



ModelOff 2013 Questions and Answers

Hard Times

Question Appeared in: ModelOff 2013 Round 2

Time Allocated: 40 minutes

INTRODUCTION

Slick Micks Toys Inc, is the manufacturer of a type of action figure moderately popular with kids between the ages of 3 and 8 years. Slick Mick's not so slick accountants all have kids that love the figurines but have nonetheless identified that unless there is a swift improvement in cash flow, the business might not make it to the next season.

You have been asked to help the team forecast cash flow for the coming three years with particular focus on the next twelve months. Use the following information to draft a three year monthly cash flow forecast with the first month being October 2013 and use it to answer the following key questions. The key assumptions are provided in the Excel file that accompanies this question and are also set out below.

KEY ASSUMPTIONS

All key assumptions are provided in the Excel file that accompanies this question and are also set out below in this document.



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Quarterly seasonality of sales

CY Q1	CY Q2	CY Q3	CY Q4
20%	15%	30%	35%

* assume months within each quarter have equal sales irrespective of the number of days in each month

Widget Sales

	CY 2013	CY 2014	CY 2015	CY 2016
Units Sold	175,000			
Sales Growth		4%	12%	12%

* assume escalation in sales takes effect instantly from 1 January

Current Sales Price and Margin:

	30-Sep-13
Sale Price per unit	\$ 29.99
Contribution Margin	25%

Indirect Costs

	CY 2013	CY 2014	CY 2015	CY 2016
Indirect Costs	\$ 1,200,000			
Indirect Cost Growth		4%	4%	4%

*Indirect Costs are fixed and occur monthly irrespective of sales.

Debt amortisation schedule

Date	\$
31-Dec-13	\$ 50,000
28-Feb-14	\$ 50,000
30-Apr-14	\$ 60,000
30-Jun-14	\$ 60,000
31-Aug-14	\$ 60,000
30-Sep-14	\$ 90,000
30-Nov-14	\$ 60,000
31-Dec-14	\$ 150,000
31-Mar-15	\$ 60,000
30-Jun-15	\$ 150,000
30-Sep-15	\$ 60,000
31-Dec-15	\$ 150,000

Cash Receipts Timing

Sale	Month +1	Month +2	Month +3
Cash Receipts on Sales	-	60%	25%
			15%

	Oct-13	Nov-13	Dec-13
Cash Receipts on Opening Receivables	30%	60%	10%

Cash Payments Timing

Purchase	Month +1	Month +2	Month +3
Cash Payments on Purchases	-	85%	10%
			5%

	Oct-13	Nov-13	Dec-13
Cash Payments on Opening Payables	30%	60%	10%

The above schedule is applicable to both direct and indirect costs

Assets and Liabilities

Assets	Opening
Cash	\$ 18,000
Accounts Receivable	\$ 600,000
Property Plant and Equipment	\$ 500,000
Total Assets	\$ 1,118,000

Liabilities	Opening	Interest
Accounts Payable	\$ 350,000	
Debt Facility A	\$ 2,000,000	7.0%
Total Liabilities	\$ 2,350,000	

*Simple interest p.a with interest paid at month end

Depreciation and Capex

Depreciation	\$ 10,000 per month
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*No capital expenditure is forecast over the next 3 years

Taxation

Slick Micks has substantial historic tax losses. Assume that no tax will be payable for the period of analysis.



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QUESTIONS

QUESTION 1

What is closest to the forecast Sales Revenue in January 2014?

- a. \$364,000
- b. \$371,000
- c. \$349,000
- d. \$454,000

QUESTION 2

What is closest to the forecast closing accounts payable in December 2015?

- a. \$647,000
- b. \$764,000
- c. \$772,000
- d. \$779,000

QUESTION 3

Which of the following is closest to the total Indirect Costs expected for the three years forecast?

- a. \$3.9m
- b. \$4.0m
- c. \$4.2m
- d. \$3.6m

QUESTION 4

Which of the following is closest to the total interest expense for Calendar Year 2014?

- a. \$112,000
- b. \$125,000
- c. \$128,000
- d. \$140,000



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QUESTION 5

Which month do you forecast Slick Mick's toys will run out of cash?

- a. May 2014
- b. June 2014
- c. July 2014
- d. August 2014

QUESTION 6

Based on the forecast in which quarter does the cash shortfall peak?

- a. Q4 2015
- b. Q1 2016
- c. Q3 2015
- d. Q2 2016

QUESTION 7

What debtor balance should the team be aiming for on 30 June 2014 if it aims to reach a set KPI of 43 Debtor days for the 9 month period ending 30 June 2014, based on the average of the period opening and period closing debtor balance?

- a. \$540,000
- b. \$560,000
- c. \$580,000
- d. \$590,000

QUESTION 8

Calculate EBIT and provide the backwards looking Interest Coverage Ratio for the year ended 31 December 2015.

- a. 1.2x
- b. 1.3x
- c. 1.4x
- d. 1.5x



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QUESTION 9

Recognizing the upcoming cash shortfall, the board orders a review of your sales terms. Based on analysis, if the following strategy were to be adopted from 1 January onward, what would the cash balance be closest to at the end of calendar year 2015?

- sale price increases by 12%
- forecast volume is lower going forward by 5%
- direct cost per unit is maintained

You should make a copy of the sheet your model appears on and name the new sheet "Sens". Use this sheet to do your sensitivity analysis - shade any cells you directly change in bright yellow.

- a. \$185,000
- b. \$260,000
- c. (\$60,000)
- d. \$360,000



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Answers

1	A	Correct Answer is \$363,879
2	C	Correct Answer is \$771,674
3	A	Correct Answer is \$3,858,298
4	B	Correct Answer is \$125,358
5	B	Correct Answer is June 2014
6	A	Correct Answer is Q4 2015
7	C	Correct Answer is \$580,453
8	A	Correct Answer is 1.2x
9	B	Correct Answer is \$261,687