Answers

1 (a) Introduction

Revenues in QTS Group have grown significantly in the last five years, from $610m in 2011 to $875m in 2014. Most of this growth has been achieved through the acquisition of smaller training companies operating in a number of niche markets.

QTS Group is now considering the acquisition of A2K, a training company specialising in business architecture training. One of its companies, QTSBA, is already a market leader in this training sector, with 23·76% market share, compared with the next largest supplier, CompTrain, which has 15·5% of the market. A2K is solely focused on the business architecture training market and currently has a market share of 8·17%.

This briefing paper identifies the benefits and advantages to QTS Group and QTSBA of proceeding with the acquisition of A2K.

Further growth through acquisition

A major reason for growing through acquisition is the speed it offers, both in increasing revenue and in entering new markets and/or offering new products. Further growth is particularly attractive to three sets of stakeholders at QTS Group or QTSBA:

– The sales department of QTSBA: who have customers with impending training needs which need to be successfully fulfilled. Finding experienced trainers is an issue. A2K has an experienced training team which would be immediately available, together with an established pool of sub-contractors.

– The shareholders of QTS Group: who have expressed their desire for the retained profit of QTS Group to be better employed in producing revenue, profit and company growth.

– The senior management team at QTSBA: who are on salary remuneration packages which are directly linked to achieving sales revenue performance targets.

Acquiring a new product, entering a new market

As previously stated, acquisition also allows an organisation to quickly enter a new market and/or acquire a new product. In some circumstances it is the only way of entering an emerging market because internal development is too slow or too expensive. Indeed, this is the situation at QTSBA, where the acquisition of the A2K e-learning team will allow QTSBA to:

– Acquire new, established products which they can offer to the market, immediately generating revenue with a significant unit profit margin.

– Acquire e-learning development expertise which can be used to successfully develop new products. QTSBA has already had a failed project where its own uncontrolled software developers used inappropriate software to develop e-learning solutions which were not attractive to customers. A2K has a successful track record in e-learning development and product sales. Acquisition allows the immediate possession of these competencies.

– E-learning may be a key part in extending business architecture training to areas beyond the continent of Eastaria. It might also be possible to use the e-learning team to develop products for other companies in the group.

Establish a dominant position in the business architecture training market

QTS Group has made a management decision to remain and compete in the business architecture training market. However, it acknowledges that the market growth for business architecture training is slowing, although it is expecting future growth, particularly outside Eastaria. Table A illustrates market growth and market share in the business architecture training market, 2009–2014.

Revenue	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**
A2K revenue ($m)	12	14	16	17	17	16·5
Year on year growth		16·67%	14·29%	6·25%	0·00%	–2·94%
QTS revenue ($m)	39	40	42	45	46	48
Year on year growth		2·56%	5·00%	7·14%	2·22%	4·35%
Total market revenue ($m)	175	190	196	200	202	202
Year on year growth		8·57%	3·16%	2·04%	1·00%	0·00%
Market share						
A2K	6·86%	7·37%	8·16%	8·50%	8·42%	8·17%
QTSBA	22·29%	21·05%	21·43%	22·50%	22·77%	23·76%

Table A: Market growth and market share in the business architecture training market 2009–2014

Table A illustrates that the market grew by 8·57% in 2010. However, since then, growth has slowed and by 2014, there was no market growth at all. A2K's growth outstripped the market in 2010, 2011 and 2012, during which it successfully won a number of contracts which QTSBA also bid for. However, since 2012 its growth and market share has declined. It seems likely that the company's performance has peaked and that it is now finding it difficult to compete successfully in an increasingly competitive market place. In contrast, after its poor performance in 2010, QTSBA's growth has continually outstripped the market, suggesting that it is successfully anticipating and serving the needs of the market. In BCG terms, QTSBA looks like a cash cow for QTS Group.

Taking a competitor out of a stagnant market place, and at the same time increasing market share to 31·93% has two advantages to QTSBA. First, it reduces the competition in the market, easing competitive rivalry and downward pressure on prices, and second, it means that QTSBA will become twice the size of its nearest competitor, with the operational advantages and brand visibility which this will bring.

Acquiring A2K appears to be a suitable option for QTS Group because it allows QTSBA to increase its market share in a relatively stagnant market place, and (through e-learning) provides opportunities for product and market development.

Exploiting core competencies

The acquisition of A2K will give QTS Group the opportunity to further exploit its core competencies in acquisition and change implementation. The financial performance of the three training companies which QTS Group has acquired in the past two years has improved after acquisition. The return on capital employed (ROCE) and the operating profit of all three companies have increased post acquisition.

There will be also be opportunities for cost efficiencies, associated with economies of scale (for example, in producing course material) and with sharing centralised services. For example, QTSBA already has well-established and successful sales and marketing departments which should be able to easily absorb the work of the current A2K team. There appears little need to retain A2K's marketing and sales directors and all their team, bringing immediate cost savings (after redundancy costs) to QTSBA.

Assessing feasibility is concerned with whether the company has the resources and competencies to deliver the promised strategy. There does not seem any issue here. Although no price for A2K has yet been agreed, it is unlikely to make too much of a dent in the $30m of retained earnings which QTS Group has earmarked to fund acquisition and post-acquisition change. As stated already, there is evidence to suggest that it has both the resources and competencies to deliver this strategy.

Benefits to shareholders

The acceptability of an acquisition is concerned with the performance outcomes of a strategy. This can be looked at in terms of return, risk and stakeholder reactions. Returns are the benefits which shareholders are likely to receive from the strategy. A number of shareholders have already campaigned for the retained profit in QTS Group to be invested in further acquisitions. They are clearly encouraged by the fact that recent acquisitions have apparently led to increased shareholder value, both in the dividend payout ratio and in earnings per share.

In terms of acceptability, risk is concerned with the probability of the failure of a particular strategy and the impact or consequences of this failure.

Table B summarises the financial performance of A2K. Although there are some concerns about its performance, the company is still trading profitably and has relatively large retained earnings. The risk of an inappropriate acquisition seems very low.

	2009	2010	2011	2012	2013	2014
Share capital ($m)	3·00	3·00	3·00	3·00	3·00	3·00
Other reserves ($m)	0·40	0·40	0·40	0·40	0·40	0·40
Retained earnings ($m)	0·80	0·90	0·80	0·80	0·70	0·60
Revenue ($m)	12·00	14·00	16·00	17·00	17·00	16·50
Net profit ($m)	1·75	1·65	1·65	1·60	1·45	1·40
ROCE	41·67%	38·37%	39·29%	38·10%	35·37%	35·00%
Net profit margin	14·58%	11·79%	10·31%	9·41%	8·53%	8·48%

Table B: Financial performance of A2K, 2010–2015

The ROCE is a fundamental measure of business performance, considering the net profit generated by the long-term capital invested in the business. The ROCE for A2K has declined from 41·67% in 2009 to 35·00% in 2014, but still remains relatively high (the industry sector average is 25%) probably reflecting the relatively low initial investment made by the founders of the company. The company also has fairly substantial retained earnings ($600,000).

The net profit margin is often regarded as the most appropriate measure of operational performance. Just like the ROCE, the net profit margin has declined from a high of 14·58% in 2009 to 8·48% in 2014. This is below the industry sector average of 10·00%. This supports Kath's view that the costs of the company have not been properly controlled in the last few years and that there is a fall in delivery efficiency. However, it seems likely that cost savings and increased sales post acquisition, will quickly return A2K to profitability which is at, or above, the sector average.

Overall, QTS Group shareholders are likely to support a proposed acquisition of A2K. It is a low risk option which fulfils their demand for further investment and the company's past record suggests that the acquisition will quickly contribute to higher shareholder returns. QTS Group is arguably, in corporate parenting terms, a synergy manager, enhancing value across a number of business units. In this instance it is potentially acquiring a company whose market is very well known to the current managers of a company already in the group.

(b) This part of the briefing paper briefly explains five contextual factors in strategic change and explores how these are likely to apply to the situation at A2K, should the acquisition go ahead.

Time: this is concerned with how quickly change is needed. A business facing rapid declines in revenue and profitability may have to be turned around very quickly. This is not the case here. Revenue growth at A2K has slowed, but the company is still profitable, although not as profitable at it used to be. QTS Group has a large 'acquisitions fund' to spend on acquisitions and post-acquisition change in companies which it purchases. Consequently, the pace of change could be quite leisurely, perhaps implemented in an incremental process. However, the problem with this could be the attitude of the three senior managers (the CEO, the sales director and the marketing director) if they remain within the merged company. The point has already been made that there is no apparent need to retain the sales and marketing director. It seems unlikely that the senior managers at A2K will either survive or embrace the kind of change envisaged by QTS Group and so changes to these key positions might have to be made very quickly, followed by reassuring customers that it is 'business as usual'.

Preservation: considers the organisational resources and characteristics which need to be maintained. These are key competencies which must not be lost if QTS Group is to improve (or at least maintain) the performance of A2K. At A2K, the key resources to preserve appear to be the full-time business architecture trainers and the e-learning team. The trainers are perceived as excellent (by customers) and the e-learning team has developed effective and innovative e-learning solutions. In contrast, QTSBA already has established sales and marketing departments and so these do need to be preserved.

Diversity: reflects on the diversity of experience, views and opinions within an organisation. It is concerned with the homogeneity of staff groups within the organisation and how they see the world. It is argued that change is hampered by a lack of diversity because everyone in the organisation sees the world in a similar way. This is likely to be an issue at A2K; although some of the trainers may have some diversity of experience, the views and opinions within the organisation are set and controlled by the CEO. Anyone with different views has left or has had their views publicly rejected. There is little diversity to build upon and so change is unlikely to be welcome or understood. QTS Group has to be aware of this. Change will have to be promoted by managers brought into A2K.

Capability: concerns experience of managing change in an organisation. As far as A2K is concerned, there is little capability in implementing change, and indeed relatively little experience of change. Thus managers employed by A2K are unlikely to have the capability to implement the changes which QTS Group will require. In contrast, QTS Group has experience of post-acquisition change in a number of companies and it is, the company believes, one of its core competencies. It will have to introduce managers into A2K charged with implementing the changes it requires. These managers will have to be appointed at a senior level, probably to replace the current board members of A2K.

Readiness: examines the readiness for change of the workforce. It seems clear that both the trainers and the e-learning team are ready for change. The trainers are disillusioned by their lack of input into business policy and training decisions and the e-learning team is angry at the lack of commitment to e-learning (as against conventional face-to-face training) and the reluctance to give e-learning a voice on the board. So, both of the key resources which have to be preserved are ready and open for change. This is a positive factor for QTS Group. It is likely that there will be pockets of resistance (sales, marketing) but it seems increasingly unlikely that these will be preserved in their current state. The current board is also unlikely to embrace change (and indeed might actively oppose it) and so the importance of acting quickly to replace this team is again reinforced.

(c) This final part of this briefing paper explores the importance of organisational culture and briefly explains the concept and application of the cultural web and organisational configuration in the context of the proposed acquisition of A2K.

Organisations vary in their personality and atmosphere. They have different ways of doing things, different attitudes towards customers and staff, different levels of freedom and responsibility. These things help define its organisational culture. When one organisation wishes to acquire or merge with another, it helps if it has an understanding of the culture of the organisation it is considering acquiring. Understanding that culture will help in diagnosis, perhaps identifying that current problems in the company being acquired are due to cultural issues, and in transition, as the company is moved to the culture which the acquiring company believes it should exhibit.

Johnson, Scholes and Whittington conceive organisational culture as consisting of four layers: values, beliefs, behaviours and paradigm, a set of taken for granted assumptions. The *cultural web* is a way of exploring two of these layers, the behaviours and the paradigm. Behaviours are explored in terms of the stories, symbols, power structures, organisational structures, control systems, rituals and routines, which all surround the central paradigm.

In the context of A2K, the *stories* told at social gatherings suggest that the CEO looks back with enthusiasm at a simpler, golden age with the two founding directors as heroes delivering training courses with a whimsy and a humour missing from the standardised events which are now delivered by the full-time training staff. The *ritual* of inviting these two founding directors to the annual 'celebration event' further excludes the current full-time staff, as the CEO sits next to these two former directors, and stories are retold all evening. Not only do the full-time trainers feel excluded, they also find it hard to reconcile these stories with the two bald, aging, fragile men sitting next to the CEO. QTSBA can exploit this aspect of culture by ensuring that such events are more focused in the future and that the people telling these stories are removed or not invited.

Power at A2K is invested in the leadership (the CEO) and this power structure is reinforced by an *organisational structure* which is very flat. The main power holders (the CEO, and to a lesser extent the marketing director and the sales director) are potential blockages to the changes which QTS Group is likely to propose. This understanding again reinforces the need to remove these people as part of the acquisition process.

Organisations are usually structured in some way to deliver the products and services they offer. Within this structure there are formal and informal organisational processes which take place within internal and external relationships which the organisation has established. Structure, processes and relationships work together. They have to be appropriate for the situation of the organisation and they have to match each other. This matching means that organisations tend towards a limited set of standard configurations. Henry Mintzberg has suggested six stereotypical configurations.

A2K appears to be a *simple* or *entrepreneurial* configuration. The organisational structure is simple and there is little middle management. Indeed, two-thirds of the staff report directly to the CEO. The CEO provides strong charismatic leadership and has a tendency to be autocratic. Unwelcome suggestions made by the marketing director have been summarily dismissed in the past. The strategy of the organisation reflects the vision of the CEO. However, the expansion of the company has meant that the CEO has become increasingly concerned with operational issues and problems and has lost sight of the strategy. This has been exacerbated by the need for her to spend more time monitoring the financial situation of the company. Indeed, Mintzberg identified this issue as a potential problem in an entrepreneurial organisation. The CEO becomes so enmeshed in operational problems that they lose sight of strategy.

In contrast, QTS Group displays elements of a *machine bureaucracy* with a centralised bureaucratic management, formal procedures and a functional organisational structure. Due to its size and client expectations, it needs to deliver its products in a standard, controlled, consistent way. It is a large, mature organisation and such organisations often tend towards a machine configuration. QTS Group has to be aware of the implications of bringing such a culture to A2K. There may be a concern that it will introduce a configuration where there is inconsistency between the structure, process and relationships. However, as noted before, they are likely to find allies in the full-time trainers and the e-learning staff who might adapt well to a more formal structure based on meritocracy, not autocracy.

The cultural analysis of A2K again suggests that although the CEO, sales director and marketing director wish to remain in their posts after the takeover, it is unlikely that they will be able to adapt to a transition to a different culture. This is yet another reason for recommending that these three managers are excluded from the post-acquisition company. Consequently, agreeing an appropriate severance arrangement with the current A2K board is likely to be an important part of the acquisition negotiation.

2 (a) A mission statement defines the overriding direction and purpose of an organisation. Some organisations also have vision statements stating what the company aspires to. However, for the purpose of this answer, vision and mission are perceived as the same thing.

Most organisations have settled into an approach where a short snappy statement is supported by a much deeper description of what the organisation is about, its stakeholders and how it wishes to interact with those stakeholders.

The current mission statement of ICOM 'Simply the best in operations management' is a slogan and says nothing about who it is the best for. John Turvey's suggested replacement is much more specific, identifying the external stakeholders it is serving (members and student members) and, importantly, valuing the internal stakeholders (the staff) who will service and inspire the external stakeholders. This more specific statement should allow the organisation to tie the mission statement in with critical success factors. However, it could retain the current mission statement as a broad statement, using John Turvey's suggested replacement as a supplementary description of what the organisation is about.

Critical success factors (CSFs) are the things which the organisation must be good at to succeed. They are the few key areas where things must go right for the business to flourish. Some writers take a more limiting view. Johnson, Scholes and Whittington believe that CSFs are the product features which are particularly valued by a group of customers and, therefore, where the organisation must excel to outperform its competition.

John Turvey has identified 35 CSFs, which seems more than a few key areas and may lead to a lack of focus on the truly critical areas. He may need to reduce these in order to ensure success in a few key areas.

To satisfy our members seems a reasonable CSF, as it aligns directly with the mission statement.

To achieve a growth in membership by 5% year on year for the next five years is not necessarily something which the members themselves will value, unless it brings added benefits to them. Furthermore, CSFs should not have specific time-bound targets associated with them.

The need to maximise profits within acceptable risk is not acknowledged in the mission statement, but it is a given of most commercial organisations.

To ensure that the syllabus reflects the current operations environment is also aligned to the mission statement's desire to inspire student members

However, it is noticeable that there are no CSFs mentioned which are associated with staff and their motivation, despite the inclusion of this commitment in the mission statement.

Key performance indicators (KPIs) are the measurements used to monitor the achievement of the CSFs. They suggest how a CSF should be measured, but they do not include the measurement itself.

The only correctly expressed KPI is the third one (ROCE and the margin of safety). The ROCE will provide an indication of the efficient use of capital in generating profit. The risk taken is measured by the margin of safety which shows how far the current income would have to fall to result in a breakeven situation. Notice that neither the ROCE nor the margin of safety are given specific values. These specific values will be given in performance objectives which relate to defined timeframes. This allows the KPI to remain the same, but the performance objective can change.

The first suggested KPI can be improved by omitting the 95% target. At present, it is a mix between a KPI and a performance objective. An appropriate KPI would be 'the percentage of members rating us as excellent in an externally administered customer satisfaction survey'.

KPIs should be quantifiable, such that they can be compared to a standard or target, or an alternative performance, such as a prior year, or a competitor. There is no real quantifiable comparator for the other two suggested KPIs. For example, the KPI 'recruit an examinations manager to rewrite the syllabus' will either happen, or it will not. This KPI, and the KPI to implement a vigorous marketing campaign are really just actions, not KPIs.

Again, there is no key performance indicator associated with internal staff and their motivation.

(b) Benchmarking is where one organisation compares its performance in a specific area to another organisation, the benchmark, to identify how much room there is for improvement. It then attempts to implement improved practices to narrow the gap between its own performance and the performance of the benchmark. In the context of the scenario, benchmarks might be used to improve the student recruitment process. Improving this process should help the company achieve CSFs and KPIs associated with student membership. For example, increasing the number of students registering with ICOM.

There are two main approaches to benchmarking which are relevant here:

– Competitive benchmarking within the same industry. In this case ICOM would benchmark itself against OMI. However, it may be that competitor information is not available or that competitors use different measurement techniques, providing an invalid comparison. Concerning student recruitment, comparative information is available. However, there is likely to be an absence of supporting information. ICOM cannot be sure how OMI has actually achieved a growth of 27% in student members. ICOM can benchmark its growth against OMI, but it has no insight into how OMI is achieving this growth, so it does not know what it needs to put in place to improve its student recruitment performance. The use of a percentage as a benchmark also needs comment. OMI's increase might be based on a much lower starting level and the percentage increase might not be a usable benchmark for ICOM.

– External functional benchmarking where a particular function (such as student recruitment) is compared with that function in the organisation which performs it best, regardless of what industry the company is in. Non-competing organisations are more likely to share data than competitors. For example, an accountancy institute might be prepared to share membership recruitment information with ICOM. However, given that the comparator will be in a different industry, the competitive situation might be quite different and this reduces the usefulness of the comparison. For example, competitors might act differently and rules for student membership may be dissimilar. However, with external functional benchmarking it is more likely that the comparator will not only share results, but also the process which has achieved these results. This will give important information to ICOM about what it needs to put in place to improve its performance.

(c) 'An integrated report is a concise communication about how an organisation's strategy, governance, performance and prospects lead to the creation of value over the short, medium and long term' (IIRC draft framework, April 2013).

Financial reports have long been part of business culture. The content, structure and rules for constructing these reports are still important. For most organisations, growth and profitability are still significant goals and this is reflected in the CSFs and KPIs of ICOM. Here, profitability will be measured by the ROCE and the ROCE will either be explicitly stated in the company's financial report or can be calculated from the provided financial data.

However, the development of approaches such as the balanced business scorecard has prompted companies to set performance measures in non-financial areas, such as customer satisfaction and process efficiency. However, within the normal financial reporting framework, there is no place for the company to report its progress (or lack of it) in these important non-financial areas.

The integrated report provides the opportunity for the organisation to restate its mission and how its strategy addresses this mission. Central to this will be a discussion of the CSFs and the KPIs which have been identified to measure business performance. KPIs will have associated performance objectives which can be reported in the integrated report.

Thus, the report not only restates the KPI and its associated performance objective, it also reports on whether that performance objective has been met and, if it has not, discusses reasons for failure and the actions which are being taken to ensure that this objective is met in the next reporting period. For example, it is in the integrated report where ICOM will report on its efforts to meet certain customer satisfaction targets and student recruitment targets. If it fails to meet these targets, then it will explain how this failure is being addressed.

However, an integrated report should be more than a summary of information from other communications; it should explicitly connect the information to communicate how value is created. Thus current and potential stakeholders should have better information about the future value of the organisation in which they are interested. Through a restatement of the mission statement, stakeholders will also have the direction and purpose of the organisation emphasised and re-affirmed.

3 (a) The sales manager is correct in that the sales volume has outperformed budgeted sales volume by 27,000 units, or 11·1% over budget. This is a positive sign in a situation where there is increased competition and more demanding customers.

However, profitability is much lower than budgeted at 4·5% rather than the 24·7% budgeted, or the 27% expected if the budget was flexed to represent actual sales volume. This could have a serious impact on the future sustainability of the business. The flexed budget can be analysed to determine where performance has been worse than expected. Differences between expected and actual performance can then be investigated. The flexed budget and variances are as follows:

	Budget units	Actual units	Flexed budget	Variance to flexed
Sales volume	243,000	270,000	270,000	
	Budget $'000s	Actual $'000s		$'000s
Sales revenue	36,450	36,450	40,500	4,050 Adverse
Direct materials	15,795	18,630	17,550	1,080 Adverse
Direct labour	3,402	4,725	3,780	945 Adverse
Overheads	8,250	11,450	8,250	3,200 Adverse
Operating profit	9,003	1,645	10,920	

From the above, it can be seen that all calculated variances are adverse when considered against the flexed budget. Although the actual sales revenue is the same as budgeted, this is from a much higher sales volume. The average selling price per unit was budgeted at $150, but the average actual selling price per unit was $135, a decrease of 10%. It may be that this was reduced in order for the sales team to hit targets, especially if their commission is based on sales volume rather than revenue. Alternatively, it could be that the price was necessarily reduced in order to cope with increased competition.

Direct materials should have cost $17·55m for the actual units produced. However, they cost $18·63m, an adverse materials variance of $1·08m. This may either be due to the price or quality of materials used, but further information would be required to determine which. It is possible that price may be an important factor, as the sales manager mentioned fulfilling orders with a short lead time. This may have meant that higher prices were paid if materials were sourced at short notice, or not using economic order techniques. Furthermore, it was stated that customers wanted 'more attractive' products, which may have led to more advanced component parts, thus increasing costs. In addition, the industry is a dynamic industry with rapidly developing technology; the cost of new technology may be higher than the standard costs budgeted for. This is one of the difficulties of using standard costing in an environment where products are frequently enhanced or new products developed.

Direct labour has also shown an adverse variance of $3·2m. This may be due to either the rate paid, or the hours worked on products. If orders were satisfied at short notice, this may have required overtime, which could affect the labour rate variance causing it to be higher due to enhanced overtime payments. In addition, special and customer-specific orders may require longer than standard hours as they may not yet have benefitted from the learning curve effect associated with standard, repeat orders.

Fixed overheads show a $3·2m adverse variance, which is 39% higher than budgeted. This is clearly a major problem and suggests that either the standard absorption rate of overheads is incorrect, or that overheads have not been controlled throughout the year. The focus on meeting increased orders may have distracted management attention from overhead control, thus leading to inefficiencies related to these costs. Overheads include those indirect elements of cost which are not specifically attributed to a product, such as cleaning materials, machine maintenance, supervisor salaries and factory rent and rates, heating and lighting. By treating them as fixed overheads, the suggestion is that they should not change with a variation in activity volumes. It is vital that the company analyses the overhead spend urgently, as this has had a major impact on profitability.

Overall, M&G should have made a budgeted profit of $10·92m on the actual sales, but instead made a profit of $1·645m, a difference of $9·275m.

One of the problems of using a standard costing system is that standard costs are based on historical information, and in a changing environment these are unlikely to remain accurate for long. It may be that the standards used in the budget are simply no longer realistic, and these need analysing before the blame is placed upon any particular department within the organisation. The suggestion of activity based costing could certainly assist with this in terms of understanding the overheads, although it will have no impact on the labour or material standards used; these would need separate analysis.

(b) Activity based costing attempts to discover what drives costs to be incurred. Cost pools are established which include all of the costs caused by one cost driver. These cost pools are then absorbed into products based on the driver activity related to each product. For example, M&G may recognise the cost driver 'machine set ups' which would occur every time the manufacturing line is set up to produce a different product or model. Following the initial recognition of costs, drivers and activities, overhead costs can then be allocated to products or customers accordingly.

Activity based costing was developed to improve the accuracy of costing in an environment where methods of production were becoming more automated and less labour intensive. The introduction of greater product ranges also demanded enhanced costing methods in order to both understand how costs were driven (and hence determine how to successfully reduce costs) and also to enhance product pricing in an increasingly competitive environment. For M&G, given the falling profitability and the increasing competition, it is important that the company determines how to reduce costs and become competitive on price without affecting profitability.

Although activity based costing should prove to be beneficial in the long term, the initial implementation of the method is a time-consuming and complex task which requires the identification of numerous activities and their cost drivers. In reality, these may number in their hundreds or even thousands. Given the volume of products in M&G's portfolio, this is likely to be an especially complex task. In addition, as new products and methods are introduced, the analysis of activities and drivers needs to be updated. The introduction of activity based costing may take up to a year and will require the participation of managers and staff in all departments. Given the growth of the company, it may be that departmental managers are feeling under pressure of enhanced activity volume and may not give sufficient thought to the identification of activities and their drivers, which would make the results irrelevant.

Additionally, some managers may be resistant to the idea of change. Although this does not appear to be a problem in M&G, the pressure of work mentioned above may contribute to resistance. The impact of the change on their roles would also be a contributory factor. The sales manager, specifically, feels that performance is good and may see the introduction of new costing and pricing methods as something which will make it more difficult for him to hit targets. His participation is important as he will need to determine the cost drivers relevant to sales activities. This participation is essential to determine the profitability of customers, a key feature of activity based costing, and this itself may lead to resistance as he may see it as a route to losing some of his more 'lucrative' contracts.

The majority of M&G's customers are repeat business customers and, even if activity based costing were to be successfully introduced, they may not accept changes in pricing. For example, analysis might suggest that a product incurs greater costs than expected and so its price is increased as a result. The customer for this product may refuse to pay this price and so seek an alternative supplier for the product. This may, however, be beneficial to M&G to focus on more profitable customers or products, providing market share does not fall substantially.

Despite the limitations, in a period of increasing overheads (M&G's overheads are 39% greater than budgeted) and falling profitability, the use of activity based costing to determine cost behaviour can lead to increased efficiency as cost drivers are recognised and a focus placed on reducing the main cost drivers. Therefore the implementation of this method could bring future cost advantages to M&G, and help to regain the previous levels of profitability.

Tutorial note: *Although this solution suggests that ABC would be beneficial to M&G, the opposite viewpoint would be equally acceptable if supported by reasoned justification.*

4 (a) Tutorial note: *There are more than four problem areas to discuss. Candidates are only expected to discuss four.*

The current process has a number of problems which may be causing the student comments in the student experience report.

– Timing of coursework deadlines

The course appears to be badly coordinated in that similar deadlines are set for different subjects. This causes periods of high activity for students, followed by periods of low activity. It would be preferable if the workload was evened out over the duration of the programme. This would address one of the student comments:

'We always have about four pieces of coursework to submit at the same time, and then weeks where nothing is required. I wish the university would manage our programme better'

A solution would be to coordinate this at the start of the course. The head of department could play a more proactive role and communicate with the lecturers after coursework deadlines have been submitted, to organise a more balanced schedule across all subjects.

– Timing of the coursework requirements publication

The lecturer releases the coursework requirements on the VLE at the beginning of the course, and so requirements are available before the work has been covered in class. This means that students may complete the work without having all of the relevant information to help them. As one student commented:

'I completed and submitted my coursework early in order to manage my workload better, but then the lecturer gave an additional lecture to help us with our coursework. This contained very useful information, which we had not previously covered. I was not allowed to resubmit my work and so suffered from being efficient'

A solution may be to issue a timed release on the VLE, which will release the coursework details as soon as the lectures relating to that topic are complete. This could also assist with students feeling that too many pieces of coursework need completing simultaneously, as it will stagger their release.

– Release of marks

It appears there are three different records of student marks, and all are input manually, which could lead to errors. The student who commented that their end of year results gave a different mark would be rightly concerned that the incorrect mark had been allocated to their degree classification.

'I received one mark from the VLE system, but when my end-of-year results were released the mark was different'

As a solution, the data should be input only once, by the lecturer marking the work, and a summary of the marks should be available for download by the head of department and the administrator, should they still need to do this. The VLE system could also be linked to other systems within the university, automatically feeding marks directly into these systems, so avoiding input errors.

– Accuracy of coursework requirements

It appears that there are problems with the accuracy of coursework requirements, and that adjustments have been made after they have been published. As one student commented, this meant that time was wasted on work which was not necessary.

'There were errors in the initial coursework requirements, which were subsequently significantly changed. I had already started the assignment so this time was wasted'

An additional step could be added into the process, whereby another lecturer proof reads the requirements and checks them for accuracy, relevance and validity. Although this would add time to the overall process, it does not appear that time is an issue at the start of the process.

– Marking and feedback activities

The guideline relating to the timing of marking is a little vague, *'within two teaching weeks of the submitted coursework being collected from the course administration office by the lecturer'*, and allows the lecturer to delay collection of the scripts in order to delay the marking. This could be one of the reasons why students complain about the time taken to mark their coursework.

'It takes weeks to receive my marks, by which time I've forgotten what the coursework was about'

Additionally, there appears to be no communication to the lecturer when coursework is ready to mark. The VLE or the administration office should inform the lecturer that scripts are available.

It would appear that the lecturer marks the hard copy and types their feedback onto a new word processed document which is then uploaded on to the VLE. This appears to lead to the feedback being difficult to understand, as the feedback is on a separate document. As one student commented:

'My feedback was on a separate document so I found it difficult to relate to the coursework submitted'

There are a number of possible solutions to these problems. The hard copy seems to be redundant if the VLE system is used for feedback. One possibility is to drop the hard copy submission to the administrator so that the student makes just a single submission on the VLE. The system could send an automated email to the lecturer once a submission has been made, or the lecturer could periodically log on to the system to view submissions.

The VLE system could be upgraded to allow online marking, with the online annotation of scripts, and automatic addition of marks awarded. This would align the feedback to the coursework and would ensure that the lecturer marks the correct, up-to-date version of the work submitted. This should help eradicate the following problems.

'The lecturer said he did not receive the hard copy of my coursework but I know I handed it in. This was counted as a non-submission'

'I accidentally submitted an unfinished piece of coursework to the administration office but submitted the correct one to the system. The lecturer marked the unfinished piece'

The university guideline should be amended to suggest that marking should be completed within a set number of weeks of the coursework submission date, not the date that the lecturer collects the scripts from the administration office.

It may be possible for the administrator to be removed entirely from the process; guidelines could be issued by the head of department, and it has already been suggested that marks could be automatically fed into the administrative systems, eliminating the need for manual input.

– System deficiencies

The system does not appear to allow for the re-submission of completed coursework. This means that if an upload does not occur correctly, or the student uploads the wrong document, they may be assessed unfairly.

'I completed and submitted my coursework early in order to manage my workload better… I was not allowed to resubmit my work and so suffered from being efficient'

It should be possible to submit coursework more than once, with a new receipt given each time, until the final submission deadline. To ensure that the correct file is uploaded, there should be an additional process whereby the system opens the uploaded file and asks the student to verify that it is the correct, up-to-date version.

(b) Any changes in processes, in this case driven by customer (student) expectations, can lead to changes in job design. Both the changing process and the changing requirements of the student will lead to a number of new responsibilities and capabilities required of different staff.

There are a number of different approaches to job design, including scientific management, job enrichment, Japanese management and re-engineering. The current approach seems to be quite close to that of scientific management, but the suggestion of 'one best way' associated with this approach may be less relevant in the changing environment.

Re-engineering requires a fundamental rethink in how processes are carried out and often leads to the automation of roles. Whilst some automation may be required in this instance, it is unlikely at this stage that lecturers will be completely replaced by technology.

The Japanese model focuses on lean methods and minimisation of waste. Whilst still relevant to service industries, it is more commonly used in a manufacturing environment and is less common in an academic environment. However, some elements may be introduced here, such as a reduction in overlap of taught subjects, but is unlikely to have a major influence on changing the current job design of lecturers.

Job enrichment would seem to be a more appropriate approach to job design in this scenario, given lecturer concerns and the need to move away from the current scientific management model. This should satisfy the needs of the lecturer, the student and the university. Elements of job enrichment may arise as a result of process changes discussed in the first part of this answer.

For example, the suggested process change creates a requirement for the head of department to become more engaged with the lecturers, who would need to work with them to coordinate the assessments to meet the needs of the students. This may enrich their role as they become more involved in planning and decision-making. From the feedback, it would suggest that this coordination would also need to extend to the course content to ensure a lack of repetition and a rational continuation of studies. In addition to providing job enrichment to the lecturers, this would address the following student's concern:

'My course didn't seem well coordinated. Some topics were repeated and others failed to cover the syllabus, making it difficult to move up from one year to the next'

Lecturers, who traditionally appear to work alone, will be required to cooperate with each other, and play a much closer role in the development and well-being of students. This means that they will need to develop social and pastoral skills. They are used to working to strict guidelines and processes and it is likely that this will need to change to meet the individual requirements of students.

It would seem that job enrichment would assist in retaining lecturers, who do not seem to be stimulated by their roles. Job enrichment would allow them to be challenged as it brings in some responsibility for planning and control. Perhaps an opportunity to manage a subject, as part of the programme team, may allow for some planning and control activities in addition to planning of coursework. The analysis of student performance and feedback and lecturer involvement in determining improvements would also enrich their roles.

Job rotation, with lecturers teaching different subjects each year, may make jobs more challenging, but this in turn should make the job more interesting as it does not become routine.

Hackman and Oldham suggest that job enrichment involves five key characteristics, one of which is task identity, or the inclusion of all tasks needed to complete a process. So, if lecturers were to be responsible for the entire outcome of a subject, from the creation of the syllabus content, the writing and marking of coursework, the planning of lessons and the analysis of results, this would suggest an enriched role. Another of the five suggested characteristics is autonomy, whereby the lecturers should have discretion in the organisation of their work. A removal or reduction in the strict guidelines would help in achieving this.

Job redesign should also exploit the use of technology, even if not using it to fully re-engineer processes, and this needs to be considered in the university. Even though a VLE system exists, it is not fully utilised and manual processes still dominate.

University lecturers are knowledge workers and therefore the organisation should carefully consider how they treat them. Knowledge is a vital asset to universities and should be acquired, managed and exploited to make the most of it. The turnover of lecturers means that knowledge is being lost to the university and this needs to be controlled. If the university were to introduce activities which further develop the knowledge of lecturers, such as research seminars and attendance at conferences, this may stimulate learning and creativity and encourage lecturers to remain and to stay motivated.

In order to ensure that job redesign fully meet the needs of the university and the students, the new roles should be carefully analysed. This can be done through the use of a competency framework. The university should list all the competences required as an institute and further narrow these down to departmental and individual competences. This framework can then be used to assess any further staff development requirements.

'My lecturer wasn't very supportive when I had personal problems'

It may be that the lecturer appeared unsupportive to the student quoted in the feedback because they simply did not know how to react to that student. A competency framework for lecturers may include the addition of a section on pastoral care. The university may choose to run internal courses to ensure that staff has the acquired necessary competences in this area. There may be an existing requirement for communication skills, but this may be emphasised in relation to internal communication within the course team. Meetings may be scheduled to enable this.

The competency framework may assist in succession planning, which seems essential in a university hoping to improve its student experience, but subject to a high turnover of lecturing staff.

1 (a) Up to 1 mark for each valid point up to a maximum of 19 marks; this will include marks for appropriate calculations. Such calculations are likely to concern market share, market growth, return on capital employed and net profit margins.

(b) Up to 1 mark for each valid point up to a maximum of 3 marks for each contextual factor. This will include 1 mark for accurately defining the contextual factor. Up to a maximum of 15 marks for this part question.

(c) Up to 1 mark for each valid point up to a maximum of 12 marks for this part question.

Up to 4 professional marks for the tone, clarity, vocabulary and approach of the answer.

2 (a) Up to 1 mark for each appropriate point up to a maximum of 15 marks.

(b) Up to 1 mark for each appropriate point up to a maximum of 5 marks.

(c) Up to 1 mark for each appropriate point up to a maximum of 5 marks.

3 (a) Up to 1 mark for each item of quantitative analysis, including variances and profitability ratios. Up to 1 mark for each appropriate qualitative point, specifically reasons for variances and how the variances contribute to the current situation. Up to 1 mark for all other qualitative points not related to variances but relevant to the question. Up to a maximum of 15 marks for this part of the question.

(b) Up to 2 marks for discussing the principles of activity based costing. Up to 2 marks for explaining the reason for its development (either theoretical or within the context of the scenario). Up to 6 marks for the evaluation of activity based costing in the context of M&G.

4 (a) Up to 2 marks for correctly diagnosing and explaining a problem with the current process. Up to 2 marks for suggesting an appropriate solution. Four process problems are required giving a total of 16 marks.

(b) 1 mark for each relevant point up to a maximum of 9 marks.