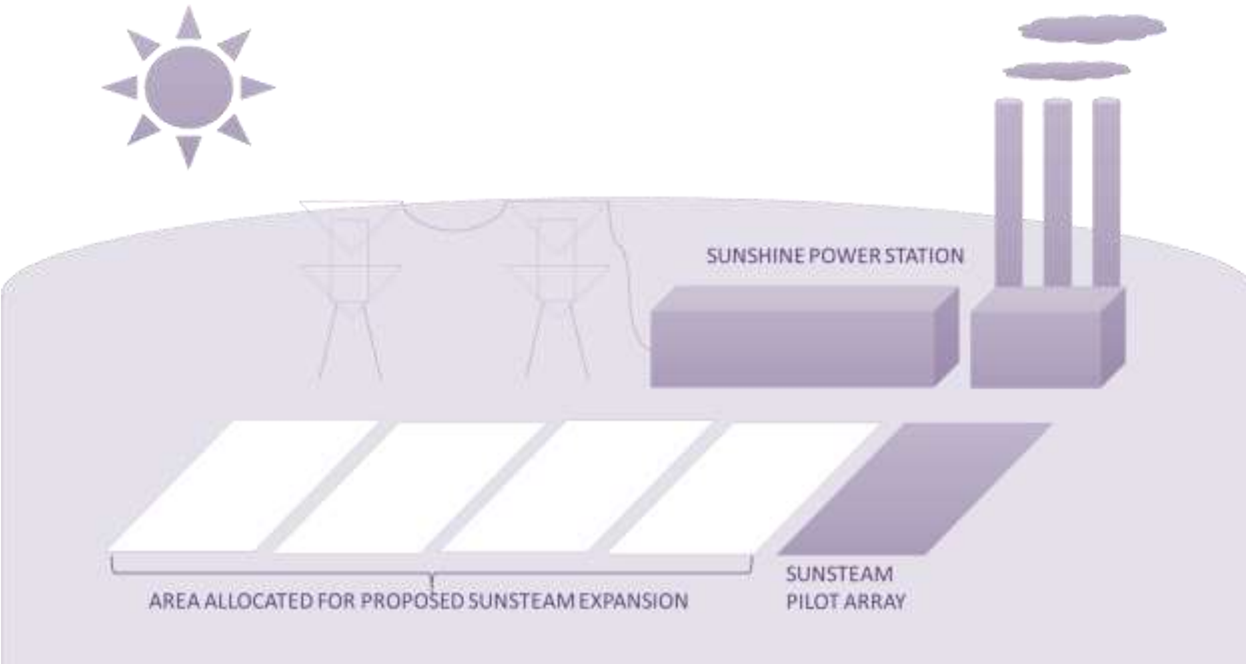
- Mitigate coal price risk by hedging or locking in option contract.
- Negotiate down construction cost of expansion. Case assumed a $3.5M AUD cost per array. If fixed cost of construction was to drop to $3.3M AUD per array then the project would meet payback criteria based on the current coal price.

Bonus: Guide to an excellent case

- Identifies that sunlight is free, but also identifies the limits of the potential growth. I.e. Coal consumption can only be cut to a maximum of 50% due to 24 hour nature of power plant operation.
- Notices declining trend in coal price and seemingly negative correlation to the pilot project payback of 6 years, can deduce that “technical difficulties” must account for 6 year payback when coal was at higher prices.
- Identifies possible external gains from the project such as, carbon credit or tax exemptions, and corporate responsibility bonuses for the client.

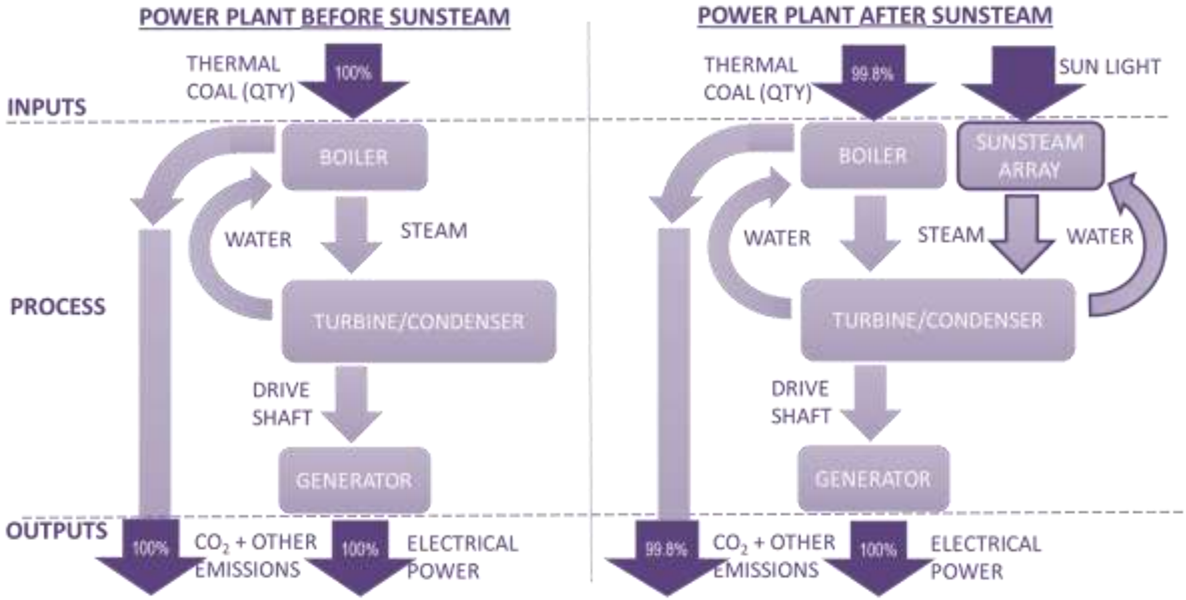
Sunshine Power: Exhibit 1

Exhibit #1: Sunshine Power Station Site Plan



Sunshine Power: Exhibit 2

Exhibit #2: SunSteam Technology Flow Chart



Sunshine Power: Exhibit 3

Exhibit #3: Spot Price of Thermal Coal (Last 5 Years)

Beijing International Airport

Author: Jim Depeng Jin (Stern '15)
Case Style: Interviewee Led
Difficulty: Medium

Case Prompt:

You are an experienced consultant from a top tier consulting firm in Beijing. On a regular Thursday night after you leave work, you decided to grab a beer in Sanlitun, a popular nightlife district. As you finish up your second beer, your old friend, the CEO of Beijing Capital International Airport (BCIA) walked into the bar and sat next to you.

He said " hey man, you are a consultant, right? I heard from a buddy of mine that Shanghai Airport Authority (SAA) is trying to acquire a smaller airport in the middle of Shandong Province. What do you think?"

As you put down your beer, what should you say to your old friend?

Case Overview:

Industry: Airport/Airline

Case Type: Industry Analysis

Concepts Tested:

- M&A
- Strategy

Overview Information for Interviewer:

This case is purposefully vague. Please read it carefully before giving it to the candidate.

The case tests the candidate's ability to extract client intention from conversation, and think off their feet to make quick recommendations.

Beijing Int’l Airport: Case Guide

Clarifying Information:

- The Shanghai Airport is interested in acquiring Weihai Airport and Tai’an Airport in the ShanDong Province.
- We do not know how much these airports are selling for.
- Beijing Airport does not have specific acquisition targets in mind.
- Biggest airports by traffic: Beijing, Guangzhou, Shanghai Pudong, Shanghai Hongqiao, Shenzhen Bao’an.
- The closest airport to Beijing is Tianjing, which is at least 2 hours by car.
- Industry landscape by revenue in 2014: East China 30.5%, Middle South China 26.1%, North China 18.1%, South West China 13.5%, Rest of China 11.8%
- As a high-end transportation mode, air passenger transport is highly concentrated in cities with large populations and well-developed economies.
- We are in a bar. (a.k.a. We don’t have access to much detailed financial information about either of the airport. Ask the interviewee to make educated guesses where need be.)

Interviewer Guide:

There are three main questions of this case:

Q.1: Who is actually our client?

- Some people may get confused on who the client is. The guy sitting next to us is the Beijing Airport CEO, not the Shanghai Airport one. We should then think from Beijing’s perspective, and not dwell on Shanghai’s.

Q.2: What is Beijing Airport CEO actually interested in?

- Well, it seems like he is interested in seeing why Shanghai airport is acquiring smaller airports, and maybe a little worried about his own strategy -- should Beijing airport consider acquiring other small airports?

Q.3: Should Beijing airport develop their own M&A strategy?

- This is the core of the case. The candidate should be able to navigate the possibility of M&A for Beijing Airport, and analyse the situation.
- M&A is costly and often painful for organizations. Thus we need to find significant synergies between Beijing Airport and smaller airports to be able to justify an M&A strategy.

Note: There is a lot of irrelevant information in this case. Interviewee is expected to focus on the analysis and not be distracted by excess data.

Beijing Int'l Airport: Key Elements

Revenue Streams:

- Aircraft movement & service charges (e.g. landing and departure fees, refuelling, aircraft parking and maintenance, etc.; accounts for 50% or more of revenue.)
- Concessions (rent or leases of retail and food outlets, advertising revenues, air catering, etc.)
- Airport fees (directly charged on each ticket)
- Other services (Ticketing services, government subsidies, etc.)
- Parking Fees (~1% of revenue)

Cost Streams:

Variable Cost: Fuel (for resale to airlines)

Fixed Costs:

- Special equipment for ground support (e.g. landing, refueling, ferrying, maintenance, cargo, baggage handling).
- Wages (airport workers tend to be educated and specialized workers)
- Depreciation of equipment
- Rent & Utility

Synergies:

- Cost: Most of the costs are tied to capital purchases and access to local resources, thus no synergy amongst different airport locations. The fuel cost will mostly be influenced by global prices.
- Revenue: Ability to charge airlines, renters or even advertisers of the airport depends on the air traffic volume at that airport. Thus no synergies

Notes to Interviewer:

- In 2014, airports in China average 12.6% in profits. Larger airports usually keep higher profits due to economy of scale, and its ability to charge higher landing fees and attract higher quality retail tenants.

Notes to Interviewer:

- Airports are predominantly fixed-cost businesses, with a large portion of expenses linked to the cost of operating and maintaining fixed assets, such as runways and terminals, rather than traffic volumes.

Notes to Interviewer:

- Question all assumptions the interviewee made on the synergies. There aren't any real synergies between large and small airports.
- (In real life, the four major players in China operates in four different cities with no incentive to merge with each other)

MCA NYU STERN

Beijing Int'l Airport: Recommendation

Recommendation:

- Looking at your cost and revenue streams, it seems like there aren't any opportunities for synergy if you purchase a smaller airport.

- Therefore, I don't recommend you to develop an M&A strategy.

Risks:

- The key risk here is missing out on the deal and the benefits on why Shanghai airport is buying smaller airport – brainstorming on why they might be doing so will suffice for risks

Next Steps:

- Suggest other areas for BCIA to boost its revenues/profits (optional)

Bonus: Guide to an excellent case

- Given our analysis, there is no significant benefit to M&A in the airport operating industry. Thus bonus points are given to candidates who can make reasonable assumptions on why Shanghai airport is buying smaller airports. It may be the case that Shanghai airport got back-door deals that gave them an unfair advantage on the acquisition price, making the deal attractive to them.
- Candidate should brainstorm potential profit-boosting areas:
  - Revenue: Can they offer new services? e.g. hotels, conference capability, and other guest services.
  - Cost: given that airports are high fixed cost, is there ways to increase efficiency? Can they refinance their debt?

Beijing Int'l Airport: Exhibit 1

Exhibit #1: Map of China and Key Airports

Grad-U-Date

Author: Wayne Atwell (Stern '15)
Case Style: Interviewer Led
Difficulty: Medium

Case Prompt:

Our client is an online dating startup named Grad-U-Date, which specializes in matching graduate students with other graduate students. Grad-U-Date has finished building their website and are now looking for your assistance in deciding on a strategy to monetization their website.

What is Grad-U-Date's best method of monetization? How profitable will the company be?

Case Overview:

Industry: Online Dating

Case Type: Pricing

Concepts Tested:

- Critical thinking
- Math

Overview Information for Interviewer:

State the information above and allow the candidate to design a framework. Complete brainstorming exercises before starting profit calculations.

Share Exhibit #2 with candidate. After profit calculations are complete, share Exhibit #3.

Candidate should identify the following major tasks:

- Market size
- Competitive landscape / market share
- Profitability for each monetization model

Grad-U-Date: Case Guide

Clarifying Information:

- Gender ratio of users will be a 50/50
- MBA, law and medical students are considered professional students

- The website has already been built, and is considered a sunk cost
- Grad-U-Date will only operate within the United States

- There are 4 major competitors and hundreds of small competitors
- There has been a significant increase in the number of free dating phone apps starting in late 2012
- There are currently no other online dating services that focuses only on graduate students

- Only one revenue model can be used

Interviewer Guide:

Brainstorming and Market Size:

Ask all of the questions in the "Key Elements" section. These questions are brainstorming exercises and a market sizing.

Revenue Model Question:

Provide the candidate Exhibit #2.

Calculate the profit of each revenue model. Fixed costs are $10,000,000 a year and variable operating cost is $1 per member per year. Which revenue model would you recommend?

Additional Questions (Ask as many as time permits)

After candidate finishes calculations, provide Exhibit #3.

- Does this information change your recommendation for which revenue model?
- Why do you think that the percentage of users paying monthly fees dropped so quickly starting in 2013?
- Given your recommended revenue model, what other strategies can Grad-U-Date use to increase profit?

Grad-U-Date: Questions 1-3

Monetization:

- What types of monetization models could Grad-U-Date use?
- What are the advantages and disadvantages of each model?

Target Market:

- Grad-U-Date is considering limiting the site to only MBA students what issues might there be with an MBA only dating website?

Market Sizing:

- What is the potential market size for Grad-U-Date?
- (Share Exhibit #1 with candidate)

Notes to Interviewer:

- Monthly Fee
- Advertising
- Pay for Premium Account
- Profile Consulting Services
- Micro-Transactions
    - Pay per Message
    - Pay for bump in profile traffic

Push candidate for more answers until they have at least 3

Notes to Interviewer:

- There are more men than women at most MBA programs, there will be a significant gender skew
- It would unnecessarily limit the size of the market
- Most MBA students tend to be older than other students, so many are already married or in a committed relationship

Notes to Interviewer:

- Medical = 450 x 4 = 1,800
- MBA = 300 x 2 = 600
- Law = 200 x 3 = 600
- Non-Professional = 1,000 x 3 = 3,000
- Grad Students per University = 1,800 + 600 + 600 + 3,000 =6,000
- Market Size = 6,000 * 1,000 = 6,000,000

Grad-U-Date: Question 4

Question #4:
Calculate the profit of each revenue model. Fixed costs are $10,000,000 a year and variable operating cost is $1 per member per year. Which revenue model would you recommend?
(Provide the candidate exhibit 2)

Math Solution:

Monthly Fee:
Customers = 6,000,000 x 5% = 300,000 users Revenue = 300,000 x $10 x 12 = $36,000,000
Profit = $36,000,000 - $10,000,000 – 300,000 x $1 = $25,700,000

Premium Account:
Customers = 6,000,000 x 30% = 1,800,000 users
Revenue = 1,800,000 x (50% x 40% + 50% x 20%) x $5 x 12 = $32,400,000
Profit = $32,400,000 - $10,000,000 – 1,800,000 x $1 = $20,600,000

Advertising:
Customers = 6,000,000 x 40% = 2,400,000 users Revenue = 2,400,000 x (50% x $0.75 + 50% x $1.25) x 12 = $28,800,000
Profit = $28,800,000 - $10,000,000 – 2,400,000 x $1 = $16,400,000

Grad-U-Date: Questions 5-7

Question #5:
- Does this information change your recommendation for which revenue model?
- (Provide Exhibit 3 to candidate)

Question #6:
- Why do you think that the percentage of users paying monthly fees dropped so quickly starting in 2013?

Question #7:
- Given your recommended revenue model, what other strategies can Grad-U-Date use to increase profit?

Notes to Interviewer:
- Candidate should switch recommendation from monthly fee to premium account
- The portion of customers willing to pay a fee and the average fee paid have been rapidly decreasing since 2008
- It is unlikely that current profitability will be maintained in the future

Notes to Interviewer:
- Increased competition in online dating market
- Quality free dating apps released that are more convenient
- Tinder app launched in late 2012

Notes to Interviewer:
Reduce Costs:
- Outsource servers
- Only provide email support and no phone number

Increase Revenue:
- Create app to attract more customers
- Profile consulting services
- Profile photo editing
- Offer deals with popular date locations
- Expand to recent graduate school alumni
- Add micro-transactions

Grad-U-Date: Recommendation

Recommendation:

- Grad-U-Date should adopt the premium account revenue model
- Monthly fee revenue model should not be selected because this segment is rapidly disappearing due to competitive pressure
- The premium account model is expected to bring in $20,600,000 in annual profit

Risks:

- Premium account could be seeing a similar decrease in share as fee
- Smaller % of users will purchase a premium account than predicted
- Ad supported model could be growing faster than premium account
- Graduate students may not be able to afford to buy premium accounts
- Number of people going to graduate school could decrease
- Grad students may not want to limit their dating pool to grad students

Next Steps:

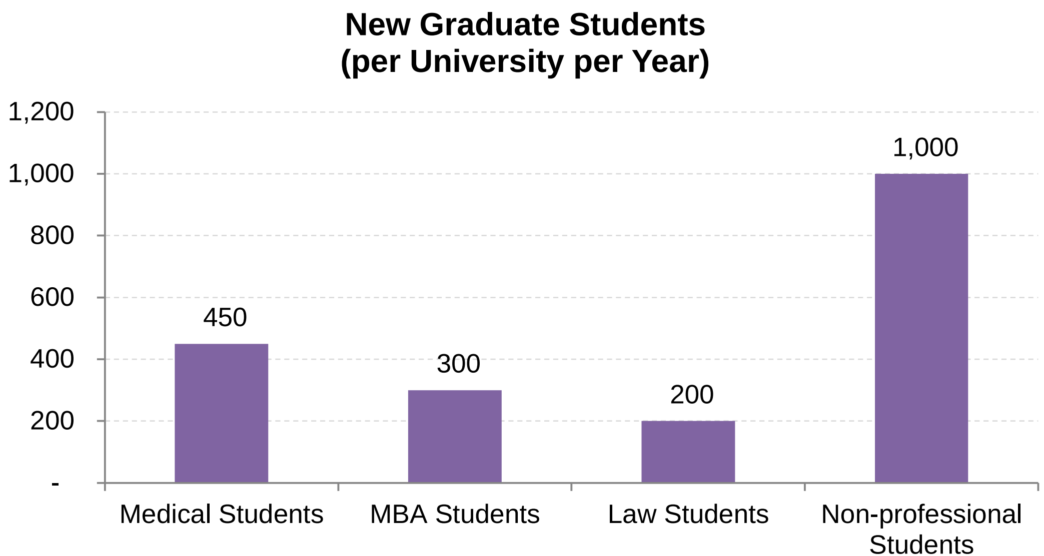
- Explore building an app
- Look into market trends for ad and premium account revenue models
- Expand into new markets such as undergraduates or other countries
- Offer additional services: profile consulting services and date deals
- Add micro-transactions such as increasing the traffic to your profile
- Incorporate social media
- Can premium account and ads work together?

Bonus: Guide to an excellent case

- A strong candidate will brainstorm 5+ monetization models and identify several reasons not to limit the website to MBA students
- Better candidates will finish the math fast enough to do 2 or 3 of the additional questions
- When brainstorming, excellent candidates will structure their answers into buckets, such as strategies to reduce costs vs increase revenue when coming up with ways to improve profitability

Grad-U-Date: Exhibit 1

Exhibit #1: Student Enrolment Information

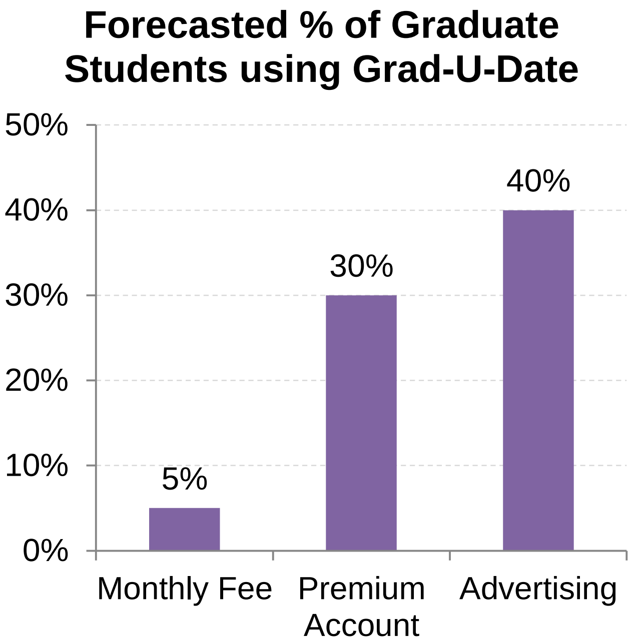


Years for Degree: 4 2 3 3

Note: There are currently 1,000 Universities in the United States.

Grad-U-Date: Exhibit 2

Exhibit #2: Product Usage



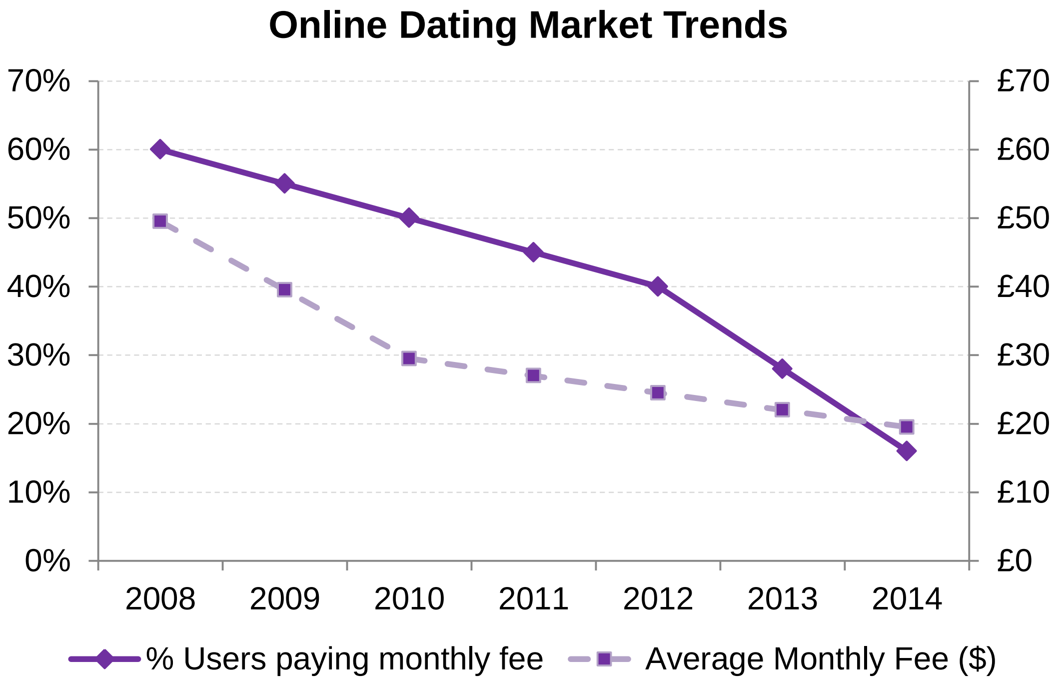
Monthly Fee Model
Monthly membership fee would be $10

Premium Account Model
Premium accounts costs $5 per month; 40% of men and 20% of women purchase premium accounts

Advertising Model
Non-professional students bring in $0.75 per month and professional students bring in $1.25 per month in ad revenue

Grad-U-Date: Exhibit 3

Exhibit #3: Online Dating Market Info



A Sticky Paper Situation

Case Style: Interviewee Led **Difficulty:** Hard

Case Prompt:

Your client is PaperCo, a manufacturer of specialty papers which are sold to commercial printers in the US. PaperCo produces self-adhesive sheeted papers that are ultimately used in a variety of labeling applications – often, eventually, to service CPG firms and for billboards. PaperCo's operations are profitable, but the business has failed to grow over the past few years.

The client would like to invest in the business to restore growth and you have been asked to identify opportunities.

Case Overview:

Industry: Paper and Pulp

Case Type: Strategy/ Re-investment

Concepts Tested:

- Profitability

Overview Information for Interviewer:

For most candidates, this case will be primarily focused on reaching and working through the math, leaving little time for high-level strategy.

The difficulty of this case lies in feeling comfortable with the relatively obscure product/industry and in obtaining the right information to make the necessary profitability and ROI calculations.

There are some key pieces of information which the candidate will need to obtain in order to head in the right direction. If they struggle to ask the right questions to get that information then you can guide them to the right place.

A Sticky Paper Situation: Case Guide (1/3)

Clarifying Information:

Products and Pricing

- Raw materials for the products include rolls of paper, adhesives, and a non-stick coating. They are then layered. Finally, they are cut to specification for the customers – this process is called “sheeting”
- The client has a range of products that is broadly the same for all customers and that it does not wish to change
- Margins are acceptable, but management is averse to price-cutting because of a fear of initiating a war with competitors that would leave everyone worse off
- Unit price differs according to customer segment (given in next section)

Market/Customers

- PaperCo sells to 24,000 commercial printers in the US (20,000 are small, 3,000 medium and 1,000 large)
- The company has 30% market share in the small printer segment and 10% in the medium and large printer segments
- Your team-mates recently completed a study that showed that if PaperCo expanded production it could increase sales to the medium-sized or large-sized printer segments by 20% *(Note to interviewer: The candidate should be clear about the difference between increasing sales by 20% and increasing market share by 20 percentage points. The former is correct. The latter would constitute a 200% increase in sales)*
- Printers (the customers) prefer to receive the product in different forms according to the size of the customer:
    - Small prefer boxes
    - Medium prefer cartons
    - Large prefer pallets

A Sticky Paper Situation: Case Guide (2/3)

Clarifying Information:

Market/Customers (cont.)

- Client's current sales volumes to each customer segment are below:

Variables	Small	Medium	Large
Number of customers	20,000	3,000	1,000
Annual unit usage per customer	100	500	3,000

- The company has the capability to expand production
- Any additional production would require an increase in the client's fixed costs (e.g. new packaging equipment, expanded facilities, increase in permanent labor force). The amount of the increase differs according to distribution method:
  - An expansion in *carton* distribution capacity would constitute a one-off cost of $675K (for medium printer segment)
  - An expansion in *pallet* distribution capacity would constitute a one-off cost of $1.3M (for large printer segment)
- Variable costs consist of materials, sheeting, coating and packaging.

A Sticky Paper Situation: Case Guide (3/3)

Clarifying Information:

Market/Customers (cont.)

- Unit costs differ according to customer segment (given below):

Variables	Small	Medium	Large
Unit price	$20	$18	$15
Materials cost	$5.5	$5.5	$5.5
Coating cost	$1	$1	$1
Sheeting cost	$0.5	$0.5	$0.5
Packaging cost	$3	$2	$1

Industry

- This is a mature industry, with low growth across the board
- There are no significant competitive or regulatory trends in the industry to be aware of

A Sticky Paper Situation: Calculations

Profitability Calculations:

- The case requires the candidate to choose the best investment. To do this they need to compare the cost of the investment to the potential return. In order to calculate the return (i.e. the additional profit generated by the investment) they need to know current profitability, which they can deduce using the information below

- If the candidate has already identified that the growth opportunities lie in the medium and large printer segments they should not waste time determining the profitability of the small printer segment

Variables	Source (given in case unless stated)	Small	Medium	Large
Unit price		$20	$18	$15
Materials cost		$5.5	$5.5	$5.5
Coating cost		$1	$1	$1
Sheeting cost		$0.5	$0.5	$0.5
Packaging cost		$3	$2	$1
Profit per unit	(unit price) – (all costs)	$10	$9	$7
Number of customers		20,000	3,000	1,000
Annual unit usage per customer		100	500	3,000
Total annual profit	(unit profit) x (# of customers) x (annual usage)	$20M	$13.5M	$21M

MCA NYU STERN

A Sticky Paper Situation: Calculations

ROI Calculations:

ROI for medium and large segments:

- Get the total available profit in the market (previous slide) and consider the additional profit from the production expansion
- Finally, account for the cost of getting the extra capacity to supply the additional customers

Variables	Source (given in case unless stated)	Medium	Large
Total annual profit	Calculated on the previous page	$13.5M	$21M
Additional annual sales with expansion		20%	20%
Additional annual profit	(total profit) x (additional sales %)	$2.7M	$4.2M
Cost of capacity expansion (one-off)		$675K	$1.3M
Additional profit net of expansion (year 1)	(additional profit) – (cost of capacity expansion)	$2.025M	$2.9M
Return on investment (1-year horizon)	(net additional profit) / (cost of investment)	3	2.23

Key Takeaway: 1-year ROI is greater for the medium sized printer segment

A Sticky Paper Situation: Recommendation

Recommendation:

- The client should expand production in the medium size printer segment, as this generates the largest ROI over the client's preferred time horizon (1-year)
- Additionally, the smaller cost of expansion in the medium printer segment means a reduced financing need and a resulting diminished risk from the investment
- The client can also consider expansion into the large size printer segment at a later date (depending on capacity)

Risks:

- These recommendations are based on no growth on the markets, expansion in one or the other could tip the balance
- There is no information regarding competitive response, but given the aggressive assumptions regarding increased sales it is reasonable to assume there would be one

Next Steps:

- Client should start looking into how the production will be expanded and the timeframe required to do so
- Investigate the impact of potential competitive response as a result of production expansion
- Deep-dive into industry trends for different segments

Bonus: Guide to an excellent case

- Stronger candidates will note that over a longer time horizon the large printer segment generates a bigger ROI.
- Candidates may even choose to calculate the exact time period over which the large segment starts to have a greater ROI, although this is definitely not required)
- Strong candidates may also note:
    - This segment of the specialty paper market seems to be fairly stable and mature, thus the assumption of no growth, hence it would probably be wise to look for opportunities outside its core products
    - Producing products downstream in the paper industry could reveal attractive opportunities as well

Sports Bar

Case Style: Interviewee Led **Difficulty:** Medium

Case Prompt:

Your client is an entrepreneur looking to invest in a new bar. He needs to determine how profitable the company will be and convince his primary investor, his father, that it will be a viable business.

What factors would you consider and investigate?

Case Overview:

Industry: Food Services

Case Type: Profitability

Concepts Tested:

- Profitability

Overview Information for Interviewer:

This case is math intensive so the candidate will need to stay organized. A great caser will lay out a chart with all the data and calculations as well as talk through the calculations to keep the interviewer apprised of his or her thought process.

By the end of the case, the candidate should make a clear recommendation as to how the primary investor can be convinced it is a viable business. He/she should approach it from an investment perspective and analyze the profitability of the business, along with any risks that aren't discussed. The total profitability should be framed in the context of other possible ways the father could invest his money.

Sports Bar: Case Guide (1/2)

Clarifying Information:

Profitability

Revenues:

- The average customer spends $15 on food per visit
- The average customer spends $20 on drinks per visit
- Capacity constraints and benchmarking should also be discussed here

Costs:

- Lease cost is $10,000 per month
- Labor costs can be seen below
- COGS: Food has a 20% gross margin
- COGS: Drinks have a 50% gross margin
- There is no specific data on utilities, legal, insurance, licenses, training, remodeling , equipment, and other startup costs

Competitive Research

Hours	Sunday – Wednesday	
	Food Customers	Drinks Customers
12pm – 8pm	10 customers/hr	4 customers/hr
8pm – 12am	4 customers/hr	15 customers/hr

Hours	Thursday – Saturday	
	Food Customers	Drinks Customers
12pm – 8pm	15 customers/hr	5 customers/hr
8pm – 2am	5 customers/hr	20 customers/hr

Sports Bar: Case Guide (2/2)

Clarifying Information:

Labor Needs

- Kitchen (when open)
  - 4 people @ $10/hr
- Bar
  - 1 person @ $5/hr
- Wait Staff
  - 3 people @ $5/hr

MCA NYU STERN

Sports Bar: Calculations

Total # of Orders:

Variables	Source (given in case unless stated)	Sunday - Wednesday		Thursday – Saturday	
		Food	Drinks	Food	Drinks
Day orders per hour		10	4	15	5
Day time hours		8 (12pm-8pm)	8 (12pm-8pm)	8 (12pm-8pm)	8 (12pm-8pm)
Day time orders	(hours) x (orders per hour)	80	32	120	40
Night orders per hour		4	15	5	20
Night hours		4 (8pm-12am)	4 (8pm-12am)	6 (8pm-2am)	6 (8pm-2am)
Night orders	(hours) x (orders per hour)	16	60	30	120
Total daily orders	(night) + (day orders)	96	92	150	160
Days per week		4	4	3	3
Total weekly orders	(days) x (daily orders)	384	368	450	480
Total weekly food orders	834				
Total weekly drink orders	848				

Sports Bar: Calculations

Revenue & Costs:

Variables	Source (given in case unless stated)	Food	Drinks	Calculations
Price		$15	$20	
Weekly orders	Previously calculated	834	848	
Weekly revenue	(price) x (weekly orders)	$12,510	$16,960	$29,470
COGS		80%	50%	
Weekly COGS	(% cost) * (weekly revenue)	$10,008	$8,480	$19,488

Variables	Source (given in case unless stated)	Kitchen	Bar	Wait Staff
Salary per hour		$10	$5	$5
# people		4	1	3
Sunday – Wednesday hours	(4 days x (12pm-12am))	48	48	48
Thursday – Saturday hours	(3 days x (12pm-2am))	42	42	42
Total labor cost	(salary) x (total hours)	$3,600	$450	$1,350
Total weekly labor cost	$5,400			

Sports Bar: Calculations

Profitability:

Variables	Source (given in case unless stated)	Calculations
Weekly revenue	Previously Calculated	$29,470
Weekly COGS	Previously Calculated	$19,488
Weekly labor	Previously Calculated	$5,400
Weekly lease cost (assume 4 weeks/month)		$2,500
Weekly Profit	(revenue) – (COGS) – (labor) – (lease)	$2,082
Weeks per year	Assumed	50
Annual Profit	(% cost) x (weekly revenue)	$104,100

Key Takeaway: Business is not projected to lose money but cost assumptions may be incomplete

Sports Bar: Question 1

Question #1:
Your client estimates that the start-up capital needed to open the Sports Bar (e.g., renovations, equipment, licenses) is $500K. How long will it take for the business to break even? Over a 5-yr period, what would be the return on this investment? (Assume no interest)

Notes to Interviewer:

Variables	Source (given in case unless stated)	Calculations
Up-front costs		$500,000
Annual profit	Previously Calculated	$104,100
Break-even Point**	(up-front costs)/(annual profit)	4.8 years
5-year ROI**	((annual profit)*(5years) – (up-front costs)) / (up-front costs)	4.1%

- The client's father would have to compare this opportunity against other potential investments
  - 4.1% at the end of 5 years
  - Over the 5-yr period, less than 1% return per year
- Although calculations indicate that the business can be profitable, the margin is rather small relative to the initial investment required
- Given these results, the client's father could likely find another investment opportunity with a faster payback period and higher ROI

Sports Bar: Recommendation

Recommendation:

- From a financial perspective, the sports bar is profitable, but should be compared to other ways the father can invest his money and when he is expecting a return
- The recommendation should focus on convincing the primary investor (his father) that it will be a viable business with strong returns in the long-term

Risks:

- There are other costs that have been excluded from this case that will need to be properly calculated in more detail and include:
    - Utilities
    - Marketing and promotions
- Location could also be an important factor in determining the success of the bar compared to competitors
- Other risks include sudden rise in COGS (food shortage), increase in minimum wages, or decrease in customers after a few months

Next Steps:

- Incorporate utilities, marketing etc. costs into the profitability calculation
- Investigate other opportunities for your client's father to invest money in

Bonus: Guide to an excellent case

- Strong candidates may also discuss ways to improve the existing business plan such as tapping other sources of revenue(jukebox, advertising) or following a different operating model (food vs. drinks)
- Strong candidates may also note:
    - In order to shorten the break-even period, the client should investigate substitutes for the fixed start-up costs, such as purchasing used equipment or a less significant interior redesign
    - Over time, if the business is successful in building a unique brand and customer loyalty, it may be possible to charge higher margins

Botox

Case Style: Interviewee Led

Difficulty: Medium

Case Prompt:

The maker of Botox is considering expanding to the migraine market and has already begun clinical trials in this area. The product is expected to receive FDA approval in 2016. Your team has been hired to assess the viability of this product for launch.

How will you determine if the market is attractive? If the market is attractive, do you have any recommendations regarding how to launch the product? What concerns should the client take into consideration before deciding to launch. At the conclusion of the case you will need to present your team's recommendation and rationale.

Case Overview:

Industry: Pharma

Case Type: New Product Launch

Concepts Tested:

- Market Sizing
- Profitability

Overview Information for Interviewer:

This is a candidate led case with 3 key components (details on next page).

The candidate should create a structured approach to respond to the prompt, laying out the actions the project team would need to take.

If the candidate struggles to organize his/her thoughts and structure the problem, the interviewer should prompt with a question (e.g., How big would the market need to be to make the product viable?) The candidate should quickly get to the mechanics of market size estimation and develop a business case.

Botox: Case Guide (1/2)

Clarifying Information:

- **Price**
  - The drug will be priced at $200/injection
- **Cost**
  - Remaining development and launch costs amount to approximately $5B
  - Manufacturing marginal costs are expected to be quite small
  - Annual marketing expense can be estimated at $1B
- **Attributes**
  - The product is a prophylactic injection given every 2 months
  - Offers similar efficacy compared to market leading option but without any side effects
  - When taken for migraines it does have some added skin care benefits

Interviewer Guide:

The case has 3 key components:

1. A high-level market sizing exercise for the migraine market, that will involve estimating the potential size of the target population
2. An assessment of the considerations for launching Botox in a new indication, targeting a new therapeutic area
3. A recommendation and report-out summarizing conclusions from the analysis

A successful candidate will go beyond the simple market and revenue sizing. He/she should discuss the pros and cons of a product launch, address additional considerations and make a solid recommendation as to how to proceed.

The interviewer should challenge the candidate to justify any assumptions or arguments made when raising considerations.

Botox: Case Guide (2/2)

Clarifying Information:

Customers

- # of typical migraine sufferers is difficult to approximate since migraines/headaches vary greatly
- Assume at least 10% of migraine sufferers are willing to try such a medicine

Market Sizing Information

Population

- This drug will initially be produced in the US, so the candidate should use world population (300 M)

% of population diagnosed with migraines

- Reasonable estimate of the number of migraine sufferers (20% of population)

% treated with OTC (Over The Counter) vs. prescription medications (i.e. severe migraine sufferers)

- Assume that about 50% of chronic migraine sufferers experience severe migraines and are willing to purchase prescription products

Expected share for the product:

- Due to the absence of side effects and the beneficial skin care properties assume 20%-40% of overall market in 5 years

Competition

- The market leading branded prescription oral migraine treatment lost patent protection last year
- Strong over-the-counter generic market for migraine treatments

Botox: Calculations

Market Sizing Calculation:

Variables	Source (given in case unless stated)	Calculations
US population		300 M
% of people who suffer from chronic headaches/migraines	Assumed	20%
% severe migraine sufferers	Assumed	50%
Total market size in # of patients	(US pop.) x (% chronic sufferers) x (% severe)	30 M
$Price/ injection		$200
# injections/year	(1 injection/(2 months) x (12 month/year)	6
Annual revenue per patient	($ price/injection) x (# injections/year)	$1200
Total annual market size in $	(# patients) x (annual revenue per patient)	$36 B
% Botox market share	Assumed	20% - 40%
Potential annual Botox market size in $	(total market size $) x (% of market share)	$7-14 B

Botox: Question 1 (1/2)

Question #1 (from prompt):

What concerns should the client take into consideration before deciding to launch?

Notes to Interviewer:

Branding

- The Botox brand carries a specific and somewhat controversial image which may impact patients' willingness to use the drug for a non-cosmetic indication

- By leaving both products under the same brand name, the client opens itself to more risk exposure should a new side-effect be discovered for one of the products. Since the migraine market will likely much larger than the existing cosmetic market, it bears a higher risk of adverse events which may then impact the existing market

Erosion/Cannibilization

- If physicians and consumers identify that they two products are essentially the same, it will be very challenging for the client to preserve the two separate markets. The client should investigate regulatory and other mechanisms for keeping the markets separate

- Launching this product at a much lower price-point than the cosmetic indication might cause substantial off-label usage, price erosion and cannibalization of the cosmetic segment

Botox: Question 1 (2/2)

Question #1 (from prompt):
What concerns should the client take into consideration before deciding to launch?

Notes to Interviewer:

Competition
- Given only comparable efficacy versus generic brands, insurance companies may not be willing to put the Botox treatment on formulary, and many migraine sufferers may be unable to afford the treatment out-of-pocket

Other Considerations
- From a regulatory perspective it can be challenging to launch a new indication of an existing product to treat a different condition. The FDA may require the products to be labeled differently and limited to certain specialties, requiring separate marketing
- In general, patients tend to be averse to injectable therapies, particularly when comparable oral treatments are available
- The client could submit the product for approval in other countries in order to increase the potential market size
- If the product can be shown to have better efficacy for a particular patient population, it may be preferable to target the indication and marketing

Botox: Recommendation

Recommendation:

- Given the projected $ size of the prescription migraine market, this looks like a promising market to enter for the Botox maker and would seem to offer very large revenue potential, and more importantly, profit potential.
- However, the product will face significant challenges if launched according to the company's proposed strategy and may cannibalize the highly profitable Botox cosmetic product.
- Launching under another brand name might allow the client to more effectively differentiate between the two uses when advertising the product to customers and physicians. It would also make it easier to price the products differently.

Risks:

- **Regulatory**: The product has not been approved by FDA yet and its success is contingent on getting regulatory approvals
- **Branding**: Both branding with same name and different names have risks attached to them – reputational issues and lack of market traction respectively
- **Cannibalization**: Launching the new product at a lower price point may result in significant cannibalization of cosmetics segment
-

Next Steps:

- Continue clinical trials and set-up regulation/ brand/ marketing-based barriers between the different markets
- Set up contracts with insurance companies to ensure that they will pay for the Botox migraine product after launch

Bonus: Guide to an excellent case

- A strong candidate will recognize the challenges (e.g., cannibalization and branding) of re-launching the brand for a new segment.

Skin Care Market (Deloitte)

Case Style: Interviewer Led **Difficulty:** Medium

Case Prompt:

Our client is a $5 Billion private European manufacturer of medicinal products. The client licenses new medicines from research companies and sells their products through both traditional European wholesale distributors as well as direct contracts with European hospitals that allow them to cross-sell their products and expand their product footprint.

The client's existing manufacturing footprint is in urban locations close to their customers resulting in higher overhead costs compared to the competition. However, they are able to command a price premium in this market due to high quality products, excellent service, and speed to market. They currently own 10% of the European market, a highly fragmented, but growing industry.

They have an aggressive growth target of doubling their top line within the next 5 years and are thinking about entering a new market, consumer skin care, due to the following attractive characteristics:

- Wide array of products treating acne, hair loss, wrinkles, infections, fungus, psoriasis, and oily skin.
- Highly fragmented, $30B global market with Lotions, Ointments, and Creams making up 80% of the products.
- Two major channels i) Physician prescriptions (sold through pharmacies) and ii) Over-the-Counter (sold through retail outlets).
- Significant convergence with more products being sold over-the-counter placing pricing pressure on prescription products in an already low-margin business.

Your team has been called in and asked to lead our client through the analysis and decision processes of how best to proceed with this decision.

Case Overview:

Industry: Cosmetics

Case Type: New Market Entry

Concepts Tested:

- Market Sizing, Marketing Strategy

Skin Care Market: Question 1

Question #1:
What factors should they consider in deciding whether to enter the European Consumer Skin Care market?

Notes to Interviewer:

- ***A good answer will*** demonstrate the candidate's understanding of market attractiveness. This would include things such as fragmentation of competition, size and growth of the market, customer options (e.g. substitutes and product differentiation) and purchasing power, and regulatory considerations (e.g. prescription coverage, etc.).
- ***A great answer*** will also examine how this market fits with the company's capabilities and strategy. Is the market large enough to get them closer to their goal of doubling top line growth in the next 5 years ($5 -> $10B)? Are the products similar enough to be considered a core competency or is this completely new? Is there existing manufacturing capacity or will they need to build? Have they considered alternative growth options that could be more in-line with their existing strategy.
- They should also consider the implications of entering a low-margin business when their existing product portfolio commands price premiums. Are they willing to trade-off top-line growth for lower profit margins?

Skin Care Market: Question 2

Question #2:

Hand Exhibit #1 to candidate.

Based on the client background and Data Sheet provided, how would you advise the client in developing a European channel strategy (Prescription, OTC, or Both?) and product strategy (Branded or Generic) ?

Notes to Interviewer:

- **A good answer would** take into account the characteristics of each channel (size, growth rates, basis of competition) as well as the client's strengths (strong physician relationships, brand quality, speed to market) to determine the pros and cons of each option. For example, it is expensive to build brands (advertising, marketing, etc.) and with the convergence of OTC and Prescription putting pricing pressures on Prescription, they should consider whether branded products will continue to command a premium.

- **A great answer would** also use information from the Data Sheet to make a hypothesis. For example, the client's high manufacturing costs (as mentioned in the case) would make it difficult for them to compete in the generic/Private Label market even though this is a growing area. If growth was strong enough, it may be worth exploring moving manufacturing facilities to lower cost areas. However, this could impact their physician relationships.

- They should also consider the goal of doubling revenue in the next 5 years and which channels will help to achieve that goal. While the branded prescription market may fit their existing capabilities, it is the smallest and slowest growing market. OTC on the other hand, may better support their top line goals

Skin Care Market: Question 3

Question #3:
Given the client's current capabilities and aggressive growth target, if they decide to enter this market, what factors should drive their decision to explore other Geographic markets versus staying in Europe?

Notes to Interviewer:

- **A good answer** would point out that Europe is a small portion of the Global Market (20%) with stagnated growth (5%) while the US makes up 40% of the market with a 10% growth rate. They may also consider the fact that the larger size, higher growth markets (US and Emerging) also have the lowest margins which may not play into their higher cost model. Other considerations are barriers to entry, competition in each country, and the increased cost and complexity of distributing product overseas.

- **A great answer** will also point out that Europe is only 20% of the $30B industry ($6B), broken into four channels. Even if they owned the entire Generic OTC market (which is the largest channel), assuming the geographical proportions hold across channels, they would have 20% of a $10B market ($2B) which doesn't even get them to half of their growth target. This would tell you that you would need to be a significant global player to come even close to your goals or at least pursue additional opportunities simultaneously.

Skin Care Market: Question 4

Question #4:
With the limited information and data available about the client and the consumer skin care industry, do you think expansion into this market is a good idea?

Notes to Interviewer:

- ***A good answer*** would defend a single position one way or the other. They might take into consideration that this is a highly fragmented market with relatively strong growth (7% CAGR) and which will provide them with the opportunity to break into larger markets in other geographic regions once they get a foothold in Europe. The products seem to align with the manufacturing capabilities (lotions, ointments, and creams) and sales channels (Physicians). On the other hand, they might indicate that this is not an attractive market because their current capabilities are best at Branded Prescriptions, which is the smallest and slowest growing part of the industry. As a result, it will not help them achieve their revenue targets in any significant way. Or they may point out that this is a lower margin business which will lower overall profit margins.

- ***A great answer*** would weigh both the pros and the cons before taking a position. They may also ask what the alternative investment options are. They currently enjoy good margins as a large player in a fragmented industry. Should they explore more options there?

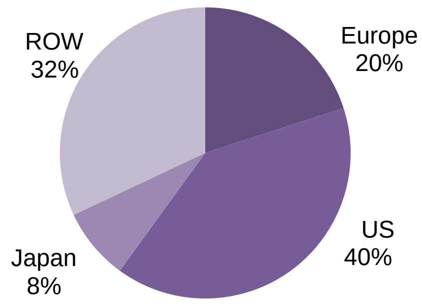
Skin Care Market: Exhibit 3

Exhibit #1: Data Sheet

Global Skin Care Market = $30B
(7% CAGR)

	Branded	Generic	
OTC	$10B (8% CAGR)	$10B (12% CAGR)	$20B (10% CAGR)
Prescription	$5B (3% CAGR)	$5B (5% CAGR)	$10B (4% CAGR)
	$15B (5% CAGR)	$15B (8% CAGR)	

Global Skin Care Market Share ($30B)



Basis of Competition

	Branded	Generic
OTC	▪ Efficacy ▪ Brand Recognition ▪ Marketing	▪ Price ▪ Product line breadth ▪ Services/ unique packaging
Prescription	▪ Efficacy ▪ Physician Relationships ▪ Speed to Market	▪ Price ▪ Reliability ▪ Specialization (unique attributes)

Global Skin Care Market Characteristics

	Growth Rate	Characteristics
Europe	5%	▪ OTC competing with prescriptions ▪ Highest margins
US	10%	▪ OTC competing with prescriptions ▪ Industry consolidation; declining margins
Japan	(2%)	▪ Low population growth ▪ High barriers to entry
Emerging	30%	▪ Highly Price Sensitive ▪ Low Margins

Great Burger (McKinsey)

Case Style: Interviewer Led **Difficulty:** Hard

Case Prompt:

Let's assume our client is Great Burger (GB) a fast food chain that competes head–to-head with McDonald's, Wendy's, Burger King, KFC, etc. GB is the fourth largest fast food chain worldwide, measured by the number of stores in operation. As most of its competitors do, GB offers food and "combos" for the three largest meal occasions: breakfast, lunch and dinner. Even though GB owns some of its stores, it operates under the franchising business model with 85% of its stores owned by franchisees (individuals own & manage stores and pay a franchise fee to GB, but major business decisions e.g. menu, look of store, are controlled by GB).

As part of its growth strategy GB has analyzed some potential acquisition targets including Heavenly Donuts (HD), a growing doughnut producer with both a US and international store presence. HD operates under the franchising business model too, though a little bit differently than GB. While GB franchises restaurants, HD franchises areas or regions in which the franchisee is required to open a certain number of stores.

GB's CEO has hired McKinsey to advise him on whether they should acquire HD or not.

Case Overview:

Industry: Fast Food

Case Type: M&A

Concepts Tested:
- Profitability

Great Burger: Question 1 (1/2)

Question #1:
What areas would you want to explore to determine whether GB should acquire HD?

Notes to Interviewer:

Stand Alone Value of HD

- Growth in market for doughnuts
- HD's past and projected future sales growth (break down into growth in number of stores, and growth in same store sales)
- Competition – are there any other major national chains that are doing better than HD in terms of growth/profit. What does this imply for future growth?
- Profitability/profit margin
- Capital required to fund growth (capital investment to open new stores, working capital)

Management Team/Cultural Fit

- Capabilities/skills of top, middle management
- Cultural fit, if very different, what % of key management would likely be able to adjust

Great Burger: Question 1 (2/2)

Question #1:
What areas would you want to explore to determine whether GB should acquire HD?

Notes to Interviewer:

Synergies/Strategic Fit

- Brand quality similar? Would they enhance or detract from each other if marketed side by side?
- How much overlap of customer base? (very little overlap might cause concern that brands are not compatible, too much might imply little room to expand sales by cross-marketing)
- Synergies *(Note to interviewer: do not let candidate dive deep on this, as it will be covered later)*
- GB experience with mergers in past/experience in integrating companies
- Franchise structure differences. Detail “dive" into franchising structures. Would these different structures affect the deal? Can we manage two different franchising structures at the same time?

Great Burger: Question 2

Question #2:

The team started thinking about potential synergies that could be achieved by acquiring HD. Here are some key facts on GB and HD. (*Note to interviewer: show candidate Exhibit #1)*

What potential synergies can you think of between GB and HD?

Notes to Interviewer:

Lower Costs

- Biggest opportunity likely in corporate SG&A by integrating corporate management
- May be some opportunity to lower food costs with larger purchasing volume on similar food items (e.g., beverages, deep frying oil), however overlaps may be low as ingredients are very different
- GB appears to have an advantage in property and equipment costs which might be leverage-able to HD (e.g., superior skills in lease negotiation)

Increase Revenues

- Sell doughnuts in GB stores, or some selected GB products in HD stores
- GB has much greater international presence thus likely has knowledge/skills to enable HD to expand outside of North America
- GB may have superior skills in identifying attractive locations for stores as its sales/store are higher than industry average, where as HD's is lower than industry average – might be able to leverage this when opening new HD stores to increase HD average sales/store
- Expand HD faster then it could do on own – GB as a larger company with lower debt may have better access to capital

Great Burger: Question 3

Question #3:

The team thinks that with synergies, it should be possible to double HD's US market share in the next 5 years, and that GB's access to capital will allow it to expand number HD of stores by 2.5 times. What sales/store will HD require in 5 years in order for GB to achieve these goals? You should assume:

- Doughnut consumption/capita in the US is $10/year today, and is projected to grow to $20/year in 5 years
- For ease of calculation, assume US population is 300 M
- Use any data from Exhibit #1 you need

Notes to Interviewer:

Variable	Source (given in case unless stated)	Value
HD sales	Exhibit 1	$700M
US market	(Consumption per capita) x (population)	$3B
HD market share	(HD sales) / (US market)	23%
Note to interviewer: At this stage, tell the candidate to round to 25% for the sake of simplicity		
US market in 5 years	(Projected consumption per capita) x (population)	$6B
HD sales in 5 years if double market share	(Current share, calculated as 25%) x (double) x (US market in 5 years)	$3B
# of stores in 5 years	(Current # stores from Exhibit 1) x (2.5)	2,500
Sales/store in 5 years	(HD sales in 5 years) / (new number of stores)	$1.2M

Note to interviewer - an optional probing question is to ask:

- Does this seem reasonable?

A good response would be:

- Yes, given it implies less than double same store sales growth and per capita consumption is predicted to double

MCA NYU STERN

Great Burger: Question 4 (1/2)

Question #4:

One of the synergies that the team thinks might have a big potential is the idea of increasing the businesses' overall profitability by selling doughnuts in GB stores. How would you assess the profitability impact of this synergy?

Notes to Interviewer:

Basic Profitability Analysis

- Calculate incremental revenues by selling doughnuts in GB stores (calculate how many doughnuts per store, time s price per doughnut, times number of GB stores)
- Calculate incremental costs by selling doughnuts in GB stores (costs of production, incremental number of employees, employee training, software changes, incremental marketing and advertising, incremental cost of distribution if we can not produce doughnuts in house, etc.)
- Calculate incremental investments. Do we need more space in each store if we think we are going to attract new customers? Do we need to invest in store layout to have in house doughnut production?
- Other reasonable answers are acceptable

Great Burger: Question 4 (2/2)

Question #4:
One of the synergies that the team thinks might have a big potential is the idea of increasing the businesses' overall profitability by selling doughnuts in GB stores. How would you assess the profitability impact of this synergy?

Notes to Interviewer:

Cannibalization

- If the candidate dives deep in the incremental revenue piece by taking into account cannibalization, what would be the rate of cannibalization with GB offerings? Doughnut cannibalization will be higher with breakfast products than lunch and dinner products, etc.
- One way to calculate this cannibalization is to look at historic cannibalization rates with new product/offering launchings within GB stores
- Might also cannibalize other HD stores if they are nearby GB stores – could estimate this impact by seeing historical change in HD's sales when competitor doughnut store opens near by
- Other reasonable approaches to calculating cannibalization are acceptable

Great Burger: Question 5

Question #5:

What would be the incremental profit per store if we think we are going to sell 50 thousand doughnuts per store at a price of $2 per doughnut at a 60% margin with a cannibalization rate of 10% of GB's sales?

Show candidate Exhibit #2. Also, if necessary, explain the "Cannibalization Rate" to the candidate.

Notes to Interviewer:

- Only do this question if you feel you did not get a good read with the first quantitative question, or if you have ample time left for the case. If you skip this question, tell the candidate the following: The team has calculated that the incremental profit per GB store from selling HD doughnuts would be $15K.

- Incremental Profit =
  - = contribution from HD sales less contribution lost due to cannibalized GB sales
  - = 50K units x $2/unit x 60% margin – 300K units x 10% cannibalization x $3/unit x 50% margin
  - = $60K – 45K
  - = 5K incremental profit/store

Great Burger: Question 6

Question #6 (synthesis):

You run into the CEO of GB in the hall. He asks you to summarize McKinsey's perspective so far on whether GB should acquire HD. Pretend I am the CEO - What would you say?

Notes to Interviewer:

This is an example response. Good answers may vary, depending on answers candidate gave in questions 1-4, and whether or not they completed all previous questions.

Early findings lead us to believe acquiring HD would create significant value for GB, and that GB should acquire HD

- We believe it is possible to add $15k in profit/GB store by selling HD in GB stores. This could mean $50 million in incremental profit for North American stores (where immediate synergies are most likely given HD has little brand presence in rest of world.
- We also believe there are other potential revenue and cost synergies that the team still needs to quantify

Once the team has quantified the incremental revenues, cost savings, and investments, we will make a recommendation on the price you should be willing to pay

We will also give you recommendations on what it will take to integrate the two companies in order to capture the potential revenue and cost savings, and also to manage the different franchise structures and potentially different cultures of GB and HD

Great Burger: Exhibit 1

Exhibit #1

Stores	GB	HD
Total	**5,000**	**1,020**
- North America	3,500	1,000
- Europe	1,000	20
- Asia	400	0
- Other	100	0
Annual Growth in Stores	**10%**	**15%**

Financials	GB	HD
Total store sales	$5,500M	$700M
Parent company revenues	$1,900M	$200M
Key expenses (% sales)		
– Cost of sales *	51%	40%
– Restaurant operating costs	24%	26%
– Restaurant property & equipment costs	4.6%	8.5%
– Corporate general & administrative costs	8%	15%
Profit as % of sales	6.3%	4.9%
Sales/store	$1.1M	$0.7M
Industry average	$0.9M	$0.8M

* Variable costs, mostly food costs

Great Burger: Exhibit 2

Exhibit #2

Sales and Profitability per store	
Units of GB sold per store	300,000
Sales price per unit	$3
Margin	50%
Units of HD sold in GB stores	50,000
Sales price per unit	$2
Margin	60%
Cannibalization Rate of HD products to GB products	10%

Cosmetics Company (Capgemini)

Case Style: Interviewer Led **Difficulty:** Medium

Case Prompt:

The client is the North American CEO of a global personal and home care products company. He has hired Capgemini Consulting to turn around the North American business from loss to profitability within two years. We've scheduled the final presentation with the board this afternoon, but the project team is stranded at an airport unable to make the presentation. You are asked to step in and make the presentation instead.

Case Overview:

Industry: Cosmetics

Case Type: Turnaround

Concepts Tested:

- Information Processing

Cosmetics Company: Case Guide

Clarifying Information:

Internal Analysis

- **Revenue Streams**: Existing & new products
- **Cost Drivers**: R&D, manufacturing, operations
- **Other considerations**: Supply chain, channel strategy, financial situation, org structure, core competencies

Industry Analysis

- **Competitors**: Who are the main competitors? To what customer segments do they cater?
- **Industry Rivalry**: How intense is the rivalry in the cosmetics industry? Is any segment of the industry more competitive than other? Are there any specific trends in industry rivalry (consolidation, price wars, etc.)?
- **Retailers**: Through what retail channels are the products sold? What is their relative power position?

Customer Analysis

- **Consumers**: What are the different consumer segments and what are their relative sizes? Who are the client's main consumers? How saturated is that segment?
- **Trends**: Are consumer tastes changing towards or away from the client's products?

Cosmetics Company: Question 1 (1/3)

Question #1:

You have come up with a good structure to approach the problem. I'm going to give you 3 charts and ask you to take a few minutes to assess and digest the information, then ask you for your observations and analysis.

Show candidate Exhibits #1-3.

Notes to Interviewer:

Exhibit #1

- Women represent the lion's share of consumption in personal care products across all three regions
- Male consumption will remain small although the 55+ age group will exhibit stronger growth than other male age groups
- Female Baby Boomers (born between 1945 to 1965) represent the major source of growth, generating 8.63%, 5.31% and 5.98% in growth for Mexico, USA and Canada respectively
- Baby Boomers drive growth by virtue of their sheer numbers and also by their high spending powers through wealth accumulation and inheritance
- Generation Xers (those born between 1965-1985) are underrepresented in terms of spending due to their relatively small numbers, with the exception being Mexico, which has a larger population growth between 1965-85 compared with Canada and the US
- Echo Boomers (those born between 1985-1995) will play a greater role beyond 2010 but in the short term they should be watched carefully as a consumption group

Cosmetics Company: Question 1 (2/3)

Question #1:

You have come up with a good structure to approach the problem. I'm going to give you 3 charts and ask you to take a few minutes to assess and digest the information, then ask you for your observations and analysis.

Show candidate Exhibits #1-3.

Notes to Interviewer:

Exhibit #2

- A direct co-relationship exists between share of wallet and consumer perception of need
- Generally speaking, the more a spending category is perceived as a necessity, the larger the spending category represents in terms of share of wallet
- According to the latest census data in Canada, Household Products and Personal Care represent 4.5% and 1.7% of share of wallet respectively
- Taxes, housing and food consume the largest share of wallet
- From a marketing perspective, the ability to move a product category up the necessity axis is essential to capture larger shares of wallet

Cosmetics Company: Question 1 (3/3)

Question #1:

You have come up with a good structure to approach the problem. I'm going to give you 3 charts and ask you to take a few minutes to assess and digest the information, then ask you for your observations and analysis.

Show candidate Exhibits #1-3.

Notes to Interviewer:

Exhibit #3

- Companies that have dedicated channel strategies tend to focus primarily on Direct Selling. Often this is a result of the desire for maximum consumer interaction when a company must choose a primary distribution channel
- There is a trend for companies to diversify, both in terms of product categories and channel strategies. This diversification is the result of different products requiring distinct channels and placements
- Competitors who use a diverse channel strategy employ a wide variety of distribution channels. For example: Estee Lauder sells their products in prestigious retail store, company-run salons and brand websites
- Competitors who have a dedicated channel strategy use a primary channel to convey their products to consumers. For example: The Body Shop's main customer-facing channel is their network of over 2,000 stores worldwide, however they also have a web channel in North America and a direct selling force

Cosmetics Company: Question 2

Question #2:
OK, you have those 3 pieces of data that you can take to the CEO, but what other considerations should you inform the CEO need further analysis? Make a list of these considerations.

Notes to Interviewer:

In-house manufacturing or Outsource:
- Pros and cons
- Key constraints and criteria to consider
- Competitor's actions regarding the same

Customer:
- Impact of country of origin on customer perception relating to marketing and brand strategy

Location:
- Does our distribution network design support future growth considering all costs?
- What distance span will optimize service and costs

Decision Making Process:
- What is the current state decision making process with regards to Make/Buy considerations?
- What should be the decision making process?
- Who is responsible and accountable for Make/Buy decisions?

Scalability:
- How will distribution centers scale up based on growth projections?
- How many distribution centers will be required?
- What is the optimal range per distribution center?

Cosmetics Company: Recommendation

Recommendation:

- The client should focus on women who comprise lion's share of consumption but should not ignore growth in the 55+ male group. Particularly among women, there are geographic differences within the North America region that must be taken into consideration.
- The client should develop deep knowledge of customer needs , perception and spending patterns in order to capture an increased share of the wallet. Capturing an increased share of the wallet is critical for driving long-term, sustainable growth.
- Client is misplaced in terms of its channel strategy. Given its large number of product categories, it should have a more diverse distribution channel

Risks:

- The market may not continue growing at the same rate as predicted or may enter a period of decline
- Threat of substitute products and changing customer trends can make the client's products less 'necessary'

Next Steps:

- Mentioned in the recommendations – key focus here will be to outline the steps that may be required for following the recommendations (e.g. investment into customer research, marketing spend for changing segment focus, deep dive into diversifying the distribution channel)

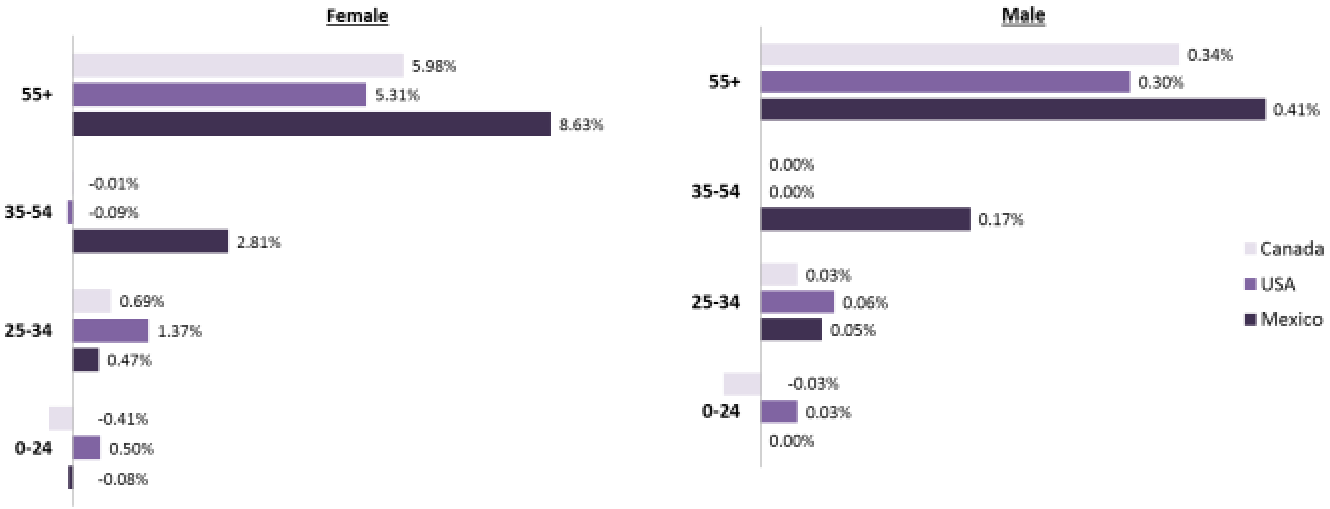
Bonus: Guide to an excellent case

Strong candidates may also mention:

- Ensure product strategy is geared towards appropriate customer segments
- Research customer needs to capture larger shares of wallet
- Investigate options for diversifying distribution channels in an efficient manner with thorough cost-benefit analysis

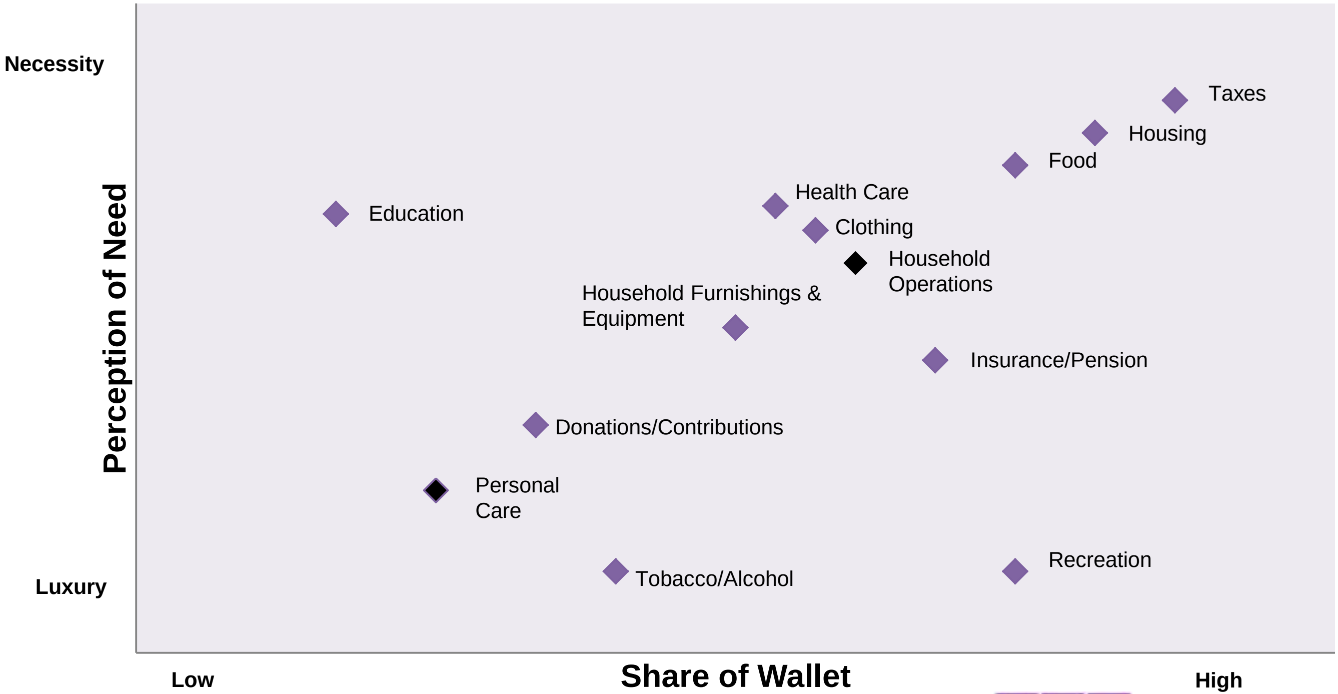
Cosmetics Company: Exhibit 1

Exhibit #1: 2009-2014 Growth in Personal Care Consumption by Age Group



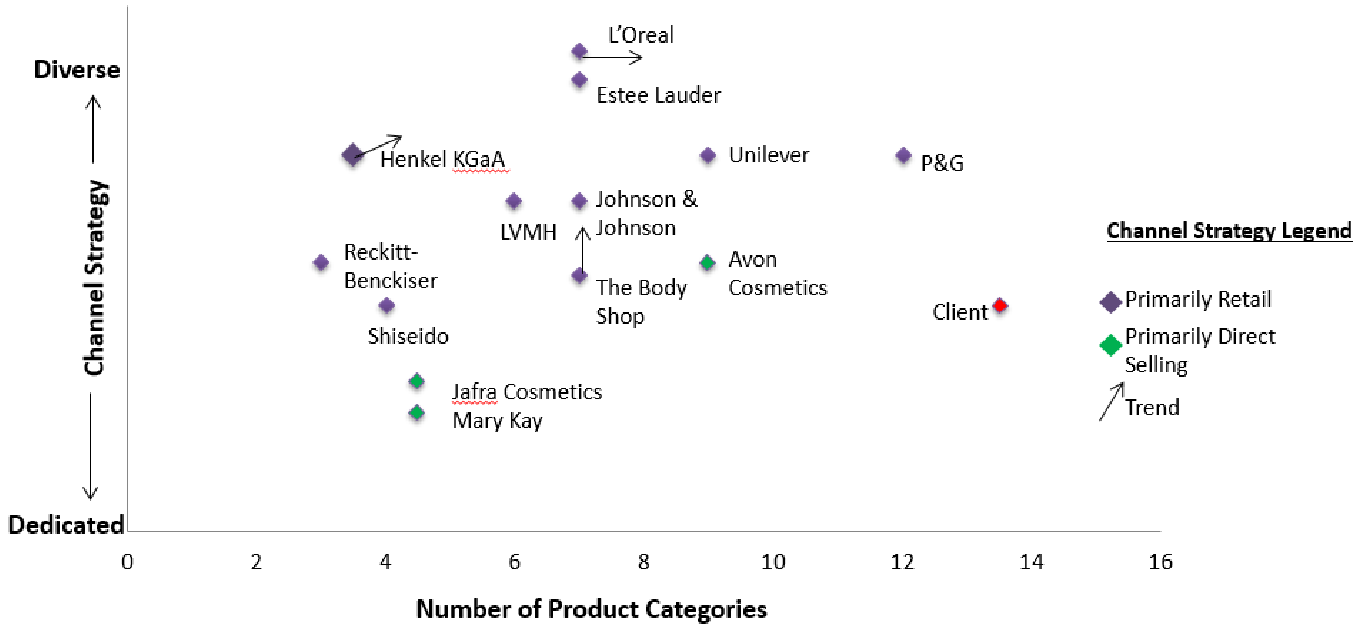
Cosmetics Company: Exhibit 2

Exhibit #2: Ranking Major Household Spending Categories by Share of Wallet and Perception of Need



Cosmetics Company: Exhibit 3

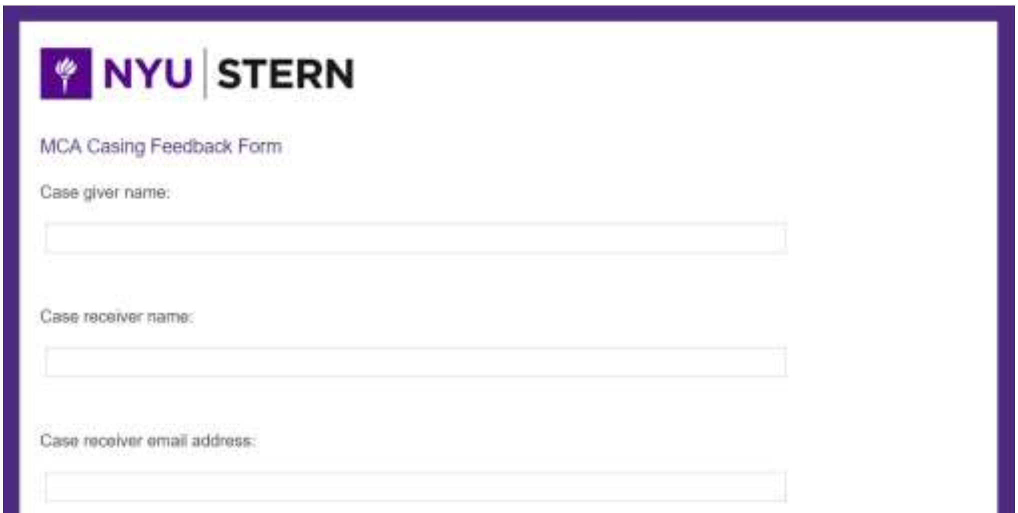
Exhibit #3: Product-Channel Strategy Map



Digital Casing Feedback Form

https://nyustern.az1.qualtrics.com/jfe/form/SV_3yKq8oUQEy8l4gd

- Form to be filled upon case completion by the case giver
- A copy will be emailed to the case receiver email address entered
- Allows for easier tracking of casing strengths and development needs


NYU | STERN

MCA Casing Feedback Form

Case giver name:

Case receiver name:

Case receiver email address:

Additional Casing Resources

Resource	Link:	Uses:	Cost:
Management Consulted	https://managementconsulted.com/	• Additional case access • Firm overviews, skill practice • 1-on-1 casing ($)	• Most resources free through MCA subscription
FastMath	http://fastmath.skilljar.com/fastmath-crack-the-case?pc=sternmba	• Mental math tutorials and practice through	• $49 (signup with Stern email address)
S&P Industry Reports	Stern Dashboard	• Industry insights including margins, growth and drivers	• Free through Stern Dashboard
Rocket Blocks	https://www.rocketblocks.me/	• Framework drills • Charts and data analysis skill work • Mental math practice	• $35 per month or • $155 per year
Case Interview Secrets	http://www.caseinterviewsecrets.com	• Various resources including fast math and framework practice to resume and cover letter coaching • Look Over My Shoulder program is a collection of audio files of example live-cases, both good and bad	• Resources range from Free - $X00

Other resources: https://nyustern.campusgroups.com/mca/links/

MasterTheCase.com

Top Consulting Interview Prep