

Ford Finance Recruiting
FINANCE MBA CASE FOR CAMPUS INTERVIEW

Instructions

In this fictitious case, you are a financial analyst in the Automotive Strategy staff of One World Automotive, a global manufacturer of automotive vehicles and products. Your responsibilities include evaluating the financial and strategic implications of corporate investment decisions.

Attached are relevant e-mails and data you have received from your manager, Les Dett.

For your meeting with the Ford Finance interviewers:

1. Review the attached material and prepare a one-page executive summary that addresses the alternative strategies outlined in the series of e-mail communications with Les Dett and others.
2. Please include the following items in your summary:
 - a. Financial analyses for each alternative you consider, as directed by Les in his e-mail
 - b. Your recommendation for which alternative should be chosen (if any)
 - c. A brief discussion of additional information that would assist you in your evaluation of the alternatives
3. Bring two additional copies of your one-page executive summary to the interview. Please bring your back-up calculations and any supplemental analyses that you have done.
4. It is expected that you will work independently, and that you will keep your work confidential.

Note: Ford Finance assessment material. Data are fictional and are not an assessment of financial performance.

Ford Finance Recruiting
FINANCE MBA CASE FOR CAMPUS INTERVIEW

E-Mail for Analyst

From: Les Dett
To: Analyst
Subject: C-Car Capacity Study
Date: June 24, 2014 1:42 pm

Analyst,

I need your help evaluating a manufacturing decision. If you look at the attached volume schedule, you can see that we do not have sufficient capacity to meet global demand for our small car, the Vision. There are many factors to consider as we think about how to increase our capacity, but as we enter into the discussion, I want to be armed with appropriate financial data. Would you please look at the attached data I've been able to collect and evaluate some alternatives?

Here are three ideas I had. I'm not sure they all make sense, but let me know what you think:

1. We have already closed our assembly plant in Alabama because the Nomad has gone out of production. Could we reopen that plant to meet the global shortfall?
2. We could take advantage of government incentives in India and build a new facility in Chennai, taking advantage of a growing automotive supply base there.
3. We have excess C-Car capacity in Europe (at our Saarbrücken plant) for most of the business plan period. Perhaps we could use that excess capacity to meet global demand.

Assume in the cases of #1 and #2 that the plants in question would have a base capacity of 350,000 units but that we could get an incremental 10% volume in each year at no cost if needed. I'll have Bob Lee in manufacturing provide you with some information on labor costs and investment levels. There's no opportunity to expand the capacity at our plant in Saarbrücken, Germany because it is landlocked.

Please lay out the alternatives so we can understand the impact on the income statement (including operating margins) and do a cash flow analysis. For cash flow assume we'll stop shipping at the end of 2021 in any scenario. Let me know which one you'd recommend based on the available data, and please let me know also what other data would be required to enhance your analysis.

Regards,

Les Dett
Controller, Automotive Strategy

Ford Finance Recruiting
FINANCE MBA CASE FOR CAMPUS INTERVIEW

ONE WORLD AUTOMOTIVE
C-Car Sales & Production Volumes

US	2016	2017	2018	2019	2020	2021
Total Industry (Mils.)	16.0	16.5	16.5	16.8	16.9	17.0
C-Segment (Mils.)	2.6	3.0	3.3	3.4	3.4	3.4
<i>Segmentation Percent</i>	16%	18%	20%	20%	20%	20%
OWA C-Car Volumes (000)	333	386	429	437	439	442
<i>Share of Segment</i>	13%	13%	13%	13%	13%	13%
Available Capacity (000)	250	250	250	250	250	250
Surplus/(Shortfall)	<u>(83)</u>	<u>(136)</u>	<u>(179)</u>	<u>(187)</u>	<u>(189)</u>	<u>(192)</u>

Europe	2016	2017	2018	2019	2020	2021
Total Industry (Mils.)	23.5	23.5	24.0	24.0	24.5	25.0
C-Segment (Mils.)	3.8	3.8	3.8	4.1	4.4	5.0
<i>Segmentation Percent</i>	16%	16%	16%	17%	18%	20%
OWA C-Car Volumes (000)	376	376	384	408	441	500
<i>Share of Segment</i>	10%	10%	10%	10%	10%	10%
Available Capacity (000)	500	500	500	500	500	500
Surplus/(Shortfall)	<u>124</u>	<u>124</u>	<u>116</u>	<u>92</u>	<u>59</u>	<u>-</u>

Asia	2016	2017	2018	2019	2020	2021
Total Industry (Mils.)	40.0	42.0	44.0	46.0	48.0	50.0
C-Segment (Mils.)	8.0	8.4	8.8	9.2	9.6	10.0
<i>Segmentation Percent</i>	20%	20%	20%	20%	20%	20%
OWA C-Car Volumes (000)	600	672	704	736	768	800
<i>Share of Segment</i>	8%	8%	8%	8%	8%	8%
Available Capacity (000)	550	550	550	550	650	650
Surplus/(Shortfall)	<u>(50)</u>	<u>(122)</u>	<u>(154)</u>	<u>(186)</u>	<u>(118)</u>	<u>(150)</u>

Total (including other)*						
Total OWA C-Car Volumes (000)	1,459	1,584	1,667	1,731	1,798	1,892

* Other markets include South America, Africa, and Direct Markets

Notes: Ford Finance recruitment material. Data are historical and are not an assessment of financial performance.

Ford Finance Recruiting
FINANCE MBA CASE FOR CAMPUS INTERVIEW

E-Mail for Les Dett

From: Bob Lee
To: Les Dett
Subject: RE: C-Car Capacity Study - Assumptions
Date: June 23, 2014 5:35 pm

Les,

Here's the data my team was able to pull together.

By the way, I mentioned this study to Jim in Logistics for his input and he said we don't want to forget about Freight for shipping the units. The Vision has a normal freight cost to dealers of about \$450 per unit within the region where it's built, but inter-regional ocean shipping for vehicles is significantly more expensive. He said you should assume an incremental \$600 per unit cost for shipping between any regions and then another \$200 per unit cost for units being shipped from Asia into North America due to special ocean shipping requirements.

From a Human Resources perspective, re-opening the Alabama plant would mean new jobs in the U.S. that the unions would support, but we're unlikely to get any concessions on labor costs to make it happen.

If you need any more data from my team, just let me know.

Bob Lee
Manager
Manufacturing Finance

-----Original Message-----

From: Loretta Call
To: Bob Lee
Subject: RE: C-Car Capacity Study - Assumptions
Date: June 23, 2014 4:30 pm

Bob,

Per the discussion at our team meeting, we were able to pull together some data for the study.

The Alabama plant is older but it could be retooled from truck production to build small cars for about \$475 million. This would be all tooling with an expected accounting life of 5 years. We could have the plant re-tooled for production at the start of 2016. We should assume all the spending takes place in 2015.

Since Chennai #1 is already at maximum capacity, a new facility would be required and is considerably more expensive than the Alabama re-tool. After government incentives, we'd need about \$250 million to secure the land and facilities and another \$425 million in tooling. Per corporate guidelines, the land and facilities are amortized over 50 years, but the tooling would have the same 5-year life as the Alabama tooling. We could have the plant up and running for January 2017 if we pay for land & facilities in 2015 and tooling in 2016.

The good news is that Saarbrücken already builds the Vision for Europe and even though there are minor differences between the European version and the Vision sold in North America and Asia, no new tooling would be required and any other fixed costs could be absorbed within the plant's existing budget.

I didn't include the labor rates here because you said Les already had that data, but let me know if you need them. I just sent the latest rates to Casey for their review so they should be up to date.

Loretta Call
Supervisor
Manufacturing Finance

Note: Ford Finance assessment material. Data are fictional and are not an assessment of financial performance.

Ford Finance Recruiting
FINANCE MBA CASE FOR CAMPUS INTERVIEW

E-Mail for Les Dett

From: Casey Bishop
To: Les Dett
Subject: Vision Per Units – Purchasing Update
Date: June 24, 2014 8:03 am

Les,

Further to my note below, Purchasing has just confirmed that with some changes to their supplier footprint assumptions on the Vision, we can take advantage of some lower wages and local manufacturing incentives and achieve a \$200 per unit savings on material cost for any units sourced out of Asia.

Casey

-----Original Message-----

From: Casey Bishop
To: Les Dett
Subject: Vision Per Units
Date: June 23, 2014 2:15 pm

Les,

I got a call that you needed some data for the Vision. Our present assumptions are shown below and are based on the latest projections and volumes. These are global averages per unit, except as noted.

Variable cost per unit is \$14,000* and includes material, warranty and freight costs to the plant. I think Bob gave you the freight costs from the plant.

Structural Costs are broken out as follows:

- Allocated Fixed Costs on existing production - \$1,100 per unit
- Labor and Overhead - \$1,200 per unit (but varies by location -- see below)

<u>Region</u>	<u>Labor and Overhead Cost</u> (per unit)
North America (Alabama)	\$1,500
Europe (Saarbrücken)	\$2,000
Asia-Pacific (Chennai #1)	\$500

Marketing is still carrying a global average price of \$18,000 per unit and with fuel prices the way they are and the new technology being offered on the Vision, we aren't expecting to have to offer any incentives to meet our sales projections.

** There is an open assignment to Purchasing to review these costs and identify opportunities around material cost.*

Casey Bishop
Product Development Controller

Note: Ford Finance assessment material. Data are fictional and are not an assessment of financial performance.

MEMO:

From: Corporate Treasurer's Office
To: All Global Car Finance Employees
Subject: Corporate Finance Assumptions
Date: June 1, 2014

We want to take this opportunity to remind all Finance employees of the Corporate assumptions. Using these common assumptions in our analysis across the all functions and regions ensures that we provide our operating management with consistent analysis and allow them to make the best decisions for the Company.

Corporate Weighted Average Cost of Capital – 12%
WACC should be used as the standard hurdle rate for most decisions.

Corporate Tax Rate -- 35%

Depreciation

- Tooling & Equipment – varies based on expected life
- Land, Facilities – 50 years
- Assume straight line depreciation in all cases

Operating Margin

Operating margin is equivalent to Profit Before Tax divided by Total Revenue. Profit Before Tax is calculated as follows:

Net Revenue
Less Variable Cost
Less Labor & Overhead
Less Program Spending
Less Other Fixed Cost

Inventory Valuation

Inventory should be valued on a First In, First Out basis