

## MARK PLAN AND EXAMINER'S COMMENTARY

The marking plan set out below was that used to mark these questions. Markers were encouraged to use discretion and to award partial marks where a point was either not explained fully or made by implication. More marks were available than could be awarded for each requirement. This allowed credit to be given for a variety of valid points which were made by candidates.

### Question 1 – Confo plc

#### **General comments**

This is the mini case worth 46 marks and also the main data analysis question.

The scenario is based on a manufacturer of confectionery products, Confo, which also owns and franchises retail outlets, which sell the company's products. Following a period of difficult trading, Confo implemented a three-year recovery plan which: closed a number of owned outlets, reopening some of these as franchised outlets; opened a new commercial division; and opened a new export division. There was also a change in the way the manufacturing division priced transfers to owned and franchised outlets. The change was from cost plus 20% to full cost, with franchisees also paying an increased fixed annual fee. One year into the recovery plan, the board undertook a review of progress. This review showed that the overall performance of the company had deteriorated. An additional ethical issue has arisen whereby the procurement manager of a major customer had been asking for gifts of sweets from a Confo sales manager. These requests were small in value at first, but increased in amount and frequency over time. Their eventual cessation by Confo led to the customer withdrawing its custom.

Candidates were required to:

- (i) Compare and evaluate the methods of pricing transfers before and after the implementation of the recovery plan.
- (ii) Analyse the performance of the Manufacturing and Retail Divisions in 2014 and 2013, explaining any problems in comparing the data and setting out any further information needed.
- (iii) Review the strategies of the new Export and Commercial Divisions and evaluate the success of the recovery plan for the company overall.
- (iv) Explain the ethical issues arising from the requests for gifts.

#### **(a)**

A transfer price (TP) is the price at which one division in a group sells its products or services to another division in the same group.

The transfer prices will be important for Confo as they have a number of implications:

- They determine the profits of divisions. If the Manufacturing Division charges a high transfer price then most of the total profit from company sales will be attributed to it, with less to the other divisions. This will give a false measure of performance for all divisions.
- As the price to franchisees is the same as the transfer price to the owned shops, this may impact upon the willingness of third parties (favourably or unfavourably) to take up franchises and the volume of goods they purchase whilst a franchisee.
- If high transfer prices are passed on to ultimate customers then sales volumes may fall and overall profits may be distorted.
- Inappropriate transfer prices can lead to internal conflict between divisions. As shops only sell Confo's confectionery, the Retail Division cannot access outside markets to obtain lower cost products from third parties. The Manufacturing Division is therefore a monopoly supplier to owned shops and to franchisees and, from 1 October 2013, to the Commercial and Export Divisions.

#### **Pre-1 October 2013 transfer pricing system**

The transfer pricing system pre-1 October 2013 was on a full cost plus 20% basis.

### *The Manufacturing Division*

From the perspective of the Manufacturing Division, the cost-plus formula guaranteed an operating profit margin of 20%. This meant that any cost inefficiencies could be passed on to the Retail Division with an additional mark-up. Perversely, this could mean that the more inefficient the Manufacturing Division was, the more profit it made.

There does not appear to be any rationale for the 20% and this figure appears to be arbitrary. More meaningful is the mark-up overall for the company.

A further concern is that, although fixed costs are not as large as variable costs, they are significant. In attempting to recover fixed costs per unit then an estimate needed to be made at the beginning of the year, not just of total fixed costs to be incurred, but also of the output volume to be achieved in order to determine budgeted fixed cost per unit and hence price. Any error would result in an under- or over-recovery of fixed costs.

A related problem is that costs (fixed and variable) need to be allocated to each type of product to set each transfer price. Given that production is likely to be interdependent between different products, costs are incurred jointly on different products and it can be difficult to identify cost drivers to separate them in order to be able to calculate each product's transfer price.

Conversely, however, there are a number of positive points that could be made for Confo's former transfer pricing system:

- The same prices were being successfully charged commercially to franchisees which may imply it was at (or below) the market rate. However, in this case, franchisees were also paying a fixed fee which needs to be considered alongside the transfer price to determine viability for the franchisees.
- The full cost may be budgeted costs rather than actual so any cost overrun would be incurred by the Manufacturing Division rather than the Retail Division (although the data shows 20% related to actual cost, it could be that the budget equalled actual).

### *The Retail Division*

The Retail Division had no control over the transfer price it paid to the Manufacturing Division and there was no alternative supplier of confectionery it could use. The transfer prices therefore had significant implications for the validity of its status as a profit centre. Being a profit centre would imply that divisional managers had significant control over costs and revenues, but this appears not to have been the case. As a consequence, the divisional loss of £400,000 for the Retail Division had little meaning.

In favour of the transfer prices, it could be that the Confo board had set cost plus 20% as their best estimate of the wholesale market value of the confectionery. The fact that there are no identical confectionery products being sold by rival companies makes this difficult to substantiate.

### **Post-1 October 2013 transfer pricing system**

The transfer pricing system post-1 October 2013 is on a full cost basis. This treats the Manufacturing Division as a cost centre and the other divisions (Retail, Commercial and Export) therefore recognise the full profit to be made from the sale by the company.

### *The Manufacturing Division*

The Manufacturing Division is now a cost centre and so its performance cannot be measured on profit, but rather on its ability to control costs (eg against budget). An example of how well it has performed in this respect is the reduction in fixed costs compared with the previous year (see below).

Given the franchisees are also acquiring the goods at the same full cost, manufacturing has few incentives to promote sales to franchisees as there is no profit. The only advantage for the Manufacturing Division of more sales to franchisees is that fixed costs are being spread over more units of output thereby increasing its cost efficiency.

### *The Retail, Commercial and Export Divisions*

These divisions are profit centres and have the advantage of acquiring inventories at cost price, whereas rivals would need to pay outside suppliers wholesale market rates including a mark-up for profit.

In terms of incentives, these divisions may be motivated to over-order from Manufacturing Division or under-price to consumers/customers compared to rivals as they can acquire confectionery more cheaply.

### **Alternative methods of transfer pricing**

There may be distortions in incentives given that internal transfer prices and prices to franchisees are unlikely to be at wholesale market rates.

An alternative system of transfer pricing would be to make transfers at market rates.

This could be done by estimating the wholesale market value of each type of sweet by comparison to rivals' products (albeit there are no identical products).

A further alternative would be to let divisional directors negotiate the transfer prices by discussion in a bargaining process. This may cause conflict, but would result in an agreed set of transfer prices, rather than a centrally imposed set. It may also tend towards market prices over time. However, the problem with this is that the strongest negotiator may dominate, possibly providing a sub-optimal outcome overall.

### **Conclusion**

Transfer prices should be set by negotiation where the outcome is influenced strongly by market prices charged to third party customers (or to franchisees) in a competitive market.

### ***Examiner's comments***

Answers were variable in quality. A significant minority failed to explain the motivational aspects of transfer pricing, particularly for the manufacturing division. For example, some considered the revised transfer pricing approach as not motivating managers in this division to control costs. Only a few candidates appreciated that any revised performance management/reward approach would incorporate success in cost control for the Manufacturing Division, as opposed to success in generating profits. Even fewer made the point that the downside could be a reduction in product quality in pursuit of lower costs.

Of those who referred to goal congruence, many did not explain this in the context of the question. The same observation applies to discussion of alternative transfer pricing approaches. With reference to transfer prices at opportunity cost, there appeared to be no appreciation of the fact that the manufacturing division only supplies internally and is a monopoly supplier to the shops. Better answers did refer to the use of market prices in this context, but normally did not consider that these may be difficult to determine, given the unique nature of the firm's products. Weaker candidates did not justify the alternative methods of transfer pricing and instead just listed various methods (such as variable cost plus, fixed cost plus, market prices, negotiated prices) without any explanation or discussion. A small minority of candidates discussed methods of pricing in general rather than of transfer pricing.

|                      |    |
|----------------------|----|
| Total possible marks | 10 |
| Maximum full marks   | 9  |

| (b)   | 2013        | 2014                | 2013                | 2014          |
|---|-------------|---------------------|---------------------|---------------|
|   | Owned shops | Owned shops         | Manufacturing       | Manufacturing |
| Revenue per shop £  | 160,000     | 180,000             |                     |               |
| Operating profit per shop £   | -2,667      | 16,500              |                     |               |
| Revenue per product £   | 2           | 2                   | 1.50                | 1.25          |
| Operating profit per product £  | -0.033      | 0.183               | 0.25                | 0             |
| Total cost per product £  |             |                     | 1.25                | 1.25          |
| Operating profit margin<br>(profit/revenue %)   | -1.67%      | 9.17%               | 16.67%              | 0%            |
| <b>Profit from franchisees:</b>   |             |                     |                     |               |
|   |             | <b>2013</b>         | <b>2014</b>         |               |
|   |             | <b>£'000</b>        | <b>£'000</b>        |               |
| Profit on transfers from manufacturing (8,100*20/120)   |             | 1,350               | 0                   |               |
| Fees  |             | <u>1,200</u>        | <u>2,500</u>        |               |
|   |             | <u>2,550</u>        | <u>2,500</u>        |               |
| Profit per franchisee shop £000   |             | 28.333              | 20.833              |               |
| <b>Manufacturing costs</b>  |             |                     |                     |               |
|   |             | <b>2013</b>         | <b>2014</b>         |               |
| Fixed costs per unit  |             | 50p                 | 50p                 |               |
| Variable costs per unit   |             | 75p                 | 75p                 |               |
| Transfer price  |             | £1.50               | £1.25               |               |
| <b>Total profit for Retail and Manufacturing</b>  |             |                     |                     |               |
|   |             | <b>2013</b>         | <b>2014</b>         |               |
|   |             | <b>£'000</b>        | <b>£'000</b>        |               |
| Manufacturing   |             | 4,350               | 0                   |               |
| Retail  |             | (400)               | 1,320               |               |
| Fees  |             | <u>1,200</u>        | <u>2,500</u>        |               |
| <b>Total operating profit</b>   |             | <b><u>5,150</u></b> | <b><u>3,820</u></b> |               |
| <b>Overall performance of Retail and Manufacturing</b>  |             |                     |                     |               |
| In comparing the data for 2013 and 2014 for Retail and Manufacturing Divisions, four significant elements of the recovery plan have occurred. These are:  |             |                     |                     |               |
| <ul style="list-style-type: none"> <li>• The closure of 70 owned shops to scale down the owned network significantly</li> <li>• Opening 30 new franchised shops in replacement of some owned shops</li> <li>• Transfers from Manufacturing Division at full cost in 2014, rather than full cost plus 20% in 2013</li> <li>• More than doubling, in total, of the fixed franchise fee from £1.2m to £2.5m</li> </ul> |             |                     |                     |               |
| These decisions distort underlying data trends and therefore impact on any comparable assessment of overall performance. This makes like-for-like comparisons difficult for the underlying elements of the business.  |             |                     |                     |               |
| <i>Note: The Commercial and Export Divisions are new lines of business and are analysed separately.</i>   |             |                     |                     |               |
| <b>Revenue – owned outlets</b>  |             |                     |                     |               |
| Total revenue for owned shops has declined by 40% from £24m in 2013 to £14.4m in 2014. Similarly, the volume of sales (number of items sold) has declined by 40% from 12 million in 2013 to 7.2 million in 2014. The average selling price has remained the same at £2, so this does not appear to be a factor in the change in revenue or volume of sales.   |             |                     |                     |               |
| A key causal factor in this decline has been the scaling down of the number of owned shops by 46.7% from 150 in 2013, to 80 in 2014.  |             |                     |                     |               |
| Thus, rather than reflecting poor performance, the change in revenue has been a deliberate rescaling within the recovery strategy.  |             |                     |                     |               |

Revenue per owned shop has increased from £160,000 in 2013 to £180,000 in 2014 (12.5%). This is indicative, in revenue terms at least, that the worst performing shops have been closed and the shops with higher revenue generation have remained open.

Thus, while there has been a downscaling of the number of owned shops in the network, the average sales generation performance per owned shop has improved.

### Operating profit – owned outlets

Total operating profit for owned shops has improved from an operating loss of £400,000 in 2013 to an operating profit of £1.32 million in 2014.

At first sight, this appears to indicate improved performance, particularly as it has been generated by a scaled down network of owned shops.

Further analysis indicates, however, that a key causal factor in this improvement has been the reduced transfer price from the manufacturing division. Adjusting the data to show the operating profit/loss if the previous transfer pricing policy in 2013, of full cost plus 20%, had been maintained for 2014 reveals the following:

|   | <b>£'000</b>        |
|---|---------------------|
| External sales                                | 14,400              |
| Internal & franchisee transfers (9,000 x 1.2) | (10,800)            |
| Variable costs                                | (1,080)             |
| Fixed costs                                   | <u>(3,000)</u>      |
| <b>Operating (Loss)</b>                       | <b><u>(480)</u></b> |

*Tutorial note: A comparable analysis could be carried out by scaling down the 2013 data.*

Thus, rather than operating profit of the owned shops improving, had the transfer pricing policy remained at full cost plus 20%, then the operating losses would have increased from £400,000 to £480,000.

This has occurred, despite the improvement in revenue generation per shop, because the smaller network has meant that fixed costs of owned shops have decreased by only 25% (from £4m to £3m) while volumes of sales have decreased by 40% (see above) thereby increasing fixed costs per unit.

### Franchised shops

The recovery strategy has been to favour franchised shops rather than owned shops. In this respect there has been some operational success in opening a further 30 franchised shops in replacement of owned shops.

Overall, the profit from franchising has decreased by 2% from £2.55m to £2.5m. This is in the context of an increase in the number franchised shops of 33.3% from 90 to 120.

As a consequence, the operating profit to Confo per franchised shop has fallen by 26.5% from £28,333 in 2013, to £20,833 in 2014. This may be indicative of poorer performance, but it could also reflect a short term policy to expand the network by offering improved conditions for the franchisee contract.

It may also reflect the fact that the newer franchisees may take some time to become established. More information would be needed on the relative performance of new and existing franchisees.

### Manufacturing

The key factor affecting the 'profit' generated by the manufacturing division has been the change in transfer pricing policy from a profit centre (cost plus 20%) to a cost centre. This is a corporate level decision and is not indicative of the underlying performance of the Manufacturing Division itself.

Basing performance on its ability to control costs, it has performed well. The overall output has reduced by 5.7% from 17.4 million units to 16.4 million units. This is a reflection of reduced sales but additional information would be needed to confirm that sales were not constrained by reduced production capacity.

Variable cost per unit has remained at 75p so any reduced scale economies have not been a factor.

More significantly, the fixed cost per unit has remained constant despite the fall in sales and production output. This reflects a good performance in reducing fixed costs.

**Examiner's comments**

Generally, this requirement was fairly well answered, with most candidates providing up-front calculations in a reasonably well structured table. Analysis often endeavoured to explain changes and results for the two years in terms of cause and effect. Weaker candidates were poor in this regard, merely reiterating the percentage changes. Weaker candidates also provided occasional calculations within their narrative, rather than in an initial structured table.

Calculations most commonly focussed on gross and net profit margins and commented on changes year on year. Only the better candidates calculated specific ratios such as revenue per shop, operating profit per shop and cost per shop. There was some good discussion of the differences in results between the franchised outlets and owned outlets.

Better responses recognised problems in comparisons between the two years, particularly due to the change in the transfer pricing system and organisational structure changes. A very small minority adjusted the data to take out this distortion, normally by adjusting the 2013 data by removing the 20% mark-up on internal transfers, thus arriving at more sensible comments regarding the relative performance of the manufacturing and retail divisions. Weaker candidates omitted to comment on problems in making comparisons, or to suggest additional information that would assist analysis, despite these being required in the question.

|                      |    |
|----------------------|----|
| Total possible marks | 17 |
| Maximum full marks   | 15 |

**(c)**

**To: The Confo plc board**  
**From: A Student**  
**Date: 10 December 2014**  
**Subject: Strategy review**

Both divisions are in the start-up phase of their life cycle so it is difficult to make judgements about the success of the performance or strategy at this stage. Nevertheless, there are some early indicators.

Using the Ansoff matrix these are both examples of market development whereby existing products are being sold in new markets.

*Export Division*

In the case of the Export Division the new markets in the Ansoff matrix are new geographical markets.

In terms of the Lynch Expansion Method it would be regarded as growth through internal development abroad (ie exporting).

These sales are likely to all be incremental with minimal leakage between home and export markets. While this is positive in terms of generating more revenue, the strategy has a number of problems in relation to costs and risks:

1. The costs incurred in penetrating new markets may be significant compared to the revenues earned
2. The downstream supply chain is lengthened significantly, thereby increasing costs of getting goods to customers
3. There may be different tastes in different countries such that products developed for the UK market tastes may be unsuitable (eg some sweets may be unsuitable in hot climates)
4. Additional risks apply (eg international physical distribution and foreign exchange rate risk on settlement)

The Export Division has made a small profit of £200,000 for the year. Whilst this is unlikely to be sufficient in the long run to justify the investment, this is the start-up phase to penetrate markets.

The profit is small but, based on the above argument; it is all incremental, with little or no damage to the existing business. Indeed, as an international brand it may enhance the existing business in the UK in terms of reputation.

*Commercial Division*

In the case of the Commercial Division, the new markets in the Ansoff matrix are new distribution channels.

In terms of the Lynch Expansion Method it would be regarded as growth through internal domestic development.

The key strategic issue in this case is that there may be competition between Confo’s existing markets and the new commercial market. If consumers become aware that the supermarkets are selling the same products as Confo’s owned shops and franchisees, but at a lower price, then this strategy may reduce contribution and destroy value for Confo overall.

The Commercial Division has made a small profit of £300,000 for the year. Unlike the Export Division, we cannot be certain that this is entirely incremental. Indeed, the lost contribution on existing sales (if consumers perceive it is the same product but own-labelled) may be greater than £300,000.

**Evaluation of success of the recovery plan**

In pure financial terms Confo has generated less profit in the year following the introduction of the recovery plan (£4.32m) than in the year before the plan (£5.15m). This is a reduction in operating profit of 16.1%.

However as the marking director pointed out, it would be unwise to judge performance on one year’s data. This is particularly the case as it is a transitional period and only the first year of the three year recovery plan.

Positive signs included:

1. the willingness of 30 franchisees to take up new franchises
2. profit in first year for Export Division
3. profit in first year for Commercial Division

Negative signs include:

1. Overall reduction in volume of sales
2. Significant fall in operating profit per franchisee shop

Given that several simultaneous changes have been made by Confo, it is difficult to determine precisely which changes have impacted performance most in the short term. Given that the planning horizon is three years, it is appropriate to review progress after one year, but unreasonable to draw firm conclusions as to whether the changes will be successful when the three year planning horizon is reached.

**Examiner’s comments**

The main weakness in this requirement was inadequate evaluation of the overall recovery plan, which was unsatisfactory in nature and in the level of detail in the answers of most candidates.

The majority of candidates incorporated analytical frameworks, and most who used models made use of Ansoff’s matrix. A smaller number also referred to Lynch.

Only a small minority recognised potential cannibalisation of the Retail Division’s sales by the Commercial Division, combined with consumer awareness that the products are identical apart from packaging. More saw the revised packaging as a protection against this.

In terms of the overall recovery plan for the company, of those who considered this, most concluded it to be favourable, on balance, as time is needed for it to come to fruition. Better candidates included calculations to support this conclusion. A few explicitly referred to the three-year time horizon.

|                      |    |
|----------------------|----|
| Total possible marks | 16 |
| Maximum full marks   | 15 |

**(d)**

Ethics pertains to whether a particular behaviour is deemed acceptable in the context under consideration. In short, it is 'doing the right thing'.

In making any ethical evaluation it is first necessary to establish the facts. In this case, it would seem that the facts are reasonably clear in terms of what has happened, although the lack of documentary evidence to support the facts may limit the actions that can be taken.

The issue of legality and compliance with the Bribery Act needs to be considered and legal advice taken by Confo. If a crime has been committed there may be a duty to disclose in the public interest.

Both the offering, and the receiving, of an inappropriate inducement may be considered illegal and/or unethical.

In making a decision as to how to proceed, it is helpful to apply the Institute of Business Ethics three tests:

- Transparency
- Effect
- Fairness

*Transparency* - would CCC mind people (existing customers, suppliers, employees) knowing that these transactions have taken place. In the first instance, there appears to be a degree of internal transparency as Kirsty reported the initial Christmas gift to the commercial director. It is not known whether John reported the gift within Lenton but, given his subsequent behaviour, this seems unlikely. At this stage Kirsty may be deemed to have taken actions which are not inappropriate given the scale, context and disclosure.

Subsequent gifts made by Kirsty were not disclosed and hence the ethical test of openness does not appear to have been met. Since March 2014 Kirsty has made gifts of company property without notification, consultation or authority, which appears both fraudulent and unethical. The question of how she obtained the goods needs to be asked and who knew about this (as opposed to the purpose for which they were being used), if anyone.

Her refusal to make undisclosed gifts beyond £100 is appropriate, but does not compensate for her earlier actions.

*Effect* – whom does the decision to make the ever larger transfers of sweets affect or hurt? The initial Christmas gift may be appropriate based on its scale (small amount of £10), context (seasonal gift and industry norm) and expected frequency (annual at Christmas) in that it would be unlikely to be of sufficient size to affect John's commercial decisions about the Confo contract. However, subsequent larger gifts may have had the effect of John choosing to make purchases from Confo, rather than a rival company which might be offering preferential commercial terms to Lenton, but with no personal inducement for John. The effect in this case would be that Lenton shareholders are suffering due to John receiving inappropriate personal inducements. Conversely, Confo may be the best commercial provider and the ceasing of gifts may have made John choose an inferior provider, to the detriment of Lenton shareholders.

In this context, sweets with a relatively small financial value (even at £100) could trigger decisions on a commercial contract worth many thousands of pounds.

*Fairness* – would the transfers be considered fair by those affected? Confo may be obtaining an unfair commercial advantage over rivals through paying inappropriate (and possibly illegal) inducements. Similarly, John has gained a significant and unfair benefit compared to more honest colleagues who would not have engaged in such actions. Whilst the benefit is in kind, rather than cash, this is not the key issue if it amounts to an inducement. Moreover, it is possible that the confectionery could be sold by John to convert to cash.

*Honesty and integrity*

Further issues are those of honesty and integrity. The inducements may fail the honesty test as they are not earned, authorised or disclosed by, or on behalf of, the giver or the recipient.

|  |   |
|--|---|
| <b>Actions</b>   |   |
| <p>An initial action for Kirsty would be now to act honestly and make transparent what has occurred to the commercial director by full disclosure of all the facts, with any supporting evidence to which she has access. The matter is likely to be of sufficient seriousness that she may offer her resignation in anticipation of possible legal action against her for misappropriating goods belonging to the company to a third party without authority.</p> <p>Kirsty should co-operate in all investigations made by the company or the police.</p> <p>The fact she received no direct financial benefit may mitigate, but not remove, her culpability. Indirectly, in making more sales, she may have benefited in the long run by achieving promotion or more job security.</p> <p>Confo may have benefited initially from Kirsty's action and may suffer reputational damage by external disclosure, but nevertheless there is a public interest disclosure requirement if, on the basis of legal advice, a crime has been committed. The Confo board should therefore inform the Lenton board of what has occurred in order that it can make its own investigations. If the Lenton board does not make disclosure to the police then the Confo board should consider doing so, notwithstanding that documentary evidence is limited.</p> |   |
| <b>Examiner's comments</b>   |   |
| <p>This requirement was well answered, on the whole, with most candidates making use of ethical principles and language to assist their balanced discussion, and recognising the potential adverse effects to be much greater than a few boxes of chocolates as it could have impacted on the cessation of the supply contract between the two companies. Legal aspects were also often referred to, including bribery, though a worrying minority dismissed the idea of there being any legal ramifications out of hand. Some considered the culpability to be only with John Drake, rather than also relating to Kirsty at Confo.</p> <p>Only a minority recognised the need for a clear formulation of a company policy on the issue of gifts to business contacts. Poorer candidates failed to deal with required actions and instead just analysed the scenario in general terms using transparency, fairness and effect.</p>   |   |
| Total possible marks   | 8 |
| Maximum full marks   | 7 |

**Question 2 – Radar Traditional Radios**

**General comments**

RTR is a family-owned company which is an upmarket manufacturer of radios with retro styling. It operates in the UK market.

RTR makes both digital and analogue radios, but it is concerned about the impact of the transfer of radio broadcasting in the UK from analogue to digital, which has been much slower than expected. As the broadcasting industry moves increasingly to digital, RTR is concerned about the increasing competition from the variety of devices that can receive digital radio broadcasting. There is also significant competition from larger global radio manufacturers which have large R&D and marketing budgets compared to RTR. Some disagreement has arisen on the RTR board as to how the R&D and marketing budgets should be targeted and focused to give maximum benefit.

Candidates were required to:

- (a) Explain the impact on competitiveness in the radio broadcasting industry of two of Porter's Five Forces: substitutes and competitive rivalry.
- (b) Explain how market segmentation can be used by RTR to target consumer groups and how it can use the marketing mix to market to these groups.
- (c) Evaluate the factors to be considered in determining whether, and if so when, RTR should cease manufacturing analogue radios in order to focus resources on digital radios.

**(a) Porter's Five Forces**

**Substitutes**

A substitute product is a product or service produced by another industry which satisfies the same customer needs as the industry under consideration.

Where there are readily available substitutes accessible to consumers at reasonable cost, then this acts as additional competition and competes away industry profitability.

In the radio manufacturing industry, close substitutes exist in a range of other devices which can receive digital audio transmissions to replicate the function of radios. These include digital televisions, internet devices and smart phones.

The growth in the use of internet and mobile phones for listening to radio between 2009 and 2014 (see table) indicates that they are relatively close substitutes.

Moreover, while some of the other devices are more expensive than buying a radio, they also perform other functions, so consumers are, for example, already likely to have a television and there is no incremental cost to listening to the radio. In addition, switching costs are minimal if other devices are already owned.

While the other products noted above are close substitutes, they are not perfect substitutes. For example:

- The other devices do not receive analogue broadcasts
- The sound quality (eg from many smart phones) may not be as good as a radio
- A radio is portable unlike some other devices (eg a television)

Nevertheless, these substitutes affect the profitability of the radio manufacturing industry through:

- Putting a ceiling on prices eg it is unlikely very high prices could be charged, even for high quality radios
- Affecting volumes of demand as the market is split not only between rivals in the industry, but with manufacturers of substitute products
- Forcing expensive investments and technology improvements to keep pace with technology changes outside the industry

Defining the industry as radio manufacturing is quite narrow. Many of the larger consumer electronics manufacturers are also likely to make the substitute products noted above and hence are internally diversified. The companies most exposed to the threat of substitutes in the industry are those (like RTR) who only make radios.

Conclusion

Overall the threat from substitutes is significant and could, in the longer run, be industry destroying.

**Competitive rivalry amongst existing firms**

The intensity of competition amongst existing rival firms in the industry will tend to compete away the collective profitability of participants in the industry.

Competition in radio manufacture is global, even if some companies in the industry are focused, like RTR, on one national market. There are major international companies which, although not based in the UK, can distribute efficiently to the UK.

The level of competitive rivalry in radio manufacturing will depend on the following factors.

Digital radios

- Rate of market growth – the market for digital radios is changing:
  - It may be rising as fewer people buy analogue radios, which will reduce competitiveness and make the industry more profitable; or
  - It may be falling as the overall market for listening to radio is fairly constant (in listening hours) and the availability of substitutes means that the remaining demand for radios is falling, leaving the incumbent manufacturers chasing a smaller market
- Ease of switching for buyers – buyers of digital radios can easily switch to rival products when a radio is replaced thus competition is intense in relation to every product cycle
- Degree of uncertainty over the actions of rival firms – new digital technology could emerge on a regular basis meaning that profits could fall away for many firms in the industry. This requires high R&D budgets which reduce industry profitability.

Analogue radios

- Level of fixed costs – if there is a smaller market for analogue radios in future and as volumes fall across the industry then fixed costs per unit increase and industry profitability therefore falls
- Importance of capacity utilisation/economies of scale – a shrinking market means fewer economies of scale and more spare capacity thereby reducing industry profit
- Exit barriers – these may be high (non-current assets with a low break-up value; redundancy payments, costs of withdrawal) due to the specialised nature of the equipment which means competition remains in the industry much longer than would otherwise be the case (zombie companies).

Conclusion

Overall, the threat from competitive rivalry amongst existing firms is significant and could cause less efficient companies to exit the industry.

***Examiner’s comments***

This requirement was generally very well answered. Most recognised the relevance of substitutes and competitive rivalry to industry competitiveness and concluded that both forces are relatively strong, hence tending towards an increasingly unattractive competitive environment. Fewer candidates emphasised the fact that analogue radio faces less of a threat from substitutes than digital.

The competitive rivalry section was less well done than substitutes, with candidates often failing to recognise that the market for radios was changing. Candidates tended to conclude that competitive rivalry was high, but often without really justifying why.

Weaker efforts tended to confuse substitutes with competitive rivalry and spent a lot of time discussing how digital radios are substitutes for analogue.

|                      |    |
|----------------------|----|
| Total possible marks | 11 |
| Maximum full marks   | 10 |

**(b)**

### **Market segmentation**

Market segmentation is the division of the market into homogeneous groups of potential customers who may be treated similarly for marketing purposes.

Focus players like RTR may only be able to use market segmentation in a limited way as one segment might be their sole consumer group. Broader market players may use market segmentation to market in different ways to different groups.

RTR has a premium pricing strategy. Necessarily, there are fewer people that can afford expensive radios than can afford cheaper radios, which limits the size of the market, but also changes the characteristics of the consumer group (see pricing section below).

Market segmentation is therefore a tool of marketing strategy that can help RTR management to focus on relevant customer groups, and to use a marketing mix to arrive at a desirable marketing proposition. This enables RTR to customise its marketing mix to make it appropriate to likely customers.

The market can be segmented in a number of general different ways. For example:

- Age
- Income
- Gender

More specific segmentation might refer to the number of hours listening to the radio, or technology spending of consumers (eg identified by purchasing technology magazines or other technology products purchased).

Different types of market segmentation can be combined in order to refine the sub group which is most likely to appeal as potential consumers of RTR radios. Thus, for instance, a particular type of radio programme might appeal to higher income groups with an age group of around 55, perhaps with more females in the audience. These can be targeted for radio advertising during these programmes.

There are a number of problems in doing this type of market segmentation:

- The groupings are crude (eg 55% female buyers for RTR is only just above half and there is therefore little benefit above mass marketing to the population generally)
- Obtaining the information to target these groups may be difficult. It may be necessary to use databases which tend to be typical of the market segments identified, rather than use the characteristics (age, income, gender) directly. The best such database is RTR's historic customer list, as these have chosen to buy RTR radios before. Other companies' customer lists, with similar customer characteristics to RTR (where they can be legally and ethically obtained) may also be a useful means of segmentation.

### **The marketing mix**

Following market segmentation, targeting involves selecting the most appropriate market segments.

Target marketing tailors a marketing mix for one or more segments identified by market segmentation.

### Promotion

Advertising is the most obvious form of promotion, and it should be appropriate to the targeted market segment.

Radio manufacturing is related to the media industry, so advertising through this means seems one of the most obvious channels to use. This may include transmissions through other rival devices such as TV, mobiles and the internet.

The internet may take target marketing down to very small groups who have shown an interest in radios and radio broadcasting through their choice of websites.

In terms of broader radio audiences, data may be available by audience characteristics for particular programmes and placing adverts adjacent to these programmes would stand the best opportunity of reaching the RTR target customer base and gain best value for its advertising spending.

Other media might include journals and magazines used by older, high income age groups, ideally with some radio listening theme.

Price

RTR has a premium pricing strategy. Necessarily, there are fewer people that can afford expensive radios than can afford cheaper radios, which limits the size of the market, but it also changes the characteristics of the consumer group willing to pay more for radios, compared with the mass market of radio purchasing consumers.

Even within the high income group who buy RTR’s radios, more customers could be created by lowering the price, but this has some disadvantages:

- Lowers the profit per unit
- Demand is likely to be inelastic in this market niche thus sales volumes may not increase significantly even if prices are substantially lower
- It sends the wrong marketing signal where this is a luxury good and the quality cannot be readily observed, thus price is a signal of quality

A key factor in assessing price is the prices being charged by the closest competitors, which should be identified in market research of competitors. In this case, however, as a signal of quality, a virtue is being made of setting prices above competitors.

Product

A product is not just the physical item with features, but the perception of the item to the customer and the package of benefits that it provides.

The technology features used by RTR are good quality, but the styling of the goods is important and is distinctive, being part of the brand image.

The brand name is key in representing these qualities and making the RTR radios distinct from other brands.

In the case of RTR, the company name is the brand name.

Thus, for example, the ‘retro’ old fashioned style may particularly appeal to the older age market segment who can remember when all radios were styled in that way.

Place

Given RTR currently only sells through retail outlets in the UK, this limits the geographical market. The distribution network should be reviewed to make sure that the shops where RTR radios are being sold are consistent in image with the high income, middle age market segmentation strategy.

However, there may also be scope for widening the perception of the attainable geographic market by marketing to similar high income, middle aged groups overseas. Further market research could reveal whether the same segmentation groups apply in other countries as they do in the UK.

In terms of distribution, a radio is small and portable so the costs of transporting them may be low and this would enhance the opportunity to open up international markets through on-line sales without damaging the relationship with UK retailers, as there is likely to be little leakage between markets.

***Examiner’s comments***

This requirement was well answered on the whole. Most began with definitions of segmentation and applied this to the question.

A minority wasted time discussing in detail market research approaches to segmentation, but then often proceeded to ignore the data which had been provided in the question.

The best answers related each different type of segmentation to the marketing mix. Weaker efforts only discussed the latter in generic terms.

There was little discussion by most candidates of the problems of applying market segmentation.

Virtually no candidate attempted to discuss the marketing mix in the broader context of an overall marketing strategy for the firm.

|                      |    |
|----------------------|----|
| Total possible marks | 13 |
| Maximum full marks   | 12 |

**(c)**

RTR currently makes both digital and analogue radios. Analogue still makes up most of the sales of RTR by volume at 60%, although by value it is less than this at 53% (see below) as digital radios are more expensive.

In sales value terms at retail prices:

|                                 | <b>2013<br/>£000</b> |     |
|---------------------------------|----------------------|-----|
| Analogue radios (60,000 x £150) | 9,000                | 53% |
| Digital radios (40,000 x £200)  | 8,000                | 47% |

While analogue radios are the more important product in terms of sales volumes, they are declining as they near the end of their product life cycle, due to both technology and regulation. In terms of a BCG matrix analysis of its product portfolio, RTR's analogue radios are the company's key 'cash cows' as they still generate significant cash flows which can be used to fund increased marketing and/or investment in R&D for the 'problem child' digital products. Cash flows are likely to decline soon however, as analogue radios head towards 'dog' status. In contrast, digital radios are in the growth phase of their product life cycle, but at a slow rate of only 1,000 radios per year on average.

The immediate abandonment of the major product seems implausible, and this is not being suggested. Rather, the suggestion is that RTR should no longer invest in analogue R&D and marketing and thus gradually let sales decline (perhaps over two to three years) to the point where they will then be abandoned.

If the process of decline in analogue is rapid (as two to three years may seem to be), this is very risky as the major product may be in its decline stage of the product life cycle but is still generating most of the major cash flows for RTR. Indeed, any R&D and marketing costs may be self-financing in terms of additional sales.

Despite the above, it seems clear that the UK government intends to abandon analogue broadcasting eventually, thereby ending sales of analogue radios in the UK. Whilst there may be overseas markets to sell analogue radios to (eg developing nations) it seems clear this market will disappear over time in favour of digital radios.

In essence therefore, the key decision for RTR is not *whether* to abandon producing analogue radios, but *when*.

In making this decision the key factors are as follows.

#### **In favour of abandoning analogue sooner and investing in digital radios**

- Analogue is to cease being broadcast. In anticipation of this, consumers will cease to buy analogue radios some time before the switch-off date
- Industry support appears to be in favour of digital, so working with broadcasters in digital research may be more fruitful than analogue research
- Only 40% households own digital radios, but in total 90% of people listen to radio programmes, so there is a big potential first time buyer market
- As technology develops rapidly, consumers will wish to replace their radios more frequently with the new features
- Distribution outlets for analogue radios may shrink as retail chains stop selling them
- New features like Bluetooth are needed to keep pace with changes in technology in order to compete and R&D is needed for this

#### **Against abandoning analogue sooner and continuing to invest in it for longer**

- Digital reception is only available to 90% of the UK population. This not only restricts the market but makes it less likely in the short term that government will switch off analogue
- Uncertainty arises from the intensity of future competition in digital communications (within the industry and with substitutes)
- Analogue is still a larger market than digital by current sales volumes and current listeners
- Digital may fail to take hold in the global market and therefore fail commercially as a technology
- Analogue may continue for many years, perhaps due to the greater sound quality.
- If other companies exit the analogue market, but RTR remain in it, then it may be less competitive for RTR

**Conclusion**

There are significant uncertainties about the nature and timing of the relative popularity of digital and analogue. It may be appropriate to keep the real option and continue with both technologies until it is clearer about the pace of change in market preferences and the timing and certainty of the analogue switch off.

***Examiner’s comments***

The responses to this question were mixed. The best answers were well balanced and often explicitly introduced either the product life cycle or the BCG matrix, or both. Many were implicitly aware of the relevance of these frameworks, so some credit was given.

Only a few referred to the uncertainty of the analogue switch-off date, with most assuming that this will happen in 2019. The weakest answers concluded that the firm should quit analogue production as soon as possible, with little consideration of the adverse cash flow impact this would have. Weaker answers also failed to make any reference to the data provided.

The higher scoring answers recognised that if other companies exited the analogue market, then RTR could benefit from this as the industry supply would be reduced to offset, to some degree, falling industry demand for analogue devices.

Additionally they tended to spend a lot of time discussing partially relevant issues such as redundancies, with little focus on the timing, product portfolio and cash flow issues.

Very few referred to the real option characteristics of the choices faced by the firm.

|                      |    |
|----------------------|----|
| Total possible marks | 10 |
| Maximum full marks   | 9  |

**Question 3 - Norgate Bank plc****General comments**

The Norgate Bank (NB) has both business customers and individual customers who are based in the UK and France. It has no branches but communicates with customers entirely through internet and telephone banking. Historically, NB had one telephone call centre near London, but last year it opened a new call centre in Vietnam to service all its French-speaking customers. At each centre, employees are divided into two separate groups which service business and individual customers. In the first year of operation, three key KPIs were used to measure and monitor performance being: time to answer a call; length of a call; and customer satisfaction survey results. Concern has been raised about the suitability of these measures. The company also wants to use benchmarking to evaluate performance and improve efficiency. Data on performance is provided.

Candidates were required to:

- (a) Evaluate the validity of the three KPIs and suggest alternative measures.
- (b) Explain the benefits and problems for NB in using benchmarks, referring to the data provided.

(a)

KPIs are metrics in relation to a target that will deliver the organisation's objectives in the area to which they relate.

KPIs should therefore be related to the relevant critical success factor. In the case of the call centres this means dealing with customer enquiries to satisfy customer expectations, build relationships and achieve this as efficiently as possible in terms of time and cost.

The actual KPIs achieved are given in the Exhibit but there is no target measure against which to judge these metrics in order to determine whether performance has been at an appropriate level. The idea of benchmarks to determine an appropriate target is examined below.

Dealing with the nature of the KPI's used by Ron:

Average time taken to answer a customer call

This is measure of efficiency, but also it is a measure of capacity to take calls. If the KPI achieved is not at an appropriate level of efficiency (eg customers are ringing off before the call is answered) then this may damage relationships with customers and cause dissatisfaction leaving customer enquiries unsatisfied.

There is therefore a trade-off between efficiency, capacity and cost. If sufficient resources are dedicated to call centres then all calls could be answered immediately, but this may not meet the objective of cost efficiency as too many staff may be idle waiting when call volumes are low.

Being efficient would be trying to meet customer expectations, including unexpected peaks and troughs in call volumes, without undue idle time and therefore excessive cost.

Overall this seems to be a reasonable measure in that long waiting times are likely to be viewed unfavourably by customers. What is not clear is how to determine the target for the optimal time that customers should wait to balance service delivery with cost.

Average length of a customer call

This KPI is, to a degree, ambiguous. If the average call is long then it could be sign of quality in meeting customer needs by giving due time to resolve all the issues raised and make the customer feel in receipt of a good service.

Conversely, it could be a sign of inefficiency in being unable to deal with customer enquiries quickly and efficiently and so wastes customer time as well as NB staff time and costs.

A further alternative may be that the length of the call is dependent on the subject matter. Thus business customer calls may deal with more complex issues than calls from private individuals and may therefore take longer on average.

Overall, therefore, this seems a difficult measure to determine, not just the level of the KPI, but the direction relative to target. In this respect many of the relevant factors may be captured in the final KPI which is:

Scores from customer satisfaction surveys

Scores from customer satisfaction surveys are a good measure of whether objectives are being achieved in relation to building customer relationships and offering appropriate service.

On their own however crude measures of how satisfied customers are with a call does not of itself indicate why they are satisfied. Further questions may therefore add detail (eg whether it is the length of the call, ability to resolve issue quickly, friendliness). It also leaves open the question of satisfaction relative to cost.

Conclusion

The KPIs selected emphasise effective service delivery by omitting measures of the efficiency with which that service is delivered.

Additional measures of *efficiency* (eg meeting peaks and troughs with the right scheduling of staff hours to meet demand at key times in the day, and for key days of the week) and *capacity* (idle hours to total hours ie utilisation) would be useful.

Also there are no financial KPIs which is key to call centre financial efficiency. Cost per call could be one such measure. In this case, the costs of the Vietnam centre per call may be much lower than the London centre, even if operational efficiency is lower in Vietnam.

**Examiner’s comments**

The quality of responses was mixed for this requirement. The best answers provided critical evaluation of each of the three KPIs after an introduction defining KPIs, their role and their relationship to critical success factors or goals. Alternatives were suggested during the course of the evaluations and, often, afterwards. Weaker candidates failed to link the KPIs with CSFs.

Relatively few candidates explicitly or implicitly discussed the trade-offs between efficiency, capacity and costs. Likewise, only a significant minority considered the issue of different types of customers and/or locations.

Additionally, a few referred to direct sample monitoring of calls as well as using the “mystery shopper” approach to direct quality evaluation.

In order to consider critical success factors, some attempted to use the Balanced Scorecard framework, but in many instances suggested goals and measures which were largely unrelated to the performance of the call centres.

Some candidates redefined the entire requirement in terms of the Balanced Scorecard, which tended to lead to poor marks.

|                      |    |
|----------------------|----|
| Total possible marks | 13 |
| Maximum full marks   | 12 |

(b)

Benchmarking is: "The establishment, through data gathering, of targets and comparators, through whose use relative levels of performance (and particularly areas of underperformance) can be identified. By the adoption of identified best practices it is hoped that performance will improve."

Benchmarking compares the use of assets and activities across the firm, or across the industry, and indicates where they might be used better or where they are already a source of superior performance. Once a business has identified its CSFs and core competences, it must identify performance standards which need to be achieved to outperform rivals and achieve sustainable competitive advantage. These standards are sometimes called key performance indicators (KPIs).

Benchmarks can therefore provide a means of determining target KPIs which, if achieved, will match the best standards in the industry. Such benchmarks not only set targets for existing KPIs, but may suggest different types of KPI to measure new CSFs.

In so doing, by comparing performance with other entities, NB can learn how to reduce costs and improve customer service quality. Additionally, benchmarking may help NB better understand whether it is achieving competitive advantage and superior performance in the call centre operations area of its activities.

Different types of benchmarks may provide different types of guidance:

**Historic or internal benchmarking** – internal benchmarking would be at the level of comparing individual units (for businesses and individuals) at each call centre (London and Vietnam) with each other to determine those that are under- or over-performing when considering the different demands and circumstances. At the moment however this is the first year of operation of Vietnam and learning may still be taking place. Conversely London may still be adjusting to losing the French customer calls. Nevertheless, internal benchmarking attempts to raise performance to the standard of the best internal unit and demonstrates to other units that this level of performance is achievable.

Historical comparison looks at performance over time to ascertain trends/significant changes, but the danger is that performance against competitors is ignored and long-standing internal inefficiencies are not highlighted. Note: for the first year of operation this is not possible in Vietnam.

In the Exhibit, it would appear that data could be used (for example) to compare the number of hours of calls handled per annum for each member of staff. In the UK call centre for individuals this is 800 hours pa ( $(1,200,000 \times 4/60)/100$ ) but in the other three functions (UK individuals, Vietnam business and Vietnam individuals) it is 1,000 hours pa. This would at least raise some questions. The differences in satisfaction also vary between centre and between types of customer, but there is no obvious pattern.

**Competitive benchmarking** – compares performance with other firms in the same industry or sector. This may assist NB in ascertaining ways to improve performance – eg comparing the performance with other banks' call centres. An alternative is to widen the definition of the industry from banks to financial services and include the experience of Ron's deputy who has worked in the related industry of insurance. The differences may be accounted for in the differences in the types of calls received by banks and insurance companies but questions may be asked to improve performance even though the comparisons are not identical.

This may involve the use of league tables, but more detailed information may be difficult to achieve as competitors may be reluctant to share data with rivals. Partnerships or industry groupings or a benchmarking centre may help overcome this lack of information.

**Activity (best in class) benchmarking** – compare with best practice in whatever industry can be found eg could compare with a hotel telephone booking system, or ticket booking or emergency telephone system, whichever is 'best in class' for the function dealing with telephone calls efficiently. This has the advantage that a firm may share operations in common with non-competitor external organisations, which might be 'best in the class' for a particular function, more readily than with a rival firm in the same industry.

**Generic benchmarking** – This is benchmarking against a conceptually similar process eg compare an online system of banking compared to telephone calls which can achieve the same outcome (eg simple transactions online or by telephone). It is unlikely that this will result in comparison of detailed measures but it could identify conceptual areas for improvement.

|  |    |
|--|----|
| <b>Disadvantages</b>   |    |
| <p>There are disadvantages to benchmarking. A full programme can overload managers with demands for information, restrict their attention to the factors that are to be benchmarked and affect their motivation by seeming to reduce their role to copying others. It can also undermine competitive advantage by revealing trade secrets. Strategically, it can divert attention away from innovation and the future by focussing it on the efficiency of current operations.</p> <p>Since benchmarking is about processes rather than results, measures would have to be linked to outcomes at some stage.</p>   |    |
| <b>Examiner's comments</b>   |    |
| <p>Most candidates discussed three or four types of benchmarking and many also provided an introduction to the purpose of benchmarking in the performance management process of identifying critical success factors and related KPIs.</p> <p>A significant minority described the approaches with little or no evaluation of advantages and problems in their application in this particular scenario. Many did mention, in general terms, the difficulties involved in obtaining competitor/comparator data. Additionally, there was a tendency to evaluate internal benchmarking only, tending to ignore the other types of benchmarking, beyond an initial description.</p> <p>Good answers also related their discussion to their previous consideration of KPIs. However, a minority of weaker candidates displayed a lack of awareness of the benchmarking process and simply carried on evaluating KPIs.</p> |    |
| Total possible marks   | 12 |
| Maximum full marks   | 11 |