

CASE REPORT

At Capital Industries, a manufacturer of tools for the oil, gas and mining industries based in Geraldton, Brendan Pierce, the owner of the company has been impressed with your work on the previous report. He has called you into his office for a meeting.

“Look mate,” he said, as you sat down. “That was an impressive report you prepared for me previously. I now need you to look at some other things for me. You know, we are not a really big organisation. However, I have been told that I should have a budget and that my managers and finance people should be helping me prepare it. I don’t understand why we need a budget. It’s a waste of time. I would rather my managers and finance staff focus on improving the business. What do they know about putting together a budget? Report to me as to why I need a budget and why my staff needs to get involved.”

“Oh, and by the way. Tom (the previous accountant-of-sorts) thinks that there is a problem with a lack of coordination between purchasing and production. I have got Jodie to gather some information for you (appendix A) to prepare a budget. Tom seems to think that a budget should be introduced to manage the interdependency of these two departments. However, I am not spending any money preparing a budget for the whole company without knowing whether it is going to be useful. The data (in appendix A) is only for the Turning and Threading Division. I will need a budget for how much direct materials will be purchased, both in terms of units and dollars, the direct labour required, in terms of hours and dollars and a manufacturing overhead budget. Look at the information in the data sheet (appendix A) for my specific requirements.”

“And another thing. The Hammer Division is not doing very well here. I am thinking of relocating to Myanmar.” Brendan said.

“Myanmar?” you replied.

“Yes. You know, the old name for that is Burma. They have had a change of government and are opening up the country. Costs will be lower there and I am thinking of moving our Hammer Division there. It isn’t rocket science the way we produce the hammers, so I am

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thinking of starting by producing the hammers in Myanmar first. And if things go well, then we may consider moving other divisions across as well.”

“However,” he continued. “Before we get too excited about this, there are some figures I need you to work out for me. Here are the details and what I need,” he said as he handed you appendix B.

“Basically, I need to know what the profit currently is, and what my level of sales will need to be in order to double the profit, assuming that we **do not move** to Myanmar. And if we do decide to move to Myanmar, what will our break-even point be? Can we achieve the same break-even point locally, without adjusting our variable costs? How would we do that?” he asked.

“Oh and I also need to know if we increase the cost of direct materials, how that would impact our break-even point. Additionally, if the number of units sold falls, how would that impact our break-even point?”

“And last but not least, AMC Industries has just come to me with a proposal for our Spring Loaded Retrieving Tool. We currently produce these tools here in Geraldton, which includes part SP-65, which we produce in-house. AMC is offering to manufacture and supply SP-65 to us for \$17.30 per unit. This price, I have been told, is only valid for next year. They are willing to give us this price because in the long run, they would like to continue servicing us, but at their market price and not the \$17.30 discounted price. This price will be valid for 32,000 units for next year. I need to know whether this is good for us, financially. I also need to know what other factors to consider before proceeding with this.”

“Jodie has prepared some information for me regarding our costs for SP-65 for this year. She has also included additional information regarding SP-65 which may be relevant. Here are the data,” he said as he handed appendix C to you.

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“Look, I know you have a lot on your plate, but I really need all the information as soon as you can, like yesterday. So can you please get it done by the end of next week?” He said.

Well, there goes your weekend!

REQUIRED:

Prepare a report (no more than 10-pages) for Brendan Pierce that addresses the following:

- a) the purpose of a budget and why his staff should be involved in the budgeting process;
- b) the direct materials purchases budget (in units and dollars) and the direct labour budget (in hours and dollars) for the **quarter** ending **30 September 2016**;
- c) a manufacturing overhead budget for the **six-month period** ending **31 December 2016**;
- d) the current profit for Hammer Division and the sales required to double that profit;
- e) the break-even point, if Hammer Division moves to Myanmar;
- f) the requirement needed to achieve the same break-even point for Hammer Division locally;
- g) the impact of the changes to direct material costs and sales on break-even point;
- h) whether Capital Industries should accept AMC Industries' offer; and,
- i) factors to consider apart from the financial results.

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Appendix A

- The Turning and Threading Division expects to sell 60,000 units during the year ending 31 December 2016. Sales to 30 June 2016, the first six months of the current year, are 24,000. Actual sales, in units, for May and June, and estimated sales, in units, for the next four months are as follows:

	<u>Sales (in units)</u>
May (actual)	4,000
June (actual)	4,000
July (estimated)	5,000
August (estimated)	6,000
September (estimated)	7,000
October (estimated)	7,000

- The desired ending inventory for the quarter's direct materials is an amount sufficient to produce the next month's estimated sales.

Direct Material	Kilograms required per finished product	Cost per Kilogram	Inventory level 30 June (in kilograms)
Beryllium Alloy (BA)	0.6	\$240	3,500
Magnesium Alloy (MA)	0.4	\$360	3,000
Titanium Alloy (TA)	0.2	\$120	1,400

- Each product must pass through three different processes to be completed. Data regarding direct labour follows:

Process	Direct labour hours per finished product	Cost per direct labour hour
Forming	0.400	\$40
Assembly	1.000	\$32
Finishing	0.125	\$36

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- The division produced 27,000 products during the six-month period ending 30 June 2016. The actual variable overhead costs incurred during this six-month period are provided below. It is believed that the variable overhead costs will be incurred at the same rate per unit of output during the last six months of the year.

Supplies	\$59,400
Electricity	27,000
Indirect labour	54,000
Other	8,100
Total variable overhead	<u>\$148,500</u>

- The fixed overhead costs incurred during the first six months amounted to \$93,500. Fixed overhead costs are budgeted for the full year as follows:

Supervision	\$60,000
Taxes	7,200
Depreciation	86,400
Other	32,400
Total fixed overhead	<u>\$186,000.00</u>

- 18,000 units will be produced in the quarter ending 30 September 2016. 60,000 units will be produced for the year ending 31 December 2016.

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Appendix B

- The Hammer Division produces non-sparking, non-marring, non-magnetic and corrosion-resistant striking hammers. Last year, they produced and sold 42,000 units. Information pertaining to last year follows:

Sales	\$4,032,000
Variable costs	1,008,000
Fixed costs	2,736,000

- Moving production to Myanmar will mean that variable costs are expected to be \$21.60 per unit and fixed costs are anticipated to be \$2,380,000.

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Appendix C

- These are the annual costs to manufacture 30,000 units of SP-65 in the current year:

Direct material	\$195,000
Direct labour	120,000
Factory space rental	84,000
Equipment leasing costs	36,000
Other manufacturing costs	225,000
Total manufacturing costs	<u>\$660,000</u>

- Direct materials used in the production of SP-65 are expected to increase by 8% next year.
- The AMWU direct labour contract stipulates a 5% increase next year.
- Facilities used to manufacture SP-65 are currently leased on a month-to-month contract. This contract can be cancelled without penalty. No anticipated use of this space is required if SP-65 is no longer manufactured.
- A special equipment is leased to produce SP-65. This lease can be terminated by paying the equivalent of one month's lease payment for each year left on the lease agreement. At the beginning of next year, there will be two years left on the lease agreement.
- 40% of the other manufacturing overhead is variable. The variable overhead changes with the number of units produced, and the rate is not expected to change next year.
- The fixed overhead costs are not expected to change, regardless of whether Capital Industries manufactures SP-65 or not.
- All other equipment, apart from the leased equipment, can be used in other divisions of Capital Industries for their manufacturing purposes.
- 32,000 units of SP-65 will be required next year.