

VPM's
DR VN BRIMS, Thane
Programme: MMS (2014-16) (Finance)
Third Semester Examination October 2016

Subject	Strategic Cost Management		
Roll No.		Marks	60 Marks
Total No. of Questions	7	Duration	3 Hours
Total No. of printed pages		Date	26/10/2016

Note: Q1 is compulsory and solve any FOUR from the remaining SIX questions.

Bharat Vikas Bank is a public sector bank in India. It has been in operation for over two decades and has more than 200 branches spread across the country. Since its inception, it has been focusing only on retail banking only.

Till 1991, the banking sector was not opened to private and foreign players and, there was not much competition among the banks. The level of service was not an issue for customers as all public sector banks provided the same level of service. Therefore, people did not have any specific criteria for choosing a bank. Their only concern was to find one close to their locality. Since then, the market dynamics has changed considerably in addition to private local banks, many foreign banks have now opened branches in the country. As customers now have a range of options, they select a bank on the basis of its performance. Therefore, in the last one decade, other public sector

banks have also changed their processes and adopted technology to provide better service to customers. But, Bharat Vikas Bank, however, did not gear itself up for the competition and continued to provide same level of service. As a result, its customer base has been eroding for the last five years. Its market share has also reduced considerably during this period.

Almost all transactions were manually recorded into registers. Sorting and searching those registers was a time consuming task. It was also difficult to avoid the mistakes associated with manual entry. Such errors could only be identified during the monthly reconciliation and checking of accounts and correcting them involved considerable work and time. The time taken to execute each task was three to five times more than that of better managed banks. The management realized that it would be difficult to survive in this fierce competitive environment if it did not improve its level of customer service. It also understood that there was a dire need to improve the situation, or it would soon be out of business.

The management therefore, appointed an internal cross-functional team to study the existing processes of the bank. The team was also asked to study how technology could help the bank improve its performance. The objective of the study was to find ways to minimize the number of stages and people involved in the operation. The team suggested that the bank processes be re-engineered. The team in its study found that the average customer waiting time was the highest in the industry. This was one of the major worries for the management. It was found that every customer coming for withdrawal had to wait for more than 30 minutes on most days, and for much longer during the first few days of the month. In the current scenario, this would be unacceptable to any customer. In addition, the bank provided services for a limited number of hours.

The bank had two options to improve the situation. It could either increase the number of counters or use technology and automate its processes. Increasing the number of counters would definitely reduce the waiting time, but the operating cost would increase. This would in turn, reduce the profitability of the bank. If the bank set up ATMs, the initial capital investment would be quite high, but the operating cost would reduce. The team found that by installing ATM machines, the transaction cost per employee could be brought down by more than 50 percent. After evaluating both the options, the bank decided to invest in ATMs, which would also lessen

the burden on the counter staff. Further, the use of such technology would give the bank a professional image among prospective customers. It also decided to computerize all the tasks in the bank. After computerization, the total operating cost came down significantly.

The management also realized that the use of technology alone would not lead to improvement in its service. It had to fundamentally rethink its processes. For instance, the number of people involved in the processing of cheques was three. After computerization, the bank found that a single person could handle the requirement of checking the available balance, verifying the signature, and then making the payment. So tasks that were performed in many stages by different personnel were combined. Many jobs were eliminated due to re engineering of the processes and the organization structure was also changed. Initially the staff protested against the implementation of

technology in the bank, but when the management communicated the reasons for re engineering the processes, they understood that this was necessary to ensure their survival in the long run.

The bank wanted to reduce the transaction time for customers, streamline the processes and improve the motivational level of employees through re engineering. After re engineering, the bank found that the transaction time had significantly reduced and was comparable with that of private and foreign banks. The level of customer service also improved due to automation of processes. Employee motivation level increased due to higher level of autonomy and task identity. Under the new structure, employees could use their discretion in taking decisions.

Though the performance of the bank has improved in the last two quarters, the management is aware that a lot remains to be done. It was however, happy that a beginning has been made and they are on the right track

1. Explain 6Rs of Business Process Re engineering and relate to the case?
2. Being a public sector bank, what other strategies can be adopted by the bank.
3. Quote an example of any other bank in India who has successfully adopted BPR

Q2. The following details have been recorded for 4 batches made in a period **(20 Marks)**

Batch output in units	A	B	C	D
Cost per batch -Direct Material	250	60	200	120
Direct labor	1650	750	2100	900
Labor hours per batch	9200	1520	6880	2400
	1150	190	860	300

The total production for period has been analyzed as follows

Machine related costs	14600
Material handling &Dispatch	6800
Stores	8250
Inspection/quality control	5850
Setup	6200
Engineering	8300

Total	50000
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The following cost driver volumes were recorded

Batch	A	B	C	D	Total
Machine hrs per batch	520	255	610	325	1710
Material movements	180	70	205	40	495
Requisitions	40	21	43	26	130
Inspections	18	8	13	8	47
Setups	12	7	16	8	43
Engineering hours	65	38	52	35	190

You are required to calculate

- The batch and unit cost using traditional costing(based on labor hour overhead absorption rate).
- The batch and unit cost using ABC and Compare the cost.
- Comment on likely position of the firm using cost plus pricing.

Attempt Any FOUR from the Remaining SIX Questions

Q3) Any two from (a) or (b) or (c) ————— (5x2) = 10 Marks

Your company plans to operate department D at normal capacity next year producing 1 lakh units of product P. Assuming no defective works, these units can be manufactured in 2.5 lakh labor hours at the cost of 0.50 per hour. Factory overhead would amount to rs 150000 of which rs 50000 would be fixed. 5 units of material can be purchased in 2 qualities, a high quality at rs1.05 per unit or a lower quality at rs0.80 per unit.

Under expected conditions, using high quality material, 10% of the work will be defective requiring complete replacement of materials, additional labor cost and variable overheads. Scrap recovered from defective production could be sold at rs 0.30 per unit.

As an alternative, the use of lower quality material is being considered but this would require an extra operation to be performed on it. An additional machine and tooling and would be needed at a cost of rs 3000 p.a The additional operation would take half an hour for each unit of product P produced, not taking defective work into account.

It is estimated that 20% would be defective all of which would require complete replacement. Scrap material from the lower quality material could be sold for rs 5000.

- Present information to management indicating the profitable course of action.
- Explain relation between quality and customer retention.

Q4) Any two from (a) or (b) or (c) ————— (5x2) = 10 Marks

- (a) Give examples of 5 cost leaders in Indian Marke?
- (b) What are hard money saving and soft money saving?
- (c) Explain the concept of balance score card ?

Q5) Any two from (a) or (b) or (c) ————— (5x2) = 10 Marks

- (a) Explain the business model of Dabbawala , in context with cost reduction
- (b) Explain case of TATA Nano in context to Target costing ?
- (c) What is Activity based costing , explain cost drivers in detail.

Q6) Any two from (a) or (b) or (c) ————— (5x2) = 10 Marks

In our example detailed in Figure 2, the Acquirer is contemplating the extent of the synergies possible through the integration of its functional groups with Target Co. In particular, the combined entity, New Co, can achieve different levels of annual savings through various degrees of integration, ranging from no layoff/no savings in the conservative Status Quo scenario, to \$40 million annual savings in the aggressive Option 3 scenario, in which a 30-per-cent head-count reduction is attained. As expected, the greater the workforce consolidation, the more attractive the economic results. For example, with a 30-per-cent workforce reduction in Option 3, economic measures such as the payback period and annual operating savings are far more prominent than in Option 1. Most notably, with a 30-per-cent versus a 10-per-cent staff reduction, the EBITDA margin improves by 500 basis points.

In \$Millions		Conservative				Aggressive	
Acquirer (Standalone)		NewCo				Target (Standalone)	
		Status Quo	Option 1	Option2	Option 3		
Revenue	\$ 300	\$ 500	\$ 500	\$ 500	\$ 500	\$ 200	Revenue
Cost of revenue	125	200	200	200	200	75	Cost of revenue
Gross margin	175	300	300	300	300	125	Gross margin
Operating Expense:							
Sales	15	25	23	21	19	10	Sales
Marketing	15	25	23	21	19	10	Marketing
Production	15	25	22	20	18	10	Production
Finance & HR	6	10	9	8	7	4	Finance & HR
Operations	30	50	46	42	38	20	Operations
General & Admin	15	25	25	22	20	10	General & Admin
	96	160	147	133	120	64	
EBITDA	\$ 79	\$ 140	\$ 153	\$ 167	\$ 180	\$ 61	EBITDA
<i>EBITDA margin</i>	<i>26%</i>	<i>28%</i>	<i>31%</i>	<i>33%</i>	<i>36%</i>	<i>31%</i>	<i>EBITDA margin</i>
Total Workforce		2,500	2,250	2,000	1,750		Total Workforce
Workforce Reduction		-	250	500	750		Workforce Reduction
Workforce Reduction %		-	10%	20%	30%		Workforce Reduction%
Severance Costs		-	\$ 18.3	\$ 34.7	\$ 49.0		Severance Costs
Est. Annual Savings		-	\$ 12.6	\$ 26.7	\$ 40.0		Est. Annual Savings
Payback Period		-	1.5 yrs	1.3 yrs	1.2 yrs		Payback Period

In principle, cost savings arising from workforce reduction are easy to calculate. However, acquirers often underestimate the practical challenges in capturing these savings. For instance, certain positions could easily be eliminated by the stroke of a pen, but the people in those jobs may be moved to other departments due to their continuing value to the merged entity. Consequently, head count remains largely unchanged, so the merger does not deliver the targeted cost savings.

- Which of the above option should be selected and why?
- Can the current capabilities of New Co support the implied operational KPIs?
- Briefly analyze the case ?

Q7) Any two from (a) or (b) or (c) ————— (5x2) = 10 Marks

(a) Sportech ceramics Ltd is to replace its rapidly deteriorating boiler equipment. Three types of boiler system are being considered as a suitable replacement. (A) coal fired (B) gas fired and (c) oil fired. The associated cost are as follows.

Boiler system	A	B	C
Cost of boiler (including installation and commissioning)	55000	74000	67000
Annual Fuel cost	27000	23000	25000
Annual operating labour cost	8000	-	-
Annual maintenance cost	4000	3000	3000
Annual electricity cost	1000	1000	1000
Total annual operating cost	40000	27000	29500

The new boiler is expected to last at least ten years. The company has an opportunity cost of finance of 15% per year. Which system should be chosen.

- Based on the above problem, highlight how life cycle costing plays an import role in decision making?
- Explain the concept of Just In Time ?