Answers

1 To: The Management
From: Management Accountant
Subject: BEC and JBC
Date: 11 December 2009

Please find herewith my report concerning the matters on which you recently requested information

(i) Income statements for the year ended 30 November 2009

	BEC Budget $	**BEC Actual $**	**JBC Actual $**
Revenue:			
Private:			
Accounting	3,456,000	3,192,000	4,000,000
Law	1,200,000	980,000	1,872,000
Marketing	1,152,000	1,120,000	2,400,000
	5,808,000	5,292,000	8,272,000
Government funded students:			
Accounting	648,000	1,026,000	–
Law	225,000	315,000	–
Marketing	216,000	360,000	–
	1,089,000	1,701,000	–
Total revenue	6,897,000	6,993,000	8,272,000
Costs:			
Salaries:			
Lecturers	3,000,000	3,120,000	3,300,000
Administrative staff	200,000	208,000	176,000
Tuition materials	648,000	741,600	730,000
Catering	92,000	95,680	110,000
Cleaning	39,000	40,950	40,000
Other operating costs	588,000	646,800	645,000
Depreciation	40,000	40,000	60,000
Total costs	4,607,000	4,893,030	5,061,000
Net profit	2,290,000	2,099,970	3,211,000

(ii) An assessment of the performance of BEC and JBC using both financial and non-financial measures is as follows:

Financial performance:

The key measurement will be the cost per student which for the year under review was as per the following table:

	BEC Budget	**BEC Actual**	**JBC Actual**
Total costs ($)	4,607,000	4,893,030	5,061,000
Number of students	7,200	7,200	7,560
Cost per student ($)	639·86	679·59	669·44

BEC incurred an actual cost per student which was above budget. Whilst JBC's cost per student was above the budgeted level of BEC it was below the actual cost per student incurred by BEC. The cost per student should be monitored over time in order to ascertain whether real cost savings are being achieved and should also be measured against comparable and competing organisations.

Competitive performance:

This will be measured in terms of the student population attracted to each institution. The growth rate may be measured in aggregate terms and by course. In addition the 'take-up rate' i.e. the ratio of uptake to enquiries received may be monitored by course type. The following table shows the take up rate during the year under review:

		BEC Budget	BEC Actual	JBC Actual
Accounting	Number of students	3,600	3,800	4,000
	Number of enquiries	4,800	4,750	5,000
	Take up rate	75%	80%	80%
Law	Number of students	1,500	1,400	1,560
	Number of enquiries	2,000	2,800	2,000
	Take up rate	75%	50%	78%
Marketing	Number of students	1,800	2,000	2,000
	Number of enquiries	2,400	2,500	2,400
	Take up rate	75%	80%	83·33

BEC budgeted to have a take-up rate of 75% of all enquiries in respect of each course type. It is noticeable that they bettered this target with regard to accounting and marketing courses. However, they only achieved a take-up rate of 50% with regard to law courses. In comparison JBC had a take-up rate of 78% in respect of law courses and 80% in respect of both accounting and marketing courses.

Service quality

This is a potential issue which will certainly include the quality of teaching provided by BEC. Service quality may be measured in terms of pass rates. In the same vein it may also be measured via students' responses to questionnaires on such as guidance from staff, tutoring and the quality of lecture handouts. The use of staff review programmes and internal reviews of the effectiveness of management committees in BEC will also be indicative of the level of service quality provided to students.

Flexibility

This may be measured in terms of the number of different modes of delivery offered to students of BEC e.g. full-time, week-day, weekend, block delivery, distance learning and linked courses which include a mix of attendance and distance learning. A further measure of flexibility lies in the availability of intermediate entry points to courses in order to enable students to gain advantage from qualifications obtained prior to joining BEC. By the same token it is also an indication of flexibility when an intermediate qualification is available for students who are unsuccessful in examinations or leave BEC for personal reasons. The fact that JBC utilises the services of freelance staff indicates an added element of flexibility which BEC did not possess during the year under review.

Resource utilisation

The main resource of BEC is its staff. As in all such institutions, a key performance measure is the staff: student ratio. This may be measured in respect of each course and monitored against budgeted targets over successive periods. What is rather worrying is the fact that recruitment in BEC was three times higher than budgeted in respect of accountancy, law and marketing lecturing staff and indicative of a staff turnover ratio of 20% per annum! In contrast, JBC only recruited one additional member to its entire team of lecturing staff during the year under review which might indicate that there might well be staff issues in BEC that do no not exist within JBC.

Innovation

All successful businesses need new products. In this regard it is noticeable that JBC is currently developing four new courses. In comparison, BEC hasn't any new courses under development and in this regard the management of BEC should realise that innovation is key to future business success.

(iii) The performance management system (PMS) must be accepted and supported by all staff throughout the organisation. In order to achieve these aims it is essential that management address the following issues:

- the need for to buy-into the system which can only occur if chosen performance measures are regarded as fair and equitable and seen as fair by all managers and employees
- the need for managers and employees to take ownership of the results produced by the PMS and accept any changes made as a consequence of those results
- the need for leadership and education and training must be accepted throughout the organisation.
- the need for performance measures used as a basis for rewards to be linked to the degree of controllability exercised by each manager and employee.
- the need for the PMS to be clear and understandable to all managers and employees. In particular, it should place a major focus on what is critical for the business in strategic terms and also facilitate the reporting of results in a variety of relevant modes.

Please let me know if you require any further information regarding the matters discussed above.

Signed: Management Accountant

2 (a) Significant items in the budget prepared for the year ending 30 November 2010 are as follows:

– Sales revenue is budgeted to increase by 10% from the 2009 actual level. It is questionable whether this is likely to be achievable given cost changes that are planned as discussed below.
– Cost of sales has the same percentage relationship to sales (66·7%) as in 2009. Note that the corresponding figure for 2008 was 62·5%. The percentage differences may be influenced by the change in mix of work – repairs, refurbishment, renewals that are planned for 2010.
– Marketing expenditure has been reduced by $1·3m. which is a 15% reduction from the 2009 actual figure. It must be asked whether demand is sufficiently buoyant to achieve the planned 10% sales increase with this marketing reduction.
– Staff training has been reduced to $1·0m which is a 25% reduction from 2009. Will the quality of work be reduced through this reduction and lead to increased costs, remedial work and customer complaints in 2010 and future years?
– Uptake of orders from customer enquiries is planned at 71% compared with 66·7% in 2009 and 55% in 2008. Is this forecast improvement realistic or achievable? This requires very careful consideration especially given the planned decrease in marketing expenditure in the 2010 budget.

Problems relating to the likely achievement of the 2010 budget and its inconsistency with the 'beyond budgeting' points 1 to 3 raised in the question may be viewed as follows:

– 'Stretch goals' are intended as moving away from fixed targets (as in the budget) that may lead to 'gaming' and irrational behaviour. Relative improvements should be the outcome of strategic changes agreed, whereas the budget focus seems to be a continuation of the *'status quo'* linked to arbitrary value changes. The budgeting system is also seen to be meeting the planned target through arbitrary costs, particularly in discretionary areas such as training and marketing (see Table A in the question).

– Evaluation and rewards should be based on relative improvement contracts (with hindsight). Until 2009, no such evaluation and reward processes seem to have been in place. The question indicates that a bonus system will be implemented in 2010 using a set of Key Performance Indicators as an incentive to the overall achievement of goals and the creation of value.

– The existing budget process does not focus on a strategy to achieve continuous value creation for RRR. The budget planned for 2010 has a target profit of $20m which is a 33% increase on the actual profit achieved in 2009, linked to a 10% increase in sales volume. It would appear that (as discussed in answer (a) (ii) above) this expresses an arbitrary set of data that is NOT the outcome of a new charge strategy.

(b) (i) Staff bonus calculation: Year ended 30 November 2009
using Key Performance Indicators (KPI's)
based on relative improvement contract factors

KPI	**Weighting Factor (A)**	**KPI Total Score % (B)* (see below for basis)**	**Weighted Score % (A) x (B)**
Revenue 2009 versus previous year (90/80)	0·15	12·50	1·875
Revenue 2009 versus competitor (90/85)	0·20	5·88	1·176
Profit 2009 versus previous year (15/16)	0·15	–6·25	–0·938
Profit 2009 versus competitor (15/15.5)	0·20	–3·23	–0·646
Quality items 2009 versus previous year:			
No. of orders requiring remedial work (W1)	0·075	31·80	2·385
No. of complaints investigated (W2)	0·075	24·20	1·815
% of enquiries converted into orders (W3)	0·15	21·30	3·195
(improvements = positive (+)			
Total	1·000	Bonus (%) =	8·863

(B)* – each KPI score value is positive (+) where 2009 value is greater
than the previous year or negative (–) where 2009 value is less than previous year.
Each KPI score value is the % increase (+) or decrease (–) in 2009 as appropriate

W1 (1 – (300/440)) x 100 = 31·8
W2 (1 – (100/132)) x 100 = 24·2
W3 2009 = (10,000/15,000) = 66·7%; 2008 = (8,800/16,000) = 55%
improvement in 2009 = (66·7 – 55)/55 = 21·3%

(ii) The KPI appraisal and bonus process provides a broad range of indicators that may be monitored, both individually and collectively over time in respect of the relative improvement in Alpha Division. The analysis may also be used in order to give a spectrum of measures against which to compare the Alpha division relative improvement against that of other divisions in RRR plc.

In addition, the factors which improve or detract from the size of the bonus earned are clearly shown. This should act as an additional incentive for staff, particularly where an improvement in the weighted score for any particular element is required. For example, in profit versus that of competitor, which shows a negative score in the 2009 comparison in (b)(i) above.

3 (a) (i) As regards Quotation 1 in respect of the year ending 31 December 2010, the management of Division B would purchase ankle supports from a local supplier in order to increase the profitability of Division B. An internal transfer price from Division A of $10·50 ($15 less 30%) would appear unattractive in comparison with a locally available price of $9. The management of Division B is encouraged to seek the maximisation of reported profit as its key objective.

Division A has spare production capacity of 10,000 units (Maximum available = 160,000 units and the 2010 budget total demand is 150,000 units). Division A could, therefore, supply 10,000 units of ankle supports at its marginal cost of $7 per unit ($350,000/50,000) i.e. at a total cost of $70,000. However the external supplier would charge $9 per unit, giving a total price of $90,000 for the 10,000 units.

In order to have decisions leading to the maximisation of SSA group profit, Division A should, therefore, quote its marginal cost of $7 per unit for each of the 10,000 units required by Division B.

SSA Group profit will then increase by ($9 – $7) x 10,000 = $20,000.

As regards Quotation 2 in respect of the year ending 31 December 2010, the management of Division B would again purchase from a local supplier in order to increase the reported profitability of the division if Division A quotes a transfer price of $10·50 ($15 less 30%).

Division A could potentially have supplied 18,000 ankle supports by using (i) spare capacity for 10,000 units and (ii) switching 8,000 units of production from sales of the type of support that earns the lowest contribution per unit.

The 10,000 units of spare capacity can be supplied at marginal cost of $7 per unit as in Quotation 1.

The additional 8,000 units would have to be diverted from the type of existing support that earns the lowest contribution per unit. The situation is as follows:

Product	**Knee Support**	**Ankle Support**	**Elbow Support**	**Wrist Support**
Selling price per unit ($)	24	15	18	9
Variable cost per unit ($)	10	7	8	4
Contribution per unit ($)	14	8	10	5

Division A should offer to transfer the additional 8,000 ankle supports by diverting production from the least profitable type of support. The wrist support earns the lowest contribution per unit ($5). Hence Division A should offer to transfer the additional 8,000 ankle supports at marginal cost + contribution foregone = $7 + $5 = $12.

In this case, Division B would reject the offer and would buy externally at $9 per unit. This would ensure that SSA Group profit is not adversely affected by any transfer decision.

(ii) The management of the SSA Group needs to ensure that the management of all divisions takes into consideration all internal and external information relevant to divisional **and,** much more importantly, group circumstances.

As a starting point, the basic principle which underpins transfer pricing is that transfer prices should be set at a level which covers the marginal costs plus any opportunity cost to the SSA Group. If the basic principle is applied correctly then any subsequent decision made regarding whether to make internal transfers or external sales of products or internal purchases as opposed to external sourcing of products should lead to the most profitable outcome from the standpoint of the group as a whole.

What is best for the SSA Group as a whole is dependent upon the capacity utilisation of its divisions. In this example everything depends on the capacity utilisation of Division A.

What is of vital importance is that the marginal revenues and marginal costs of the SSA Group are known, understood and applied by management.

(b) (i) If Division B buys from a local supplier the financial implications for the SSA group are as follows:

	$
Division A sales:	
60,000 wrist supports at a contribution of $5 per unit	300,000
Taxation at 40%	120,000
After tax benefit of sales	180,000
Division B purchases:	
18,000 ankle supports at a cost of $9 per unit	162,000
Taxation benefit at 20%	32,400
After tax cost of purchases	129,600
Net benefit to SSA Group = $180,000 – $129,600	$50,400

If Division B buys internally from Division A the financial implications for SSA group are as follows:

	$
Division A sales:	
External:	
52,000 wrist supports at a contribution of $5 per unit	260,000
18,000 ankle supports to Division B at a contribution of ($15 x 70%) – $7 = $3.5 per unit	63,000
	323,000
Taxation at 40%	129,200
After tax benefit of sales	193,800
Division B purchases:	
18,000 ankle supports at cost of $10·50 per unit	189,000
Taxation benefit at 20%	37,800
After tax cost of purchases	151,200
Net benefit to SSA Group	$42,600

The SSA group will be $50,400 – $42,600 = $7,800 worse off if Division B purchases the ankle supports from Division A, as opposed to purchasing an equivalent product from a local supplier.

4 (a) From the information available it would appear that the business of CAP has been in decline for at least the last three years. Turnover has fallen during each of the last three years and profit levels have also fallen during the same period of time. Relevant performance measures are as follows:

	2006	2007	2008	2009
% growth/(reduction) in Turnover	1·5	(3·0)	(3·8)	(9·1)
Operating costs as a % of Turnover	81·9	82·5	83·1	85·7
Net profit margin (%)	18·2	17·5	16·9	14·3
Turnover per Aqua Park ($m)	5·893	5·517	5·133	4·516
Dividend cover				1·5

It is noticeable that the net profit percentage has fallen from 18·2% in 2006 to 14·3% in 2009 and that turnover per Aqua Park has been reducing on a year by year basis.

Operating costs have also fallen during each of the last three years. The fact that turnover has declined at a faster rate than operating costs may be indicative of the fact that a significant proportion of operating costs are in the nature of fixed costs. A detailed analysis of operating costs would be most valuable given the decline in profitability during recent years.

In addition, dividend cover at 1·5 (21m/14m) is currently very low. If profits continue to fall, then it will not be possible to maintain the current level of dividend. Indeed, the recent trend in profitability raises the question as to how the proposed expansion into Robland is going to be financed.

The liquidity position of CAP is also a cause for concern since there is only a small balance at the bank insufficient to meet the trade and other payables owing by CAP at 30 November 2009.

The relatively low P/E ratio may be attributable to a market perception of low future growth and concerns regarding the company's future well-being due to the $110m ($100m + $10m premium) repayment of redeemable preference shares in 2010.

(b) **Financial considerations:**

Before consideration is given as to how the proposed expansion into Robland would be financed, CAP will have to raise $110m in order to redeem the preference shares currently in issue. The proposed expansion into Robland will require a further $120m (40 x $3m), therefore a total of $230 million of additional finance would be required.

The raising of equity finance does not appear to be a feasible solution because of Jody Cundy's desire to control the business. Jody currently owns 55% of the ordinary share capital. Any significant public issue of shares might dilute his shareholding to below 50%, a situation which would obviously be unacceptable to him as he has stated on many occasions he always wants 'to control this business'.

Furthermore, the very poor dividend cover together with the relatively low price earnings ratio would suggest that it is not a good time for CAP to consider a public flotation.

The raising of debt finance might well prove more attractive. However, this would require the directors of CAP to convince potential lenders that the reduction in profitability during recent years will cease. The gearing level is not too high and there appears to be adequate security (non-current assets $220m, net current assets $30m) that could be offered to potential lenders as security for debt finance.

The potential exit from Robland would be easier if an autonomous operating subsidiary was to be created as this would facilitate the future sale of the business in Robland.

Economic considerations:

The potential demand within Robland will be linked to the local economy. In this regard it is of paramount importance that CAP gives most careful consideration to the reliability of the market research study commissioned by Jody Cundy. The accuracy of information about market size, the extent of competition, likely future trends etc is of crucial importance.

The potential instability of the currency within Robland assumes critical significance because profit repatriation can be difficult in situations where those profits are made in an unstable currency such as the Rob, or one that is likely to depreciate against the home currency, thereby precipitating sizeable losses on exchange. Any currency restrictions in Robland need to be given careful consideration.

The attitude of the government of Robland to incoming organisations must be assessed very carefully and all local legislation should be given careful consideration. It might be the case that legislation in Robland favours comparable local Aqua Parks already in operation.

Social considerations:

CAP operates in the leisure sector and therefore the disposable income of inhabitants of Robland assumes critical significance because people spend their income on 'essentials' as opposed to 'would like to have' goods and/or services.

Correct decisions regarding the location of the aqua-parks in Robland would be vital to the success of the proposed expansion. In making this decision CAP would be aided by the findings of the market research study which should contain information regarding the geographical and age distributions of the population within Robland.

However, there is nothing to suggest that CAP has any expertise in site appraisal and selection. Futhermore, Robland is situated a long way from Lizland and therefore CAP should engage the services of an established consultancy in Robland to provide advice regarding the location and exterior design of each of its aqua-parks.

CAP will need to consider other issues such as the availability of suitably qualified staff and wage rates payable in Robland.

CAP should also consider lifestyles, attitudes and customs within Robland which all influence the design and facilities of the aqua-parks.

5 (a) (i) A 'mission' is the purpose of an entity and its reason for existence, i.e what is it attempting to accomplish? Henry Mintzberg has stated that 'a mission describes the organisation's basic function in society, in terms of the products and services it produces for its customers'. A large number of organisations provide a formal statement of their mission in a mission statement. Even though an entity might not have a clearly defined mission it may nevertheless have a mission statement!

A mission statement should be both memorable and succinct. It should also be 'enduring', i.e. the statement should not change unless an entity's mission changes otherwise the mission statement would serve to confuse the business community.

The mission statement should guide all employees throughout an organisation to work collectively towards the accomplishment of the corporate mission and may contain references to many stakeholder groups such as, for example, shareholders, customers, employees and the general public.

Potential benefits of mission statements include:

- providing strategic direction to the organisation thereby assisting in the formulation of acceptable strategies
- assisting in the resolution of potential conflict among different stakeholder groups
- providing a framework within which managerial decisions can be made
- assisting in the communication of key cultural values to employees
- assisting in the presentation of a clear image of the organisation for the benefit of customers and other interested parties
- helping to prevent potential misinterpretations of the organisation's 'reason for being'.

Potential problems of mission statements include the following:

- They may be unclear
- They may be vague and therefore valueless
- They may contain 'motherhood statements'
- They may be unrealistic and not reflect reality
- There may be inconsistency between different elements
- They may be inconsistent with management action
- They may lack sufficient external focus.

(ii) Up until now it would appear that the mission statement of CFD was relevant to its central mission '….thereby providing very high value for money to all our clients'.

However, the proposed opening of the Dog Sanctuary might be considered to have changed the mission of CDC. The Dog Sanctuary is a good example of the concern of the directors of CFD for Corporate Social Responsibility. The concern is obviously not one solely based on profitability or continued 'value for money' for its customers.

Therefore one might conclude that the mission statement no longer communicates to the business world what CFD is all about and that a change in mission can necessitate a revised mission statement.

(b) Critical success factors (CSF's) are performance requirements that must be achieved if an organisation is to be successful and outperform its competition. In the context of CFD, CSFs should be regarded as those service features that are particularly valued by dog owners.

Three critical success factors are as follows:

Health – All dog owners wish their pets to be healthy and therefore it is essential that staff at CFD take all necessary steps to ensure that the premises are free of disease. A key performance indicator in this regard would be the number of dogs that become ill during a stay at CFD's premises.

Safety – Dog owners are entrusting their pets to CFD who are responsible for the safety of all dogs taken into care. A key performance indicator in this regard would be the number of accidents reported during a given period.

Cleanliness – It is vital that CFD achieve the highest possible level of cleanliness throughout its entire premises. An example of a key performance indicator with regard to cleanliness would be the length of time taken to clean the dog kennels.

(c) In order to assess the quality of service provided by the CFD the following performance measures might be used:

- The percentage of repeat bookings by dog owners which is evidence of customer satisfaction and perhaps ultimately customer loyalty.
- The percentage of dog owners who were able to book a dog stay at their preferred date and time is an indication of the availability or non-availability of the service provided by CFD.
- The percentage of dogs that were collected and delivered on time from and to the homes of dog owners.

Professional Level – Options Module, Paper P5
Advanced Performance Management **December 2009 Marking Scheme**

					Marks	Marks
1	**(i)**		Revenue:			
			Private students/Government funded students		3	
			Salaries:			
			Lecturers and administrative staff		2	
			Tuition materials		1	
			Catering		1	
			Cleaning		1	
			Other operating costs		1	
			Depreciation		0·5	
			Profit		0·5	Maximum 10
	(ii)		Financial & non-financial measures	Up to 2 each x 5	10	10
	(iii)		Comments (on merit)	1 each		6
			Professional marks			4
						Total = 30
2	**(a)**		Comments re achievability of budget and its consistency with the 'beyond budgeting' philosophy (on merit)	Up to 2 each		14
	(b)	**(i)**	Revenue 2009 versus previous year		1	
			Revenue 2009 versus competitor		1	
			Profit 2009 versus previous year		1	
			Profit 2009 versus competitor		1	
			Quality items 2009 versus previous year:			
			Number of orders requiring remedial work (W1)		2	
			Number of complaints investigated (W2)		2	
			% of enquiries converted into orders (W3)		3	
			Total		1	12
		(ii)	Comments (on merit)	Up to 2 each		4
						Total = 30
3	**(a)**	**(i)**	Quotation 1	Up to 4		
			Quotation 2	Up to 4		8
		(ii)	Comments (on merit)	Up to 2 each	4	4
	(b)		Calculations (on merit)			
			Purchase from local supplier		3	
			Purchase from Division A		4	
			Conclusion		1	8
						20

						Marks	Marks
4	**(a)**	Financial performance:					
		Margin				3	
		Dividend cover				1	
		Liquidity				1	
		Price earnings ratio				1	6
	(b)	Issues:					
		Financial				5	
		Economic				5	
		Social				5	Maximum 14
							Total = 20
5	**(a)**	**(i)**	Purpose			2	
			Potential benefits			3	
			Potential problems			3	8
		(ii)	Changed circumstances	Up to 2			
			Conclusion	Up to 2			Maximum 3
	(b)	Critical success factors		3 x 2		6	6
	(c)	Performance measures		3 x 1		3	3
							Total = 20