

The National Bund (*NB*) company manufactures three different models of paper shredders. Each shredder has a waste paper container. National Bund estimates for the containers needed over the next five years is given in table 1. The equipment needed to manufacture waste containers must be replaced. The old equipment is fully depreciated other details about the machines are given in table 2.

The company's current manufacturing costs are given in table 2. An outside supplier has offered to supply all the containers that National Bund needs over the next five years for \$29 per container. If the supplier's offer is accepted, the equipment need not be replaced.

If the waste containers are outsourced, the salary and benefits of one supervisor, included in the indirect costs would be eliminated. There would, however, be no change in general administrative overhead. NB has no alternative use for the extra space that would be available if the containers were outsourced. Working capital requirements are approximately the same whether the containers are made or outsourced.

Required:

1. Use a net present value analysis to determine whether NB should outsource the waste containers or make it.
2. What nonfinancial and qualitative factors should NB consider before coming to a decision?



Table 1: Expected needs of containers

<i>Year</i>	<i>Containers</i>	<i>Year</i>	<i>Containers</i>
2001	50,000		
2002	50,000	2004	55,000
2003	52,000	2005	55,000

Table 2

Old Equipment disposal price		\$	1,500
New equipment cost		\$	960,000
Useful life of the new equipment in years			5
New equipment disposal price after useful life		\$	12,000
MACRS tax life in years			3
Cost recovery rates for years one to four			
	33.33%	44.44%	14.81%
Income tax rate			40%
After tax required rate of return			12%

Table 2

Direct Materials		\$	10.00
Direct manufacturing labor		\$	8.00
Variable manufacturing overhead		\$	4.00
Indirect manufacturing costs			
Supervision		\$	2.00
Depreciation on old equipment		\$	3.00
General administrative overhead		\$	6.00
		\$	11.00
Total manufacturing cost per unit		\$	33.00