

Markscheme

May 2021

Business management

Standard level

Paper 2

18 pages



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The markbands and assessment criteria on page 3 should be used where indicated in the markscheme.

Marks	Level descriptor
0	The work does not reach a standard described by the descriptors below.
1–2	 Little understanding of the demands of the question. Few business management tools (where applicable), techniques and theories are explained or applied, and business management terminology is lacking. Little reference to the stimulus material.
3–4	 Some understanding of the demands of the question. Some relevant business management tools (where applicable), techniques and theories are explained or applied, and some appropriate terminology is used. Some reference to the stimulus material but often not going beyond the name of a person(s) and/or the name of the organization.
5–6	 Understanding of most of the demands of the question. Relevant business management tools (where applicable), techniques and theories are explained and applied, and appropriate terminology is used most of the time. Some reference to the stimulus material that goes beyond the name of a person(s) and/or the name of the organization. Some evidence of a balanced response. Some judgments are relevant but not substantiated.
7–8	 Good understanding of the demands of the question. Relevant business management tools (where applicable), techniques and theories are explained and applied well, and appropriate terminology is used. Good reference to the stimulus material. Good evidence of a balanced response. The judgments are relevant but not always well substantiated.
9–10	 Good understanding of the demands of the question, including implications, where relevant. Relevant business management tools (where applicable), techniques and theories are explained clearly and applied purposefully, and appropriate terminology is used throughout the response. Effective use of the stimulus material in a way that significantly strengthens the response. Evidence of balance is consistent throughout the response. The judgments are relevant and well substantiated.

Section A

Section A

1. (a) State **two** features of a cooperative.

[2]

Co-operatives are businesses owned and run by and for their members. The members may be customers, employees or residents. All members have an equal say in what the business does and a share in the profits.

Award [1] for each feature identified – no reference to Hafs is needed:

- Profits are shared amongst members
- Members share decision making
- Each member has the same voting rights on decisions
- Members are owners of the business
- · Operate in the private sector
- N.B. If a candidate states that a cooperative is a social enterprise, accept that point as one feature for [1].
- (b) Using Figure 1:
 - (i) explain what the y axis shows;

[2]

Award [1] for a correct label or naming of revenue and costs and a second mark for a full explanation, such as "The Y-axis represents both the forecasted cost and revenue figures for Hafs. As its sales or output or activity increases (x-axis), Hafs has higher revenue and higher total costs, which can be determined by their relationship to the Y-axis and its scale. Wording does not have to be exactly as above. Maximum award: [2].

(ii) calculate the forecasted profit if sales are 25 000 units in 2021 (*show all your working*);

[2]

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The level of profit if sales are 25 000 units in 2021 is TR = $250 000 TC = $175 000 [1] = $75 000 [1]
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Candidates that do not show any working and simply write 75 000 can only be awarded [1].

(iii) calculate the total contribution in 2021 if *Hafs* only sells 20 000 units (*show all your working*).

[2]

Total contribution is the difference between total sales revenue and total variable costs.

At an output of 20 000 units TR = \$200 000 TVC = \$100 000 (TC = \$150 000; TFC = \$50 000) = \$200 000 - \$100 000 = \$100 000

To calculate TVC, take total costs and subtract fixed costs, as follows \$150 000 minus \$50 000 = \$100 000

Candidates that do not show any working and simply write 100 000 can only be awarded [1].

(c) Explain whether an increase in total fixed costs has an impact on unit contribution.

[2]

Award [1] for a statement such as "it will have no impact".

Award a further [1] for an explanation such as "unit contribution is the difference between the selling price and its variable cost, therefore an increase in fixed costs will have no impact on unit contribution".

2. (a) Describe **one** step in the development of a brand.

[2]

Common steps in developing a brand include:

- · consideration of the business' strategy
- identification of the target market
- doing market research
- · focusing on any one of the four Ps for purposeful positioning
- · development of market vision around the USP
- selection of a name and logo
- development of a marketing strategy.

Accept any other relevant step. Candidates do not have to use identical wording to the above.

Award [1] for identification of a step and [2] for an appropriate description of it.

(b) Calculate:

(i) which store made the highest net profit before interest and tax (*no working required*);

[1]

Store 1	Store 2	Store 3
\$90 000	\$103000	\$85 000
<u>-\$66 000</u>	<u>-\$76 000</u>	<u>-\$67 000</u>
\$24 000	\$27 000	\$18 000

Store 2 made the highest profit.

Award [1] for the correct answer. Working not required.

(ii) which store had the highest profitability (show all your working).

[2]

$$\frac{$24\,000}{$180\,000} = 13.33\%$$

$$\frac{$27\,000}{$223\,000} = 12.11\%$$

$$\frac{$18\,000}{$170\,000} = 10.59\%$$

Store 1 had the highest profitability.

Award [1] for correct working and [1] for correct answer. Own figure rule applies.

On this question, to get marks for correct working, candidates must provide all three calculations and perform all three calculations correctly. Disregard minor errors of rounding provided that those errors are irrelevant to correct determination of which store had the highest profitability.

(c) Calculate:

(i) TPS' equity; [1]

Award [1] for the correct answer.

(ii) TPS' return on capital employed (ROCE) (show all your working).

[2]

Step 1: add up the profits from the three stores.

$$$24\,000 + $27\,000 + $18\,000 = $69\,000$$

Step 2: Calculate ROCE.

$$\frac{\$69\,000}{\$50\,000\,(loan\,capital) + \$80\,000\,[Equity]} = 53.08\,\%$$

Award [1] for correct working and [1] for correct answer. Own figure rule applies.

(d) Explain **one** effect that the \$50 000 long-term debt may have on *TPS*' profit and loss account.

[2]

The \$50 000 in long-term debt would have to be repaid with interest. That interest expense would have three effects:

- The interest expense would be subtracted from net profit before interest and tax, thereby lowering TPS' net profit before tax.
- The corporate tax rate would be applied to TPS' net profit before tax. Because
 this figure is lower than it would have been had TPS not had an interest
 expense, TPS' income tax expense is reduced.
- Because a tax rate is less than 100 %, the interest expense is greater than the tax savings. Therefore, TPS' net profit after interest and tax is lower than it would have been had TPS not had an interest expense.

Award [1] for identification of an effect (or demonstration of some understanding). The candidate has to link interest expense (from the debt) to the profit and loss account and/or to changes in tax. Award an additional [1] for a complete, clear explanation. Candidates do not have to explain all three of the bulleted points above, only one.

Section B

3. (a) State **three** of *Buzza*'s main business functions.

[2]

Possible answers include:

- human resources
- finance (and accounts)
- marketing
- operations
- management

Candidates must use the traditional business functions, such as those noted above (or others which are traditionally listed in textbooks). Do not accept terms inspired by the stimulus itself (R & D, for example).

For [2], candidates must state 3 (or more) of the above.

For [1], candidates must state 2 of the above.

If a candidate states only one business function, award [0].

(b) Explain **one** advantage **and one** disadvantage to *Buzza* of operating as a partnership.

[4]

Advantages include:

- Partners can each have different skills, which benefits the business. In this
 case, Jo is a gifted designer and therefore brought key sills to the design side
 of the business, whilst Demi is a business graduate and will know much more
 about how to run a business.
- More capital is available for the business than when set up as a sole trader.

Disadvantages include:

- There is a risk of disagreements amongst partners.
- The amount of capital that can be raised is limited unless additional partners are taken on and in this case the partnership lacked the finance needed for expansion.
- The liability of the partners for the debts of the business is unlimited.

Each partner is liable for actions by other partners.

Accept any other relevant advantage or disadvantage.

Mark as 2 + 2.

For [2], candidates must identify an advantage or a disadvantage, explain it, and apply it to the stimulus.

(c) Explain **one** advantage **and one** disadvantage of the high labour turnover of designers at *Buzza*.

[4]

Advantages and disadvantages can apply to *Buzza* OR to the designers themselves.

Advantages include:

• Buzza has a constant supply of new designers with fresh ideas, which is good for the business. The fact that the average age of the design team is 26 is evidence of the constant supply of new designers.

- The "threat" of not having a contract renewed may act as a motivator for designers, a situation that benefits *Buzza* as they will have a very focussed team of designers only 50% of designers on average gets contracts renewed so they know they are under pressure to perform.
- Buzza does not have to deal with the problem of under-performing designers in the long-term as they can simply not renew designers' 12-month contracts. This situation also allows Buzza to avoid the need for redundancy payments.

Disadvantages include:

- Buzza will need to continually recruit new designers, which can be expensive
 and time consuming as 50 % of new recruits on average do not have their
 contracts renewed.
- Labour turnover figures, with 50 % not having contracts renewed, may act to
 discourage some potential good designers from applying and *Buzza* may lose
 out on potentially gifted designers as other exclusive brands have a lower
 labour turnover figures and may attract applications from such graduates.
- The high labour turnover figures may cause insecurity amongst the workforce and demotivate designers who feel under pressure particularly if after three seasons they have not had a design accepted.

Accept any other relevant advantage or disadvantage.

Mark as 2 + 2.

For [2], candidates must identify ad advantage or a disadvantage, explain it, and apply it to the stimulus.

(d) Discuss the two options that Jo and Demi are considering.

[10]

Option 1: Sell surplus products at greatly reduced prices via its website.

- This option has the advantage of increasing revenue as out of season stock is sold and at least raises some revenue, even though it will be far less than the original price charged.
- It also avoids the need to destroy stock in an incinerator and may improve the business's image amongst consumers who dislike the idea of perfectly good products being burnt, which is a waste of resources and potentially damaging to the environment.
- However, Option 1 can seriously affect the brand's image amongst wealthy consumers— Buzza a highly desirable and exclusive brand bought by wealthy consumers — who may take issue with their 'status symbol' fashion items being sold to less affluent consumers. Desertion of the brand by current customers to could seriously undermine the brand image and lead to lost sales at high prices charged in approved outlets.
- The approved retail outlets that sell Buzza products may also object as they
 may lose sales as some wealthy customers may delay purchasing until the
 products they want are sold at much lower prices on the Buzza website.
 These outlets may no longer wish to stock Buzza products, affecting Buzza
 sales, profits and reputation.

Option 2: Break down returned products to recover raw materials to re-use in future products. This process will be costly.

This option avoids the need to burn products and therefore will impress those
who see burning stock as a waste of resources and damaging to the
environment and will therefore answer social media critics.

- This option is better for *Buzza*'s brand reputation amongst the wealthy consumers as they will not face the prospects of having their exclusive products also being worn by those on less in reputation as perfectly good products will not be broken up.
- However, this option is a costly method. Not all materials that are recovered may be suitable for use in new season products and so there may still be considerable waste.

No details are provided as to the actual costs of incineration or of breaking down products to re-use in future season products. Candidates in the 7+ mark range would be expected to refer to this and the need for more information before coming to a final decision.

Maximum	Option 1	Option 2	Judgments/conclusion
3	One option unbalanc	ed	N/A
4	One option balanced and one argument agains an unbalanced fashio	st) or both options in	N/A
5	One balanced and or	ne unbalanced	N/A
6	Both balanced		No judgments/conclusions
7–8	Balanced Largely effective use language and the stir		Judgments/conclusions based upon analysis and explanation in the body of the response
9–10	Balanced Rich use of business language, business theory, and the stimulus		Judgments/conclusions based upon analysis and explanation in the body of the response

Marks should be allocated according to the markbands on page 3.

4. (a) Define the term *niche market*.

[2]

A niche market is a small market segment. The products are usually specialised, aimed at satisfying specific market needs for a well-defined segment of the population.

Candidates are not expected to word their responses exactly as above. If a candidate uses the word smaller rather than small, accept.

Award [1] for some understanding.

Award [2] for a clear definition.

(b) Explain **two** benefits to *RV* of the decision to adopt e-commerce.

[4]

Benefits must be to *RV* not just to customers – a benefit to a customer can only be rewarded if the answers goes on to explain how this benefit also helps the business

For example, stating that a website allows the customer to view the business products 24x7 (or to place orders from the comfort of their own home) is on its own not rewardable. The candidate would need to go on to state that this situation may lead to increased orders for *RV* bicycles for the response to be rewardable.

Benefits may include:

- Lowering costs *RV* can reduce the need for employing staff to handle orders or take phone calls.
- Providing abundant information There are limitations to the amount of
 information that can be displayed in a physical store. It is difficult to equip
 employees to respond to customers who require information across product
 lines. E-commerce websites can make additional information easily available
 to customers. Most of this information is provided by vendors and does not
 cost anything to create or maintain. Will also help overcome problems that RV
 faced eg RV received an increasing number of customer complaints that
 phone lines were often engaged and calls not returned.
- Being open 24x7, which may increase orders as customers can order anytime.
- Making the business more visible currently 98 % of customers are within 5 miles of RV's business.

Accept any other relevant benefit.

Award [1] for stating a benefit to RV from adopting e-commerce and an additional [1] for its explanation with reference to RV. Award a maximum of [2] per benefit.

Mark as 2 + 2. Maximum award: [4].

(c) (i) Calculate the payback period if *RV* chooses **Option 2** (*show all your working*).

[2]

The payback is:

\$600 000

= 5 years and 10 months *OR* 5.833 years

OR

 $\frac{$3.5}{$0.6}$

= 5 years and 10 months OR 5.833 years

Award [1] for correct formula (with or without figures)

OR

Award [1] for correct figures but incorrect final answer

$$(eg \frac{\$3.5}{\$0.6} = 5.5 \text{ years}).$$

Award [2] for correct answer with working.

(ii) Explain **one** disadvantage to *RV* of using the payback period method of investment appraisal.

[2]

One disadvantage is that the payback method fails to take into account the time value of money and adjust the cash inflows accordingly. [1] Though the forecasted net returns each year are \$600 000, the inflation in the country is forecast to remain in the 2–3 % range for the next three years. Therefore, the real value of the annual \$600 000 will be less in years 1 to 3, thus overstating the return on the investment.

Also, the payback analysis fails to consider inflows of cash that occur beyond the payback period [1] – in this case we are not told the life of the investment so we cannot see how much the net returns will be for the life of the investment [1].

Award [1] for a disadvantage of the payback method and [1] for its application to RV.

(d) Recommend whether *RV*'s directors should choose **Option 1** or **Option 2**.

[10]

Option 1 advantages:

RV will have lower production costs as production costs are lower in China. This option will help the business deal with the low-priced imports.

It will allow *RV* to concentrate on design and marketing, which may enable it to improve its designs and marketing and, thus, increase sales.

Option 1 disadvantages:

The Chinese factory uses batch production, which will affect RVs ability to produce bicycles that fit their customer's demands. Currently, RV can meet customer demands because the business uses job production.

RV will no longer have control over production and quality standards may deteriorate.

Transport issues from China will mean that RV will not be able to deliver bicycles to customers within 7 days of receipt of their orders. RV's advertising slogan will need to change as the business will no longer hand make orders in the USA.

Option 2 advantages:

RV will have lower production costs because it will no longer need expensive, skilled labour. Lower costs will help the business deal with the low-priced imports.

Production will remain in the USA and it can retain job production.

RV will likely not have delivery time issues.

Option 2 disadvantages:

Will need to make existing skilled employees redundant which will incur redundancy costs.

Require an investment of \$3.5m at a time when the business is making losses (since 2017) – this may require external finance which will, incur interest charges, raising unit costs.

The payback period is also more than 5 years which is relatively long.

Will their customer base trust the new production technique which uses glue rather than welding?

Candidates may assume that using glue rather than welding means lower quality. Accept that assumption.

Accept any other relevant evaluation.

Marks should be allocated according to the markbands on page 3.

The table below should be followed (along with the markbands on page 3). These mark awards in the table below should be viewed as maximums. That is, just because a candidate has one argument for **Option 1** and one argument against does not mean that they will automatically get a 4. One strong argument for one side and merely a weak or nominal argument for the other side might result in a 3.

Maximum mark award	Option 1	Option 2	Judgement/Conclusion
3	One option unbalanced		N/A
4	One option balance for and one argume both options in an fashion	ent against) or	N/A
5	One balanced and	l one unbalanced	N/A
6	Both balanced		No judgments/conclusions
7–8 Balanced Largely effective use of business language and the stimulus		Judgments/conclusions based upon analysis and explanation in the body	
Balanced 9–10 Rich use of business language, business theory, and the stimulus		Judgments/conclusions based upon analysis and explanation in the body	

Marks should be allocated according to the markbands on page 3.

5. (a) Define the term *product orientation*.

[2]

A company following a production orientation chooses to ignore their customers' needs and to focus only on efficiently building a quality product. They do not undertake market research identifying customer reactions to their proposed product before commencing production. This type of company believes that if they can make the best product their customers will come.

Candidates are not expected to word their responses exactly as above.

If the candidate says something to the effect of "The company focuses on the product," award [1]. A second mark can be awarded if the candidate then offers a contradistinction such as "ignores the market," "does not do market research," "does not appeal to the market," etc.

Award [1] for identification of one characteristic of a product-orientated business. Award [2] for a full, clear description.

(b) With reference to **Option 1**, for *KT*, explain the relationship between the product life cycle, investment, profit and cash flow.

[4]

Initial research and development costs plus the costs involved in launching a product usually means a product will be a loss maker in its early years. Cash flows may be negative. As sales grow and the product moves into the growth phase, profits are likely to be positive but the company will require additional working capital Not until the product reaches the maturity phases of the life cycle are cash flows and profits likely to be positive. In the decline phase, cash flows and profits are likely to remain positive. The cash flows especially should be solid with the contraction of necessary working capital. For KT, the investment in R&D for the new battery will have had a negative effect on cash flow and profits. Once the product is launched, Option 1 forecasts see quite large sales and therefore large cash inflows. However, we do not know about the marketing costs, which will increase cash outflows. Sometime in year 2, further investment would be needed if sales targets in years 3 and 4 are to be fulfilled as projected sales exceed capacity. This investment would increase fixed costs and reduce profits.

If a candidate shows some understanding the relationship between the product life cycle, investment, profit and cash flow, but with no application to the stimulus, award [1].

If the candidate shows clear understanding of the relationship between the product life cycle, investment, profit and cash flow, but with no application to the stimulus, award [2].

If the candidate shows some understanding of the relationship between the product life cycle, investment, profit and cash flow and has some application to the stimulus, award [2].

If the candidate shows clear understanding of the relationship between the product life cycle, investment, profit and cash flow and has some application to the stimulus, award [3].

If the candidate shows clear understanding of the relationship between the product life cycle, investment, profit and cash flow and has detailed application to the stimulus, award [4].

If a candidate writes or draws some sort of table (such as exist in several of the textbooks IB students use) listing the stages of the product life cycle and showing the relationship between stages of the life cycle and their relationship to investment, cash flow and profit, accept and award [2] marks if well executed with no application to the stimulus and award [1] if poorly executed with no application to the stimulus.

If the candidate applies to the stimulus, either by making inserts into the table or with commentary before or after it, award an additional [1 to 2] according to the depth and quality of the application.

(c) With reference to KT, explain **two** problems that a new business may face.

[4]

Problems any new business may face include:

- Competition *KT* faces stiff competition in the market for batteries for consumer products from multinationals.
- Cash flow problems KT suffered from cash flow problems in its first year of trading.
- Human resources issues, particularly finding the right staff.
- Insufficient marketing.
- Market research *KT* is product orientated and therefore will not have undertaken market research before developing is products.
- · Poor planning.
- Insufficient start-up capital.

Accept any other relevant problems that a new business may face.

Mark as 2 + 2.

For [2], candidates must identify a problem, explain it, and apply it to the stimulus.

N.B. If the candidate addresses an issue at the end of the time period specified in the stimulus and notes a problem that KT may face then, do not accept (as the business will no longer be new).

(d) Recommend whether *KT s*hould choose **Option 1** or **Option 2**.

[10]

Option 1: Selling car batteries directly to car owners. They currently sell B2B rather than B2C.

Advantages:

- Higher initial revenues per unit KT will receive \$400 per unit by selling directly to consumers, compared to only \$250 per unit if sold to a car manufacturer.
- Sales are higher in option 1 for the first 2 years and at 410 000 over 5 years are 95 000 higher.
- Total revenues are higher at \$164 000 000 compared with \$78 750 000.

Disadvantages:

 KT has no experience of selling directly to consumers as it is currently a B2B business. It will need to decide HOW it will allow customers to order its

- products via its website or by phone both solutions will require additional spending.
- KT will need to undertake a marketing campaign to raise awareness of its new products. As a B2B business, KT has no experience of engaging consumers. Funds will need to be found to finance a marketing campaign to raise awareness of its product and to persuade consumers to buy the product.
- The data in Table 1 is only a forecast and therefore may exaggerate its potential. *KT* may sell much less than forecast which affects its profitability.
- Further investment would be needed to meet demand as full capacity is exceeded in years 3 and 4. The cost of this investment is unknown. *KT* has insufficient funds to invest in new capacity.

Option 2: Form a five-year strategic alliance with a manufacturer of electric cars.

Advantages:

- Sales are guaranteed as the partner in the strategic alliance has agreed to buy a set number for 5 years. This alliance provides the business with certainty.
- *KT* avoids capacity issues as maximum annual sales are 85 000 units (batteries), which is below *KT*'s capacity of 90 000 units.
- No additional marketing costs.

Disadvantages:

- Sales are lower than option 1 for years 1,2,3,4 and 5.
- Unit revenues are lower at \$250 rather than \$400 per unit.
- Total sales and sales revenue are lower at 315 000 units with a total revenue of \$78 750 000.

Balance in the context of this question means having at least one advantage and one disadvantage for each option (and, thus, addressing both options).

Accept any other relevant evaluation.

These mark awards in the table below should be viewed as maximums.

Maximum mark award	Option 1	Option 2	Judgement/Conclusion
3	One option unbalanced		N/A
4	One option balance for and one argume both options in an fashion	ent against) or	N/A
5	One balanced and	one unbalanced	N/A
6	Both balanced		No judgments/conclusions
7–8 Balanced Largely effective use of business language and the stimulus		Judgments/conclusions based upon analysis and explanation in the body	
9–10	Balanced Rich use of busine business theory, a		Judgments/conclusions based upon analysis and explanation in the body

Marks should be allocated according to the markbands on page 3.