

MARKSCHEME

November 2005

BUSINESS AND MANAGEMENT

Higher Level

Paper 1

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SECTION A

1. (a) **Evaluate the main types of market research that *Gadgets2u.com* may use to identify their target market and their product requirements. [10 marks]**

Market research can be classified as Primary or Secondary, Qualitative or Quantitative. **Primary sources of data** – these are first hand sources. There are three basic techniques of field research to collect primary research:

- surveys/questionnaires *e.g.* face to face interviews
- observation *e.g.* focus groups
- experimentation.

This data is up-to-date and fit for purpose, but may be expensive to gather.

Primary research might be through the use of focus groups or questionnaires sent to existing and potential customers. Appropriate techniques should be selected to ensure that the sample is representative and statistically significant. This is likely to provide more qualitative data, than secondary research.

Secondary sources of data – these are the use of second hand data, collected by somebody else for another purpose. This data may be manipulated and analysed to suit the new purpose. This desk research may come from internal or external sources, and include some of the following:

- Internal – sales and financial records, customer records, internal reports
- External – media reports, company reports, government statistics, retail data

This data is relatively cheap to gather, but may lack relevance and/or may be dated.

A range of market research may be suggested and applied. *Secondary data* from government sources on social trends, economic patterns, ownership of computer related technologies would be helpful. This may be gathered across Europe from EU sources. Analysis may be necessary to identify competition from other web-based organizations. Much of this will be quantitative data. It may be used to identify likely target groups. Various lists of potential customers can be purchased from retail audit groups. These may be customers already purchasing from the net.

Quantitative data – concentrates on numbers representing factual information. It is possible to present this in the form of diagrams, graphs and charts.

Qualitative data – in-depth research, which may concentrate on opinions and motivation behind consumer behaviour. It may be difficult to present this information in a simple and digestible form.

In the case of *Gadgets2u.com*, the company uses occasional web-based surveys. However, there is concern that changing demographics may alter demand patterns and that sampling techniques lack precision.

It is appropriate to use a range of primary and secondary sources and techniques. The issue of cost may be important, since *Gadgets2u.com* is a relatively small business. However, the innovative nature of the market; the speed of change and the vital decisions about the future direction of the business require detailed research with a high level of primary data.

[8 to 10 marks]

Full and detailed evaluation of market research techniques. The techniques selected are considered with reference to the needs of *Gadgets2u.com* for [9 to 10 marks] may use examples from the case study.

[5 to 7 marks]

There is some consideration of market research techniques. There is some reference to *Gadgets2u.com*, though this may be limited towards the bottom of the range.

[3 to 4 marks]

Some market research techniques are identified and explained, but this may not be linked to *Gadgets2u.com*.

[1 to 2 marks]

An essentially descriptive answer or a list of techniques.

- (b) **Identify possible pricing strategies available to *Gadgets2u.com*. Assess the appropriateness of each in relation to the company's product range.**

[8 marks]

Pricing strategies include the following:

- cost-based
- penetration
- market-based
- skimming
- competition-based
- customer-based.

Customer-based pricing recognizes that different customers have different price sensitivities. *Gadgets2u.com* has adopted a **price skimming** approach (customer based) as its customers are early adopters and innovators and are more concerned with the technology than the price. However, demand is income sensitive and economic growth forecasts for the EU for 2005 and 2006 suggest a slowdown. The demand for products is also seasonal, causing cash flow difficulties. Tom would like to develop the business further. This will mean targeting newer groups of customers, who may have different price sensitivity. It is clear that price skimming is appropriate for its present target market as it generates high profit margins. However, changing market conditions, poor liquidity and expansion may require the firm to examine a combination of other pricing approaches.

Cost based pricing is more often used for manufacturing firms and traditional markets. Clearly *Gadgets2u.com* will need to cover costs, but this approach ignores competition. E-commerce is highly competitive.

Market-based pricing is based on customer requirements. It is unlikely that *Gadgets2u.com* will be able to price discriminate as it cannot clearly segment and separate its customers. However, it has a loyal core of customers, so it may aim to generate higher sales by offering price incentives to this group. Other price levels can be assessed through customer questionnaires and web-based surveys. It is clear that price skimming is appropriate for much of its target audience, but if the economy slows too fast, lower prices or price offers may be necessary. In addition, the seasonality of

the business may require *Gadgets2u.com* to review price levels in quieter periods of the year to generate greater cash flow.

Competitor-based pricing would require *Gadgets2u.com* regularly to check out the prices of close competitors and to set their prices in line with these. In the type of market targeted, this would be less important than say in a traditional product market like grocery, as competitors will be fewer and not so easy to access.

At present, the nature of the product means that penetration pricing would be counter-productive. However, if Tom wishes to move into new markets where the firm does not have an existing reputation then low, customer attractive offers could be a useful approach to generate customer loyalty and goodwill.

[6 to 8 marks]

Detailed assessment of pricing strategies with recognition that the market is dynamic and the product is sensitive to various factors. Reference is made to the case study.

[3 to 5 marks]

Some assessment of pricing strategies. The assessment is related to the case study though this may be limited towards the lower end of the range

[1 to 2 marks]

A general answer with few specific pricing strategies and/or limited reference to the case.

2. (a) **Assess the suitability of the present organization structure of *Gadgets2u.com*, given the recent rapid growth of the company. [8 marks]**

Some aspects of the business, such as recruitment and accounting are sub-contracted. Five employees work from home. *Gadgets2u.com* is presently organized as a matrix structure with a project team for each major function.

Advantages

This has provided greater flexibility and a flat hierarchy, which is intended to empower and motivate employees and to involve them in decision-making. Project leaders report to the senior management team.

Disadvantages

It is becoming clear that this structure is leading to some communication difficulties with project teams failing to discuss issues with other project teams. Tom's leadership style of the purchasing project team is also rather autocratic. Clearly, the structure needs review, based on a restatement of objectives. Is flexibility or control the priority?

[6 to 8 marks]

The suitability of the present organization structure is assessed given the recent rapid growth of the company. The assessment uses a range of business terminology and examples from the case study.

[3 to 5 marks]

Some assessment of the present organization structure given the recent rapid growth of the company. Links to the case study may be limited.

[1 to 2 marks]

A limited and/or descriptive answer.

- (b) Advise Tom Figueredo on the advantages and disadvantages of homeworking. The answer should refer to productivity, motivation and job satisfaction.**

[8 marks]

Tom is questioning whether the five members of staff who work from home should continue to do so. He is suggesting that they might be encouraged to move into the office. Clearly for Tom the central issue may be one of control and coordination. Some of these staff members live up to 150 km. from the main office. The immediate effect of such a change may be that these people choose to leave the firm. This could be costly if they are very experienced. Recruitment and training of new staff is not cheap. Working from home provides flexibility, and allows work to be fitted in around other responsibilities such as childcare. The employee may feel more empowered and as a consequence may be more motivated and productive, leading to greater job satisfaction.

In terms of motivation theory, homeworking, which provides greater empowerment may satisfy higher order needs in Maslow's hierarchy.

Research suggests that those working from home, work longer hours than those who travel to an office and time and money is clearly not wasted in commuting. Given that *Gadgets2u.com* is an internet-based operation it seems strange that they would wish to reintroduce more traditional working arrangements.

However, it is true that they may be more distractions in the home environment and it is harder to ensure that an employee is on task. Communication between project teams is already strained and centralizing staff may improve the situation, allowing improved coordination. New information and communication technologies, such as teleconferencing, the Internet, mobile telephones *etc.* are speeding up communications and should ensure that communications steadily improves.

It is not clear what the objective of stopping homeworking will be and Tom would need to be clear on the costs and benefits before such a change took place. It may be possible to outsource the functions that the homeworkers are undertaking. A rash action is not advisable.

[6 to 8 marks]

A clear and detailed analysis of the advantages and disadvantages of homeworking, with coherent, supported advice given to Tom. The advice is in the context of the business needs of *Gadgets2u.com* and includes reference to productivity, motivation and job satisfaction.

[3 to 5 marks]

Some analysis of the advantages and/or disadvantages of homeworking. Advice may be given to Tom, although reference to the specific needs of *Gadgets2u.com* may be brief or missing.

[1 to 2 marks]

A limited and/or brief answer, which lacks specific advice.

3. (a) **Analyse the problems for *Gadgets2u.com* of holding too much, or too little, stock.** **[6 marks]**

Costs of holding too much stock include:

- **Administration costs increases** with more stock to administer and keep secure.
- **Insurance fees** may increase with stock values.
- **Stock wastage** may increase through damage, obsolescence and there are risks of theft.
- **Storage costs rise as the space required increases.** As well as rent there are labour and utility charges.
- **Liquidity problems** may occur as cash is tied up in stocks and is unavailable for other purposes such as paying bills. As *Gadgets2u.com* already has a seasonal business they really need to avoid further drains on their liquidity position.
- **Opportunity cost** of holding stock includes all other potential issues of the capital tied up in stock, e.g. purchase of new equipment, research and development, which may affect its competitive position.
- **Finance costs** may be high as goods produced may be sold on credit. Borrowings and interest payments on the stock may be large.

Costs of not holding stock include:

- **Inability to satisfy sudden large orders** which may mean the business will lose potential profits and the goodwill of customers.
- **Existing orders may be delayed** leading to longer delivery lead times.
- **Workers and machines may be left idle as there are not enough stock to fulfill orders.**
- **An e-commerce business** offers the USP that delivery should be quick and simple. Delays may affect its image across all of its activities.

[5 to 6 marks]

A balanced and detailed analysis of the problems of holding too much, or too little, stock with suitable examples and some reference to *Gadgets2u.com*.

[3 to 4 marks]

Some analysis of the problems of holding too much, or too little, stock. The discussion may lack some detail, balance and/or may have few examples.

[1 to 2 marks]

An essentially descriptive answer, which tends to listing.

- (b) **Assess the problems that *Gadgets2u.com* may face if it chooses to implement just in time (JIT) stock control (line 98).** [8 marks]

Some possible problems that *Gadgets2u.com* may face when implementing just-in-time stock control include:

- higher costs if it loses some economies of scale for bulk-buying
- the firm becomes more vulnerable to problems with supply or breakdowns on the part of their suppliers
- it would become more reliant on a high quality supply chain and distribution mechanism for getting hold of supplies of goods – this may increase costs
- could be problems at certain times of year when demand is particularly high
- possible problems with customer satisfaction if deliveries are delayed
- *Gadgets2u.com* may need to build much closer relationships with its suppliers and this may take some time before it happens
- *any other relevant point.*

These problems must be placed in the context of the benefits, which will be lower stock and administration costs. The problems are likely to be short term.

[6 to 8 marks]

Detailed assessment of several possible problems. The problems are related directly to the case study.

[3 to 5 marks]

Some consideration of a few possible problems. The problems are related to the case study though may tend to be a little tenuous in their connection.

[1 to 2 marks]

An essentially descriptive answer or a list of problems without any assessment.

4. **“Sam (Figueredo) is proposing to the senior management team an expansion into retail operations for the firm” (lines 157-8). Evaluate this proposal by examining the internal and external forces driving or restraining change at *Gadgets2u.com*.** [12 marks]

Gadgets2u.com has been profitable for three years of rapid sales growth. Expansion of the business may seem a logical progression at this point. However, there are forces restraining such change:

Restraining forces:

Internal:

- Tom is keen to concentrate the business on existing core customers who have helped make the business successful and profitable
- the cash flow forecast shows difficulties caused by the seasonal nature of demand. Expansion could worsen the position by creating greater cash demands
- the firm may not have the management experience necessary to diversify as there is insufficient knowledge of new markets
- there is a risk of overtrading and a loss of cost control, which have been the foundations of the firm’s present profitability
- staff members may feel that the change is threatening.

External:

- demand patterns are less predictable for new products and markets increasing risks and exposure to losses
- few barriers to entry in the retail market allowing increased competition if the market proves profitable
- *Gadgets2u.com* has less experience of the retail market and the costs of setting up a suitable infrastructure may be substantial.

Driving forces:

Internal:

- Sam is keen on the idea of diversifying, believing that the quicker expansion would be possible through greater brand exposure
- as the demand for the firm's products is seasonal, it is important to offset this by less seasonal products
- retail outlets may allow for greater economies of scale and may reduce the risk of excess stock
- retail outlets in other countries may help diversify risk, *e.g.* as one country moves into recession, another may be moving out
- extension to retail outlets will create greater brand awareness, which may also lead to higher sales from the website
- present growth in sales appears to be flattening off
- being first into a new market may allow for continuation of price skimming approaches.

External:

- franchising is becoming an increasingly popular form of business unit. More able and talented individuals are looking for suitable franchising opportunities
- there is a substantial market which is still suspicious of new technology, and/or reluctant to pass on financial details on the web.

Evaluation:

There are relative differences in the strengths of these forces. Whether Tom decides to follow Sam's recommendations will depend on the strengths of the restraining and driving forces. It is clear that any decision should not be made before further market and economic research is undertaken. The growth of the firm and the structural and organizational problems presently experienced should place a major question mark against further quick expansion and there appears no overriding driving force. There are many unknowns, which increase risk. As the firm is profitable and expanding there is no major driving force to risk liquidation. However, e-commerce is a fast moving sector and firms will need to be adaptable and open to change to retain competitive advantage. However, this change needs to be planned and researched.

[10 to 12 marks]

Detailed evaluation of several driving and restraining forces, both internal and external within a logical structure. The evaluation must be embedded in the facts of the case and drawn from several of the business functions. For **[11 to 12 marks]** a judgment should be included and supported by clear discussion.

[6 to 9 marks]

An evaluation of driving and restraining forces, both internal and external. There may be a lack of balance or one element may be missing. There is some reference to the facts of the case although these become increasingly limited at the bottom of the band.

[3 to 5 marks]

Some consideration of driving and restraining forces, but these may be limited, and/or unbalanced. There are references to the case study although these may be tenuous or generalized. There is unlikely to be a supported discussion or judgment.

[1 to 2 marks]

An essentially descriptive answer or a list of issues without structure and/or assessment of problems.

SECTION B

5. (a) **Explain why Suzi Garcia has recommended running the “warehouse as a separate cost centre” (lines 122-123).** **[3 marks]**

- a cost centre is a section of an organization where the cost of an operation or activity can be calculated and any variance from the expected cost can be identified
- cost centres can be the basis for deciding the price to be charged for a product, or deciding whether to continue stocking that product
- individual product performance is clearer
- Suzi is recommending that the creation of a cost centre will improve the cost control of the business and possibly its cash flow and profit.

[3 marks]

There is a clear understanding of cost centres and an explanation of their role in identifying and allocating costs.

[2 marks]

There is some understanding of cost centres and their role in allocating costs.

[1 mark]

A limited explanation

(b) Using both the FIFO and LIFO methods of stock valuation calculate the following for the first four months of operation

(i) the value of closing stock at the end of each month.

[8 marks]

FIFO Month	Purchases	Issues	Stock Balance	Value €
May	6000 @ €3	3400 @ €3	2600 @ €3	7800
June	5000 @ €3.20	2600 @ €3 3020 @ €3.2	1980 @ €3.2	6336
July	7000 @ €3.40	1980 @ €3.2 5580 @ €3.4	1420 @ €3.4	4828
August	3000 @ €3.20	1420 @ €3.4 755 @ €3.2	2245 @ €3.2	7184

LIFO Month	Purchases	Issues	Stock Balance	Value €
May	6000 @ €3	3400 @ €3	2600 @ €3	7800
June	5000 @ €3.20	5000 @ €3.2 620 @ €3	1980 @ €3	5940
July	7000 @ €3.40	7000 @ €3.4 560 @ €3	1420 @ €3	4260
August	3000 @ €3.20	2175 @ €3.2	825 @ €3.2 1420 @ €3	6900

[6 to 8 marks]

The figures are laid out clearly and calculations are correct for *[8 marks]*. Allow up to two calculation errors for *[6 marks]* and/or some lack of clarity in layout.

[3 to 5 marks]

There are several errors and/or omissions, but the layout shows that the candidate understands the main principles of the two methods.

[1 to 2 marks]

There is some attempt to layout stock, but there are many errors and/or omissions.

(ii) the gross profit for the period May to August.

[5 marks]

<u>Sales value</u>		€
May to July	18 000 × €12	= 216 000
August	3 000 × €10	= <u>30 000</u>
Total		<u>246 000</u>

<u>Cost of sales</u>			€
<u>FIFO</u>			
3 400	@ €3	=	10 200
2 600	@ €3	=	7 800
3 020	@ €3.2	=	9 664
1 980	@ €3.2	=	6 336
5 580	@ €3.4	=	18 972
1 420	@ €3.4	=	4 828
755	@ €3.2	=	<u>2 416</u>
Total			<u>60 216</u>

<u>LIFO</u>			€
3 400	@ €3	=	10 200
5 000	@ €3.2	=	16 000
620	@ €3	=	1 860
7 000	@ €3.4	=	23 800
560	@ €3	=	1 680
2 175	@ €3.2	=	<u>6 960</u>
Total			<u>60 500</u>

<u>Gross profit</u>	<u>FIFO</u>	<u>LIFO</u>
	€	€
Sales	246 000	246 000
less cost of goods sold	<u>60 216</u>	<u>60 500</u>
Gross Profit	<u>185 784</u>	<u>185 500</u>

[5 marks]

There is a clear understanding of the layout of a trading account and how gross profit is calculated. Working is shown, and the profit and loss account is calculated correctly.

[3 to 4 marks]

There is some understanding of the layout of a trading account, but may include errors in both layout and calculation.

[1 to 2 marks]

There are many omissions and miscalculations, but a small measure of understanding about layout, with some attempt at calculation.

- (c) **Compare FIFO and LIFO as methods of stock valuation for *Gadgets2u.com*.** **[4 marks]**

FIFO is realistic as it is based on the assumption that issues are made in order of the goods being received. The costs are therefore based on the prices paid. Closing stock is based on most recent prices. In a time of rising prices, it may overstate profit as it gives a lower cost of sales figure based on historic pricing.

LIFO is based on the prices paid. Issues are calculated at the most recent prices. It may be considered unrealistic as it is based on the assumption that issues are from the latest stock. Closing stock is not based on the most recent prices.

[4 marks]

A good understanding of the two valuation methods, with clear comparison.

[2 to 3 marks]

A reasonable understanding of the two valuation methods, with perhaps limited comparison.

[1 mark]

A limited understanding.

6. (a) **Explain the potential effects on *Gadgets2u.com* as interest rates go up.** **[4 marks]**

The interest rate is the cost of borrowing and the reward for saving:

- when rates go up, the cost of borrowing is higher, so the level of borrowing decreases as does demand. Lower demand for goods and services usually has a depressing effect on prices curbing inflationary pressures.
- if interest rates in a country rise faster than rates in other countries there tends to be an inflow of capital to take advantage of the higher interest rates on savings.
- to facilitate this process, foreign investors must purchase domestic currency, increasing the demand for that currency on international markets. The currency tends to strengthen as a result, unless there are other more powerful external factors.

For *Gadgets2u.com*, the following effects may occur as a result:

- demand is likely to fall as their goods are luxuries – profits may fall
- borrowings costs will rise
- costs of imported items are likely to decrease
- expansion may be restricted.

[4 marks]

A clear and detailed explanation of several effects of increased interest rates.

[2 to 3 marks]

An explanation of at least two effects, though this may lack detail and/or may not be applied to *Gadgets2u.com*.

[1 mark]

A brief, generalized answer, which may be a list.

- (b) **Identify the potential effect of changes in the euro to dollar and euros to yen exchange rates on the performance of *Gadgets2u.com*.** **[4 marks]**

Gadgets2u.com sources many of its products from Japan and the USA. As the dollar strengthens against the Euro, then any imported products from the USA will be cheaper to *Gadgets2u.com* and will raise their profit margins. They may be able to take profit on some or all of the lower sourcing costs as their customers are relatively price insensitive. A similar situation prevails with the yen, although as this continues to strengthen against the Euro in 2006, then imported products will appear marginally cheaper.

Any increase in purchase costs may also have an adverse effect on the liquidity position of the firm as they are paying out more in cash. It may push *Gadgest2u.com* to try to find alternative sources to US and Japanese products, but this may be difficult.

[3 to 4 marks]

Several appropriate effects are identified, which are clearly rooted in the case study.

[2 marks]

More than one appropriate effect is identified, although these may not be well linked to facts of the case study.

[1 mark]

One appropriate effect is identified, or more than one with no link to *Gadgets2u.com*.

- (c) (i) Using the incomplete cash flow statement above, calculate total payments, net cash flow, and opening and closing balances. *[4 marks]*

Cash flow statement January – March 2006

	January	February	March	April
(Euros)				
Receipts				
Sales	281 000	265 000	275 000	342 000
Loan	<u> </u>	<u>105 000</u>	<u> </u>	<u> </u>
Total receipts	281 000	370 000	275 000	342 000
Payments				
Interest	7 880	7 880	8 650	8 650
Purchases (materials)	204 000	282 000	284 000	432 000
Purchase (fixed assets)		58 000	54 000	
Salaries	38 000	38 000	46 000	46 000
Rent	3 650	3 650	3 650	3 650
Office expenses	2 800	2 750	2 900	3 100
Distribution costs	4 120	4 446	5 230	8 657
Other overheads	3 232	3 454	3 566	6 669
Total payments	<u>263 682</u>	<u>400 180</u>	<u>407 996</u>	<u>508 726</u>
Net cash flow	17 318	(30 180)	(132 996)	(166 726)
Opening balance	88 020	105 338	75 158	(57 838)
Closing balance	105 338	75 158	(57 838)	(224 564)

[4 marks]

All calculations are accurate.

[2 to 3 marks]

There are one or two calculation errors, which are separate rather than carried through.

[1 mark]

There are up to four errors, but an understanding of the process must be evident.

- (ii) Evaluate methods by which *Gadgets2u.com* can improve liquidity and its cash flow management. [8 marks]

Demand for Gadgets2u.com is highly seasonal and this can have an adverse effect on cash flow. To manage cash flow a firm will need to assess the size and timings of cash flows into and out of the business and whether there are other sources of finance to cover any short term liquidity problem.

Possible methods:

- reduce stock levels – there is evidence that this is a problem. *Gadgets2u.com* could change to a just-in-time method of stock control. This would reduce stock levels, but the firm may lose discounts for bulk purchases and may face stockout situations if suppliers are unreliable. This method is only suitable for continuous mass production. As *Gadgets2u.com* is regularly updating products JIT may not be appropriate.
- seek to offer lower credit periods or collect debts earlier by offering incentives. It is unlikely that the credit card company will pay earlier and most sales will be in cash, so there will be little mileage in this approach.
- extending credit periods allowed by creditors. It may be possible to change suppliers or persuade existing suppliers to extend credit terms. Changing suppliers to those inside the European zone may overcome problems associated with exchange rate risks, which is presently making imported products more expensive.
- selling fixed assets e.g. unused offices or buildings, machinery etc. This is unlikely to be suitable for *Gadgets2u.com* as it has a limited asset base.
- postponing the purchase of assets or choosing to lease or hire assets instead of buying them. This may be a suitable source of cash flow for *Gadgets2u.com* as assets such as computer and Internet equipment will be frequently updated.

Alternatively, *Gadgets2u.com* may improve its cash flow position by finding alternative sources of finance. These may include the following:

- additional funding from the venture capital company, Four H
- a joint venture
- a bank loan
- government grants
- sales of shares – turning *Gadgets2u.com* into a limited company
- increasing sales revenue through adjustments to the marketing mix.

[6 to 8 marks]

A clear and detailed evaluation of methods by which *Gadgets2u.com* can improve its cash flow management. The evaluation employs a number of examples linked to the case study.

[3 to 5 marks]

A satisfactory consideration of methods by which *Gadgets2u.com* can improve its cash flow management. There may be limited reference to the case study.

[1 to 2 marks]

A limited and generalized answer, which nonetheless shows some understanding of the concept of cash flow.
