Case: EasyNav

McKinsey, Mock Interview

Problem statement narrative

EasyNAV is a multi-national third-party fund accounting company based in New York. Asset managers, such as Fidelity or other smaller investment shops, often outsource the calculation of their daily fund prices to third-parties such as EasyNAV. These fund prices, called Net Asset Values, or "NAVs," represent the per-share price of the fund, which then becomes published to the general public, e.g., in the Wall Street Journal. Given the high financial stakes, asset managers require EasyNAV to be both highly accurate and timely in their NAV calculations. This is still a highly manual process due to the number of data sources required to collect this information and inconsistency in data formats delivered to EasyNAV. Although business growth has been strong over the last five years, EasyNAV has seen its costs rising more quickly than its revenues. At the current trajectory, costs will exceed revenues within the next decade, and something must be done. *What are the causes of EasyNAV's rising costs, and what can be done to reduce them?*

Overview for interviewer

The initial problem statement specifically asks the candidate to explore EasyNav's rising costs. Therefore, the candidate should ignore typical Profitability frameworks that explore Revenues in addition to Costs.

After the candidate develops a framework the interviewer should move on to the subsequent questions.

Case Type: Profitability / Operations
Case Style: Command & Control

Information to be provided upon request

Steps EasyNav uses to calculate NAVs:

1. Verify the number of shares of each security that is held within the fund
2. Verify the number of outstanding shares of the fund itself
3. Receive and confirm the market-close prices of each security in the fund (must wait) for the equity markets to close; 4pm EST)
4. Use all available data to calculate NAV and send to requisite publishers – Wall Street Journal, Financial Times, etc. (must submit by 6pm EST)

Potential Issue Tree & Approach to Solving the Case

Key elements of analysis to solve the case

Company

How does EasyNAV operate?
•Workflow process
• Balance of labor

Possible follow-up and guidance to interviewer

• Bottleneck of waiting for market-close prices will cause EasyNAV to have to staff to this peak period of capacity demand, leaving periods of time earlier in the day that are left with slack capacity.
• Dedicated fund accountants who process each account from start to finish are more costly than functionalizing roles along the value chain.

Customer

Who are they?
• Influx of small asset managers
• Shift in customer mix

Possible follow-up and guidance to interviewer

• Smaller asset managers have simpler systems leading to ad hoc/manual methods of delivering data to. EasyNAV, which increases labor & cost
• Greater business from new customers vs existing customers requires greater expense in initial account setup.

Industry

What are the industry trends & norms?
• Shift to wider range (and complex) investment products
• Technology adoption rates

Possible follow-up and guidance to interviewer

• Shift from typical mutual funds to derivatives add to complexity and are more difficult to price.
• Few third-party fund accounting companies relying on technology to calculate NAVs resulting in high labor costs.

Question 1 – Cost Reduction

Question

EasyNAV has 125 fund accountants today (the FTEs who calculate NAVs) who typically are assigned 3-6 funds each, which they work with from morning until end of business. These fund accountants tend to be very busy during the end of the day in order to meet submission deadlines. Separately, EasyNAV also has a staff of 25 fund administrators who deal mainly with the publishing of quarterly and annual prospectuses (i.e. a report of fund performance). In addition to its operations in upstate New York, EasyNAV has fund accounting operations in Melbourne, Australia, which handles some internationally domiciled funds. What are some possible ways for EasyNAV to improve their workflow and reduce costs?

Information to provide up front

None

Provide information if asked

None

Overall approach, good shortcuts & solution

Possible solutions:
-- Functionalize pieces of the value chain to properly align resources with work load. For example, instead of one fund accountant following a fund from beginning to end, break up the steps to calculating a NAV.
-- Rebalance funds across different fund accountants to ensure that the most complex funds are handled by the best fund accountants (load balancing).
-- Utilize the fund administrators group to help process funds during the peak end-of-day period. Since their work output is on a quarterly basis, they may have capacity to assist the fund accountants during crunch time.
-- Utilize all locations (U.S., London, India) to better load balance work through time zone arbitrage. For example, end-of-day activities for London would take place during quieter morning/noon times for the U.S., so excess capacity in the U.S. could be used to help London during peak times.
-- Utilize potential low-cost regions of the globe for additional offshoring.
-- Increase use of technology to reduce manual processes

Question 2 – Productivity Loss

Math Question

Due to market changes, the team believes that productivity per FTE has dropped over the past five years. Because more complex funds take more manpower to process, EasyNAV normalizes the difficulty of each fund by assigning funds a "complexity point score," which allows a fair fund-to-fund comparison (e.g., a fund with complexity score 15 takes three times as long to process as a fund with complexity score 5). The team needs to determine the level of severity of this productivity drop. To do this, data in Exhibit 1 has been collected. Using this data and any other data you might deem necessary, what is the percentage drop in productivity over the past five years, where "productivity" can be expressed as complexity points per FTE?

Information to provide up front

Exhibit 1 should be provided after problem statement is read.

Provide information if asked

- Large funds have an average of 10 complexity points each
- Small funds have an average of 20 complexity points each
- Number of large funds has grown 25% over the last five years
- Number of small funds has grown 120% over the last five years
- Number of fund accountant FTEs has grown 150% the past five year

Overall approach, good shortcuts & solution

Solution: 20% drop in productivity

	5 years ago	Today
# large funds	100	**125** [=100*(1+25%)]
# small funds	200	**440** [=200*(1+120%)]
# FTEs	50	**125** [=50*(1+150%)]
# complexity points for large funds	**1,000** [=100*10]	**1,250** [=125*10]
# complexity points for small funds	**4,000** [=200*20]	**8,800** [=440*20]
Total complexity points	**5,000** [1,000+4,000]	**10,050** [=1,250+8,800]
Complexity points / FTE	**100** [=5,000/50]	**80.4** [=10,050/125]

Question 3 – Resource Allocation

Math Question

After meeting with EasyNAV management, the team is asked to explore potential savings by utilizing fund accountant downtime in one geography to assist another geography during their peak time between 4-6pm. Specifically, they would like us to examine how the Melbourne location could assist the New York location. Additional information uncovered:

-- Melbourne is 16 hours ahead of New York
-- FTEs are paid an equivalent of USD $50,000 per year
-- New York has 100 FTEs staffed throughout the day, Melbourne has 60 FTEs
-- Utilization of FTEs varies throughout the day based on the amount of work required at that time of day. Avg utilization in Exhibit 2.

-- Due to natural variances in workload per day, a location's average utilization cannot exceed 80% of the total available FTEs. That is, an average safety cushion of 20% FTEs is required all times of the day to allow for very busy days. Both location's full-staffing levels reflect the necessary staffing to meet this requirement (e.g. 100 employees in New York to meet the average need of 80 employees in peak hours).

If all available slack capacity in Australia could be diverted to help work on New York-processed funds during their peak activity period of 4-6pm, how much could be saved in labor expense by reducing the New York staffing requirement?

Information to provide up front

Exhibit 2 should be provided after problem statement is read.

Provide information if asked

Utilization is a measure of how much of a location's total available FTE resources are being used (demanded) at any given time, e.g., if a location has 5 FTEs on hand, and the utilization is 60% at noon, then the demand for work is 3 FTEs at that time.

Overall approach, good shortcuts & solution

See following slide.

Question 3 – Solution

Math Solution

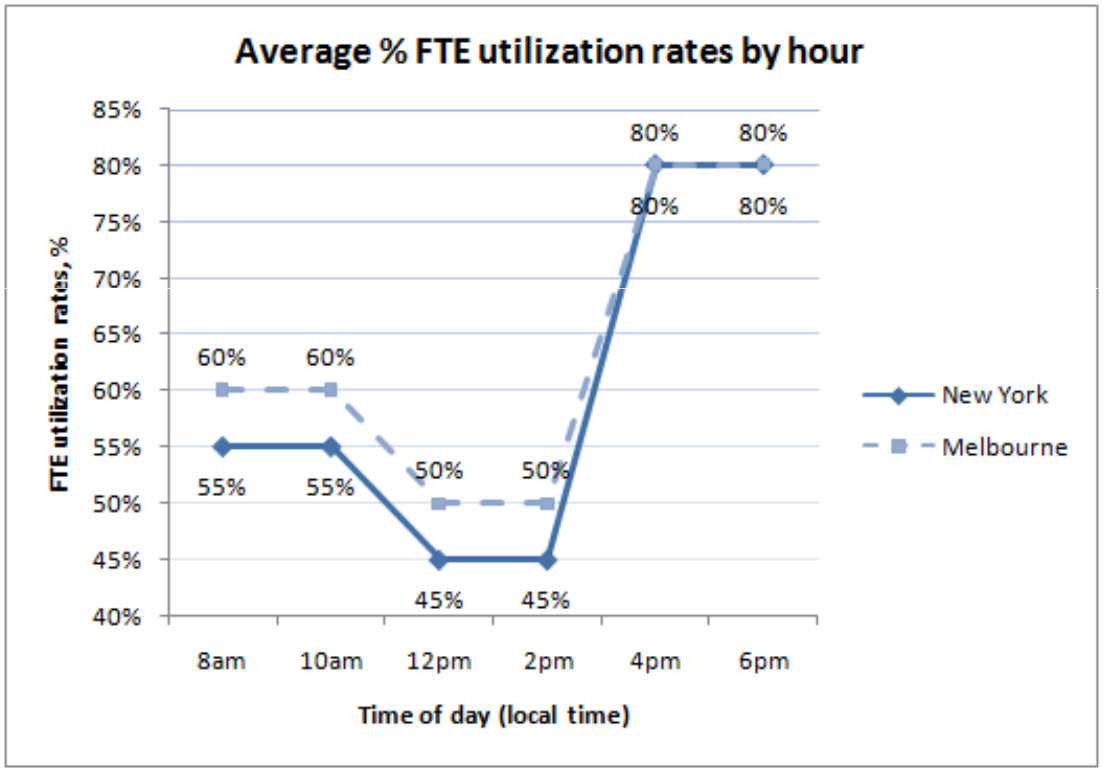
Solution: EasyNAV will save $750,000/yr, or about 15% of total New York FTE spend

- Time zone conversion: 4-6pm peak period in NY is 8-10am in Melbourne
- Available resources in Melbourne:
  - -From the exhibit, average utilization in Melbourne from 8-10am is 60%, therefore there is 20% capacity before reaching the 80% threshold (average utilization cannot exceed 80% during any period of the day)
  - -Therefore, 20%*60 FTE = 12 FTEs available to assist NY
- New resource requirement in NY by utilizing Melbourne:
  - -During the peak time of 4-6pm, NY has an average of 80% FTE utilization, meaning that 80%*100 FTEs = 80 FTEs needed/working during this time
  - -By utilizing Melbourne, EasyNAV can reduce the 80 FTE demand by 12: 80-12 = 68 FTEs required in New York
- Savings due to reduction of FTE requirements in NY:
  - -EasyNAV can reduce staff in NY so that the 68 FTEs required during the peak time represent 80% staffing requirements
  - -Therefore, 68 FTEs/80% = 85 FTEs
  - -FTE savings of 100-85 = 15 FTEs
  - -Dollar savings of 15 FTEs*$50,000 = $750,0000

EasyNAV Exhibit 1

	5 years ago	Today
# large funds	100	
# small funds	200	
# FTEs	50	
Complexity points / FTE		

EasyNAV Exhibit 2



Sample Recommendation

Recommendation	EasyNav's primary cost driver is the mismatch between FTE resources and demand. The client can reduce these costs by utilizing slack capacities between New York and Melbourne. Such an arrangement will allow EasyNAV to reduce its labor by 6 FTE, a savings of $300,000/year.
Risks	Trade-offs to maximum efficiency (e.g. potential loss of quality or less-skilled labor in offshore agreements, loss of ownership, etc)
Next Steps	EasyNAV may benefit from greater automation of manual processes and, in addition, can work with its clients to mandate standardized data submissions to streamline NAV calculations.