Answers
Report
To: CEO
From: A. Accountant
Date: June 2013
Subject: Balanced scorecard and targets at Kolmog Hotels

Introduction
This report explains the differences between service and manufacturing industries and evaluates the current board performance information. Next, it evaluates the proposed balanced scorecard and describes the difficulties in implementing and using it. Finally, the purpose of setting challenging targets is explained and the hotel managers’ standards and rewards are evaluated using the building block model.

(i) Characteristics differentiating service from manufacturing businesses
The service nature of the hotel business can be analysed as:
- simultaneous in that the service is created as it is consumed during the customer’s stay;
- heterogeneous (variable) in that it is hard to standardise the service since each hotel and city stayed in is different;
- intangible in that there is no physical product, only nights’ stay in the hotel. This is a cause of the low cost of sales at 12% of revenue;
- perishable in that hotel nights cannot be stored as they are used that night. Thus, in the hotel industry room occupancy is often a key performance measure; and
- there is no transfer of ownership as the guest’s stay only gives them right of access to use the hotel facilities for a limited period.

(ii) Current strategic performance information
The current information used by the board is purely financial in nature and, as a result, it omits to measure many of the elements mentioned in the mission. It covers the shareholder value aspects through EPS growth, share price performance and ROCE, although there are arguably better measures of shareholder value in total shareholder return and economic value added. However, it does not quantify customer and employee loyalty nor product innovation, which are the routes by which the primary mission is to be achieved.

Most strikingly, there is also no attempt to measure the goal of being the No. 1 hotel chain in Ostland. An obvious way to measure this would be market share but there is no external data given in the report. The use of ratios comparing to revenue is a helpful communication tool in showing how resources/costs generate sales but, again, no external comparators are given which would aid in judging competitive position.

The breakdown of results into geographical areas is only helpful if these are comparable. A breakdown of the results by hotel type may be a more useful management tool, as luxury hotels will use a higher staff to guest ratio than budget ones and the geographical results will be distorted unless each geographical area has the same mix of these different product types. Year on year growth figures are given but no inflation figure is given which might explain growth as a non-management achievement.

There is limited information on fixed and variable costs in the report which is relevant to Kolmog, as hotels naturally have high operational gearing since many costs (financing, property, staff and administration) are fixed and so profit is sensitive to small changes in revenues. There are a number of traditional measures of hotel performance that would improve the report by helping to capture this issue, such as occupancy rates and revenue per available room.

Finally, the report does not link to the budget which appears to be the main operational control tool. Summary budget figures and variances may aid the board in their role of overseeing performance.

(iii) BSC proposal
Generally, the BSC will aid in communicating, implementing and controlling the strategy of the company. It aims to help achieve coherence between the stated goals and the measures used at Kolmog.

The proposed scorecard has the advantage of using only a limited number of measures and so should avoid the danger of information overload. Taking each perspective in turn:

The financial perspective is covered by the measures of strategic financial performance (share price and ROCE). This fits with the objective of maximising shareholder value. It is also common to use dividend per share as well as share price to reflect total shareholder return. Return on capital employed is a standard measure of overall performance but this may now have less value for Kolmog. The change in strategy in no longer owning the hotels that it operates will reduce the capital dependence of the business. It may be more appropriate to use a measure such as operational gearing (fixed costs/total costs) that reflects the returns against fixed costs (especially rental payments). Revenue growth will also be an important measure of the achievement of being the leading hotel chain in Ostland.
The customer perspective is addressed by the customer survey scores. This addresses the objective of delighting customers. However, there is no direct attempt to measure the objective of improving brand loyalty. The customers are a major stakeholder whose loyalty Kolmog will want to improve. Growth in returning customers (i.e. repeat business) would be better measured, for example, through growth in customer account revenues.

The internal process perspective is addressed through the hotel budget variance analysis. This analysis will need to be broken down into detailed areas for each hotel. It may be necessary to have different areas of emphasis depending on the hotel type, for example, country house hotels will have different occupancy levels from city centre ones due to the seasonality of this trade. Benchmarking performance against these internal comparators should assist in spreading best practice within the chain. This communication of best practice may help to instil brand loyalty among employees if they feel that other members of the chain are helping to improve their own hotel’s performance.

The learning and growth perspective would appear to be an obvious area to address, given the objective on product innovation. Yet there is no measure given for this. A possible metric would be percentage of revenue generated from new hotel types or hotel services. Hotels are a fairly mature business and so this may be a difficult objective to realise.

Instead, the objective of employee loyalty is addressed by measuring staff turnover. The happiness and motivation of staff is likely to be a key driver of the customer experience and so it has been highly prioritised. This can be measured through surveys of staff attitudes.

In relation to all the measures proposed, Kolmog should benchmark their performance against their competitors. This will measure whether they are achieving the ‘No. 1’ status that is the primary objective.

(iv) Difficulties of implementing and using the BSC

The first difficulty is in selecting the metrics for use in the scorecard. It is important that the BSC does not become a long list of metrics that obscure the truth with information overload. It is important to measure what is needed to be measured, not just what can be measured. There is often difficulty with measuring the innovation and learning perspective and other qualitative/non-financial areas. There is also the need to translate the strategic measures down to the operational level, for example, breaking down general customer satisfaction into specific areas of customer interaction such as reception and room service.

The second difficulty is that some of the perspectives and their metrics will naturally conflict with each other. For example, reducing employee turnover may require increasing their pay but this will conflict with profit targets. These conflicts may be required to be resolved at board level by looking at what will achieve the overall mission of the company.

The third difficulty is that the use of many metrics requires managers to be capable of interpreting each metric and also handling the volume of metrics presented. This expertise is less common among non-financial staff.

The final difficulty is the need for senior management to be committed to use of the BSC, otherwise staff will fall back on the traditional financial performance measures. The use of the BSC can be emphasised by tying the individual’s performance appraisal into measures derived from the BSC.

(v) Hotel manager targets

Challenging targets

Target setting is a difficult task. The targets must be challenging enough to push employees, in order to motivate them to maximum effort, without being perceived to be so improbable to achieve that they demotivate the employees. The proposal here is to use so-called stretch targets that aim beyond the easily achievable but fall short of the improbable.

At Kolmog, there is a history of setting targets that have been too difficult to achieve, so that many employees will never expect a bonus and so make no effort beyond the minimum acceptable to keep their job. The new targets will need to be perceived as more difficult but achievable in order to motivate employees.

Standards

Standards are the measures of employee performance. Employees must take ownership so they need to participate, accept and be motivated by the targets. Targets must be achievable and so challenge the manager without being demotivating. They must take account of expected market conditions that will be beyond the control of the hotel manager. Targets must be fair, for example, different types of hotels must be measured against similar standards (e.g. city centre hotels v other city centre ones and not country houses).

Rewards

Rewards must be

– clear, that is, understood by the managers;
– motivating, that is, of value to the employee; and
– controllable, that is, related to their area of responsibility.

The system proposed at Kolmog suffers from a number of potential problems. The basic measures are considered acceptable by the CEO but the detailed system conflicts with the building block principles given above.

– The performance against budgeted profit may fail to be participative since the finance department at head office sets the budget. Hotel managers will need to be involved in budget setting.
The use of an industry wide standard for staff turnover would not be fair if staff wages are not controllable by the manager and set at a level that is not reasonably attractive in the industry. It may be better to compare staff turnover to the company average (or even the average within the company’s product range) in order to get a fair comparison between hotel managers.

The use of company average customer satisfaction does not stretch staff to meet competitor performance. This area is much more in the control of the hotel manager and should be externally compared in order to generate competitive advantage.

The reward offered is valuable at up to 30% of salary. It would need to be compared to competitor offerings in order to judge the effect in retaining employees. It may not be clearly understood, as the precise level is based on the regional manager’s assessment but this should be dealt with by explanation at the annual appraisal.

The company is already collecting data about the number of staff receiving different levels of bonus and this should be continued as it represents a way of quantifying the achievability of the targets.

2 (a) Current absorption costing
(Workings to support quantitative results are given below.)

The CC department represents an overhead to the operations at Navier. Its costs are currently allocated in a simple fashion by dividing the total departmental cost by the number of dishes to obtain a cost of customer care for each dish as $8·03. This cost will then be added to other costs (such as materials and labour used in production) to obtain a total cost per dish. This cost can then be compared to the selling price per dish in order to obtain a figure for the profit per dish.

In addition, the FD adds a further $100 per specialised dish in order to compensate for the extra work involved. However, this leads to an over-absorption of total cost since the $8·03 will absorb fully the CC costs and an additional $160,000 (1,600 specialised dishes at $100) of costs may be incorrectly absorbed.

ABC costing
The problem at Navier is that it sells two different types of dish and these products use different amounts of the company’s resources. The activity-based analysis shows that the cost of customer care per standard dish is in fact lower than the current cost allocated at $6·22 per dish. This means that these dishes are making a higher profit per unit than would be given using the existing costing system. The specialised dishes are costing $106·05 each in customer care and it is vital that their price reflects this much higher cost base. The major activities that contribute to this higher cost are dealing with initial sales enquiries and handling complaints. This is not surprising, as the specialised dishes represent a bespoke service which will not be easily reduced to a standard set of steps.

Given the size of the difference between the ABC cost ($106·05) and the current initial estimate of absorbed cost ($8·03), it is not surprising that there have been efforts to correct for this difference. The finance director’s estimate of $108·03 to cover the costs of customer care for the specialised dishes is fairly accurate but, of course, the addition of this extra amount should have required the cost for the standard dishes to be reduced from $8·03 in order to compensate for the allocation of more cost to the specialised dishes. It is not clear if this is being done.

The advantage of the ABC analysis is that it shows the activities that are driving the higher costs and, therefore, this analysis opens the opportunity to consider if the customers of the specialised dishes value the additional work. If not, then ABM would require the non-value adding processes be removed/reduced. A survey of customer attitudes and a comparison with competitors’ service standards would shed light on the perceived value of these activities.

A question that should arise in relation to the ABC exercise undertaken here is whether it has been worth the effort, given that the finance director does appear capable of reasonably accurately estimating the costs without undertaking the time-consuming ABC analysis. Of course, the problem of over-allocation of total costs would have to be corrected in any case.

(b) The information in the workings below shows that the main cost activities of the CC department are pre-sale preparation (handling enquiries and quotes) and post-sale complaints handling. Together, these activities consume 65% of the resources of the customer care department.

The pre-sale work is essential for the organisation and the department converts 46% (16,000/35,000) of enquiries to orders. It would be beneficial to try to benchmark this ratio to competitor performance although obtaining comparable data will be difficult, due to its commercially sensitive nature.

However, the complaints handling aspect is one which would be identified as non-value adding in an activity-based management analysis. Non-value adding activities are those that do not increase the worth of the product to the customer, common examples are inspection time and idle time in manufacturing. It is usually not possible to eliminate these activities but it is often possible to minimise them. Complaints handling is not value adding as it results from failure to meet the service standards expected (and so is already included in the price paid).

Complaints handling links directly to issues of quality management at Navier as improved quality of products should reduce these costs. These costs are significant at Navier as complaint numbers are 20% (3,200/16,000) of orders. Complaints may arise in many ways and these causes need to be identified. As far as the operation of the CC department is concerned, it may cause complaints through poor work at the quotation stage where the job is improperly understood or incorrectly specified to the manufacturing or installation teams. This leads to non-conformance costs as products do not meet expected standards and, in this case, complaints imply that these are external failure costs as they have been identified by customers.
Quality of the end product could also be affected by the supervision activity and in order to ensure that this is functioning well, the CC department will need to have the authority to intervene with the work of other departments in order to correct errors – this could be a key area for prevention of faults and so might become a core quality activity (an inspection and prevention cost).

The other activities in the department are administrative and the measures of their quality will be in the financial information systems. Order processing quality would be checked by invoice disputes and credit note issuance. Credit check effectiveness would be measured by bad debt levels.

**Workings:**

**Customer care (CC) department**

**Standard absorption cost per dish**

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<td>Salaries</td>
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<td>Computer time</td>
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<td>Telephone</td>
<td>79</td>
</tr>
<tr>
<td>Stationery and sundries</td>
<td>27</td>
</tr>
<tr>
<td>Depreciation of equipment</td>
<td>36</td>
</tr>
<tr>
<td></td>
<td>707</td>
</tr>
</tbody>
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**Finance director’s adjusted cost per specialised dish**

<table>
<thead>
<tr>
<th></th>
<th>$'000</th>
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<tbody>
<tr>
<td></td>
<td>707</td>
</tr>
</tbody>
</table>

**Activity-based costs**

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Standard</th>
<th>Specialised</th>
</tr>
</thead>
<tbody>
<tr>
<td>Handling enquiries and preparing quotes</td>
<td>282,800</td>
<td>226,240</td>
<td>56,560</td>
</tr>
<tr>
<td>Receiving actual orders</td>
<td>70,700</td>
<td>63,630</td>
<td>7,070</td>
</tr>
<tr>
<td>Customer credit checks</td>
<td>70,700</td>
<td>63,630</td>
<td>7,070</td>
</tr>
<tr>
<td>Supervision of order through manufacture to delivery</td>
<td>106,050</td>
<td>95,445</td>
<td>10,605</td>
</tr>
<tr>
<td>Complaints handling</td>
<td>176,750</td>
<td>88,375</td>
<td>88,375</td>
</tr>
<tr>
<td>Total</td>
<td>707,000</td>
<td>537,320</td>
<td>169,680</td>
</tr>
</tbody>
</table>

|                               |        |          |             |
|                               | Average |          |             |
|                               | dishes |          |             |
| No of orders                  | 14,400 | 1,600    |             |
| Total number of dishes        | 86,400 | 1,600    |             |
| ABC absorption cost per dish  | 6·22   | $106·05  |             |

3 (a) Porter’s five forces analysis

**Threat of new entrants**

The threat of new entrants will be dictated by barriers to entry into the fuel cell market. These appear to be high, given the long timescale and the high levels of technical expertise required to develop a viable product. Also, the developer will need to have cultivated a strong relationship with the major vehicle manufacturers who will be the customers for the product.

A suitable performance measure would be percentage of revenue derived from patented products to measure the legally protected revenues of the business and so indicate the barrier to entry. Stokeness will need to ensure that all technology developments are written up and assessed for their patent possibility.

[Other measures could include ratio of fixed cost to total cost (measures capital required) or customer loyalty (through long-term contracts to supply fuel cells to manufacturers).]

**Threat of substitutes**

The substitutes mentioned in the question are electrical batteries, compressed natural gas and improved existing diesel/petrol engines. However, it is clear that improved diesel/petrol engines would potentially have many lower barriers to cross as the technology is known to the car industry and the infrastructure exists to deliver the fuel to the end-users of the cars.

The threat of each of these substitutes would be measured by an analysis of the comparative cost of creating a viable alternative to the fuel cell. The performance in terms of power output of the engine and emissions reductions compared to price would be critical. Management of this aspect will entail monitoring fuel prices in the market, reviewing the appropriate technical journals and attending conferences in order to identify these threats and their progress. This will require the input of both finance and engineering staff at Stokeness.
Power of suppliers
The suppliers have considerable power. There are rare raw materials used in production and the price and availability of these will dictate possible output levels for fuel cell producers. This is especially important, given the possibility of increased production that could flow if fuel cells become the dominant way to power vehicles in the future. There is a danger that the market in these materials is controlled by a few suppliers who can then dictate price. The engineering subcontractors will also have power through their knowledge of the design elements of Stokeness’ product. It will be important for Stokeness to protect this by legally enforceable non-disclosure agreements. There is a danger that this knowledge will lead the suppliers to consider pre-emptive forward integration by taking over Stokeness.

The power of suppliers could be measured by estimating the cost of shifting to an alternative supplier, which could be considerable, given the innovative nature of the technology. These costs would have to include the damage to value from the delay that such a shift would cause.

Other measures could include cost of suppliers’ product compared to total cost of the fuel cell, which indicates the importance of this component in production, and the number of suppliers as it indicates the level of competition in that market.

Power of customers
The customers are the major bus and truck manufacturers. Again, the customers will have a large degree of influence, given their size and limited numbers if Stokeness wants to access the world market. There will need to be a partnership between the fuel cell maker and the vehicle manufacturer in order to ensure that the technologies are compatible. There is the threat that these powerful customers will seek to take over Stokeness if its products prove successful; however, this may be an attractive exit for the shareholders depending upon the price offered.

The power of customers can be measured by estimating their switching costs which are likely to be high, given the technological compatibility issue. However, these costs will only occur once the vehicle manufacturer has agreed to source from a particular supplier (e.g. Stokeness) and until an agreement is reached, the fuel cell supplier will be in the weaker position. The vehicle manufacturer will also have the commercial power to be able to become a new entrant to the market if it appears more profitable to do so.

Stokeness could seek to manage these problems in two ways:
(a) quickly enter into an exclusive arrangement with one partner by emphasising the technological lead that they hold over the competition. This will be lower risk but will cut returns as the partner will then have pricing power; or
(b) seek to develop a product that will be attractive to multiple vehicle manufacturers and then maximise price by playing them against each other. This appears less plausible in this scenario, given the limited number of large manufacturers.

Other measures could be the number of alternative customers, the level of discounts customers demand and the number of alternative suppliers customers can chose from.

Power of existing competition
The power of existing competition appears low as Stokeness has a two-year lead in development. It will be important to protect this legally by patenting innovations as soon as possible and, also, ensuring the strictest commercial confidentiality is maintained within Stokeness and their commercial partners.

The power of existing competitors can be measured by market share once the market forms. However, at this development stage of the industry, a measure such as time to market (the expected commercial launch date of a viable fuel cell) would be more appropriate. This will aid management focus on delivering the product as rapidly as possible, thus maintaining Stokeness’ competitive advantage and avoiding time over-runs in development which will strain the cash flows of the company and may lead to unwelcome further calls for funding from the VCs.

Other measures could be partnership agreements (with car manufacturers) signed or projected revenues/volumes under such agreements.

[Tutor note: The use of ideas such as patent protection, time to market and partnering with a vehicle manufacturer are relevant under several of the headings and credit is given provided the point is suitably justified to the particular force being discussed at that point of the answer.]

(b) Market definition
The CEO’s concerns over the definition of market in market share are justified, as there are a variety of possibilities.

If Stokeness were to take an ambitious view, then they could measure the market as the total commercial vehicle market and measure the number of vehicles powered by Stokeness’ fuel cell compared to the total number of vehicles. This would be a measure of competitive performance against all existing engine technologies including existing petrol/diesel. It would be more realistic to use the number of new vehicles sold rather than all vehicles in existence in this measure.

A second possibility exists in this scenario for comparing the number of vehicles with Stokeness’ fuel cell compared to the number using any of the alternative engine technologies (fuel cells, electrical, compressed natural gas).

However, Stokeness could take an even less ambitious view and consider just the market for fuel cells, therefore measuring Stokeness’ performance against only other fuel cell makers.

The board must make a choice as to the market they are competing in or maybe decide the firms that they see as their main competitors, and then use this to define the market and so the performance measure.
(c) **Venture capitalists**

The VCs are likely to be rational investors seeking maximum return for minimum risk. However, they will have invested in a number of companies and so are prepared for investments to fail, provided that some of their investments perform very well. Therefore, they will be risk seeking in technology start-ups such as Stokeness.

The VCs have placed employees within the management team and so have a high degree of influence on Stokeness. They will be looking at medium/long-term returns, given the nature of the project, through net present value based on projected revenues. More immediate concern will be the worry that Stokeness runs out of cash before it has a viable product to sell and so cost control measures (variances from budget) and cash outflow will be key measures at present. They will have stated a rough timescale to exit the investment on provision of the initial funds and they will monitor performance to plan on this basis. Progression towards an exit will require Stokeness to pass various milestones (e.g. to file patents, to sign contracts with customers), timely achievement of these would be useful performance indicators, as well as purely financial ones such as meeting the cash flow projections.

4 (a) **Current transfer pricing policy**

A good transfer pricing system will ensure goal congruence and fair performance measurement between the divisions and maintain a suitable level of managerial autonomy within each division. Generally, the use of variable costs is helpful as it leads to optimal decisions for the company as a whole. The use of fixed production costs obscures these marginal costs and can lead to sub-optimal decisions by the divisions.

**Electrical components**

The use of a market price basis for electrical components makes sense, as these are generic products for which there is a ready external market. Therefore, the performance of the components division in their production can be readily compared to this market and the assembly division will accept such a price, as this is its alternative to sourcing internally. This activity does return a small contribution to head office costs, currently $383k (1,557 – 804 – 370). This small contribution reflects the generic nature of the products.

However, the assembly division could reasonably argue that the market price is too high, since an internal transfer of components does not require a number of costs (transport, marketing and bad debts). These should be deducted from the market price in order to get an adjusted market price. If this is done, then the contribution to head office costs from electrical components within the components division falls to $114k (1,288 – 804 – 370 or 383 – 269), as shown below.

**Housing components**

The housing components are currently priced using actual production costs. This makes sense, as these components are uniquely produced for the assembly division and there is no external market since this would give away Landual’s competitive advantage. It could be argued that the unique work in housing components should be rewarded with greater divisional profit. The components division only covers its actual production costs and gets no contribution towards the allocated head office costs from these components. Thus, since housing represents the bulk of the division’s revenue (84% = 8,204/9,761), it will be difficult for the components division to ever earn a significant profit. A mark-up on actual total production costs of 30% (say) would not seem unusual for such unique products and would lead to additional divisional profit of $2,461 (30% of $8,204k). This would significantly shift the location of the divisional profit from assembly to housing.

However, by using actual rather than budget costs, this means that there is no incentive to reduce on costs by the components division, as it will always receive these back from the assembly division. This lack of incentive could explain the failure to meet budget by $575,000 caused in the production of the housing components.

Applying all of these changes, divisional reports would be:

<table>
<thead>
<tr>
<th></th>
<th>Components Division</th>
<th>Assembly Division</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sales</strong> Electrical</td>
<td>1,288</td>
<td></td>
</tr>
<tr>
<td>Housing</td>
<td>9,918</td>
<td></td>
</tr>
<tr>
<td><strong>sub-total</strong></td>
<td>11,206</td>
<td>15,794</td>
</tr>
<tr>
<td><strong>Cost of sales</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electrical</td>
<td>804</td>
<td>1,288</td>
</tr>
<tr>
<td>Housing</td>
<td>6,902</td>
<td>9,918</td>
</tr>
<tr>
<td><strong>Fixed production costs</strong> Electrical</td>
<td>370</td>
<td></td>
</tr>
<tr>
<td>Housing</td>
<td>1,302</td>
<td></td>
</tr>
<tr>
<td><strong>sub-total</strong></td>
<td>1,672</td>
<td>1,268</td>
</tr>
<tr>
<td>Allocated HO costs</td>
<td>461</td>
<td>2,046</td>
</tr>
<tr>
<td>Profit</td>
<td>1,367</td>
<td>1,274</td>
</tr>
</tbody>
</table>
Notes:
1. Transfer price for electrical components is reduced by additional costs of external sales.

<table>
<thead>
<tr>
<th></th>
<th>Components</th>
<th>Assembly</th>
<th>Landual Lamps</th>
</tr>
</thead>
<tbody>
<tr>
<td>Previous market price for electricals</td>
<td>$1,557</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less: additional costs for external sales</td>
<td>(269)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjusted market price</td>
<td>$1,288</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. The transfer price for housing is now budgeted total production cost ($7,629 = 6,902 + 1,302 – 575), marked up by 30%.

(b) The change in transfer policy has the effect of reducing the revenue/cost of sales of the components/assembly divisions by the fixed production costs of the housing components ($1,302k). It shifts this amount of divisional profit from the components to the assembly division. This change seems unusual since the competitive advantage of the business lies in the housing designs, and yet this change is further emphasising the importance of the assembly division which does not seem to be the value-adding element of the business.

There is a danger, here, that the company focuses on the work of the division with higher profits and so downgrades the unique work done by the components division. However, the clarity of using variable costs only in transfer pricing may assist the company overall in achieving optimal pricing and profit.

There is no change to the company’s profit from such a change.

Working:

Data for the year ended 31 March 2013

<table>
<thead>
<tr>
<th></th>
<th>Components</th>
<th>Assembly</th>
<th>Landual Lamps</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>$'000</td>
<td>$'000</td>
<td>$'000</td>
</tr>
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<td>1,557</td>
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<td>6,902</td>
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<tr>
<td>sub-total</td>
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<td>15,794</td>
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<td>Electrical</td>
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<td>sub-total</td>
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<td>Fixed production costs</td>
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<td>Electrical</td>
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<td>Housing</td>
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<tr>
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<td>1,672</td>
<td>1,268</td>
<td>2,940</td>
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<td>Allocated HO costs</td>
<td>461</td>
<td>2,046</td>
<td>2,507</td>
</tr>
<tr>
<td>Profit</td>
<td>(1,380)</td>
<td>4,021</td>
<td>2,641</td>
</tr>
</tbody>
</table>

Note:
Only change is that housing is now charged to assembly on variable cost only.

[Tutor note: This calculation is much more than required as change is simple – it is presented here for clarity only.]

(c) Housing division
The housing division is now a cost centre and so it will be easier for it to focus on cost control (avoiding adverse budget variances) and quality of its output (as it makes the key components for the company’s products). However, there may be an adverse effect on the motivation of divisional managers through losing profit centre status and this must be countered by altering their reward packages to focus them on costs.

Electrical division
The electrical division can be seen to be making a small divisional profit ($335k). Its treatment as a profit centre makes sense, as it can be compared to similar companies for benchmarking purposes and also so that Landual can consider easily the ‘make or buy’ decision for such generic components. Obviously, at present, electrical is making a contribution to HO costs which means that it should continue to obtain the business from the assembly division.

Assembly division
The assembly division is unaffected by the changes, although the greater clarity of results in the electrical division will allow the managers of the division to ensure that the electrical division remains competitive.

Landual Lamps
The change has no effect on the company profit reported but it would be hoped that the change would bring the benefits noted above (cost savings in housing and greater motivation to compete in electrical) and so improve profits in the future.
## Working:

<table>
<thead>
<tr>
<th></th>
<th>Housing $’000</th>
<th>Electrical $’000</th>
<th>Assembly $’000</th>
<th>Landual $’000</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sales</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electrical</td>
<td>1,557</td>
<td></td>
<td>15,794</td>
<td>15,794</td>
</tr>
<tr>
<td>Housing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Cost of sales</strong></td>
<td></td>
<td></td>
<td></td>
<td>7,706</td>
</tr>
<tr>
<td>Electrical</td>
<td>6,902</td>
<td>804</td>
<td>1,557</td>
<td>8,204</td>
</tr>
<tr>
<td>Housing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Fixed production costs</strong></td>
<td>370</td>
<td></td>
<td>1,268</td>
<td>2,940</td>
</tr>
<tr>
<td>Electrical</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Housing</td>
<td>1,302</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Allocated HO costs</strong></td>
<td>413</td>
<td>48</td>
<td>2,046</td>
<td>2,507</td>
</tr>
<tr>
<td><strong>Profit</strong></td>
<td>(8,617)</td>
<td>335</td>
<td>2,719</td>
<td>2,641</td>
</tr>
</tbody>
</table>

**Note:**

Head office costs have been reallocated *pro rata* with cost of sales.

*Tutor note: This calculation is much more than required as the changes are simple – it is presented here for clarity only.*
1 (i) Service industry characteristics
   1 mark per point which must be illustrated for the hotel industry
   Max 5 marks

(ii) Current performance reporting
   Comments on measuring objectives of Kolmog – up to 6 marks
   Other comments – 1 mark per point made up to 6 marks
   Total 8 marks

(iii) Proposed BSC
   Up to 4 marks for each perspective
   Other comments 1 mark per point
   Max 12 marks

(iv) Difficulties with BSC
   1 mark per point up to 7 marks
   Max 7 marks

(v) Targets
   Explain the purpose of challenging targets – up to 3 marks
   To get all 3, must make answer relevant to Kolmog
   Standards
   3 marks for explaining criteria (ownership, achievability, fairness)
   Rewards
   3 marks for explaining criteria (clarity, motivation, controllability)
   Commenting on Kolmog system – 1 mark per point up to 7
   Max 14 marks

Professional marks
0·5 for report headings
1 for introduction
0·5 for use of suitable subheadings in report
2 for clarity and language use
1 for conclusion (not required here but give if reasonably attempted)
Max 4 marks

Total 50 marks
2 ABM

(a) 1 for standard absorption cost per dish
0.5 (x 2) for each number of dishes
1 (x 2) for ABC cost allocated to each dish type
4 marks for calculations
Standard absorption cost – comments up to 4
ABC absorption cost – comments up to 7
Max 13 marks

(b) General comments on costs for each activity
Comments
Pre-sales work – up to 2
Complaints handling
Non-value adding – up to 4
Quality management – up to 4
Other relevant points – 1 mark each
Max 12 marks
Total 25 marks

3 (a) Up to 4 marks for performance measure justified and performance management implications for each force
Max 16 marks

(b) 1 mark per suitable point made
Max 4 marks

(c) Assess risk appetite up to 2 marks
Impact on performance measures up to 3 marks
Max 5 marks
Total 25 marks

4 (a) Electrical components
Basic policy – up to 2 marks
Use adjusted market price – 1 mark
Housing components
Basic policy – up to 2 marks
Need for mark-up – up to 2 marks
Use of budgeted costs – up to 2 marks
Workings:
New divisional profit –
electrical policy 1 mark
housing policy 2 marks
Max 10 marks

(b) New component revenue figure – 1 mark
New profit figures, 1 for each entity – up to 3 marks
Comments – 1 mark per point up to 4 marks
Max 6 marks

(c) New profit figures, 1 for each entity – up to 4 marks
Comments – 1 mark per point up to 7 marks
Max 9 marks
Total 25 marks