

Markscheme

May 2019

Business management

Higher level

Paper 1

18 pages

No part of this product may be reproduced in any form or by any electronic or mechanical means, including information storage and retrieval systems, without written permission from the IB.

Additionally, the license tied with this product prohibits commercial use of any selected files or extracts from this product. Use by third parties, including but not limited to publishers, private teachers, tutoring or study services, preparatory schools, vendors operating curriculum mapping services or teacher resource digital platforms and app developers, is not permitted and is subject to the IB's prior written consent via a license. More information on how to request a license can be obtained from <http://www.ibo.org/contact-the-ib/media-inquiries/for-publishers/guidance-for-third-party-publishers-and-providers/how-to-apply-for-a-license>.

Aucune partie de ce produit ne peut être reproduite sous quelque forme ni par quelque moyen que ce soit, électronique ou mécanique, y compris des systèmes de stockage et de récupération d'informations, sans l'autorisation écrite de l'IB.

De plus, la licence associée à ce produit interdit toute utilisation commerciale de tout fichier ou extrait sélectionné dans ce produit. L'utilisation par des tiers, y compris, sans toutefois s'y limiter, des éditeurs, des professeurs particuliers, des services de tutorat ou d'aide aux études, des établissements de préparation à l'enseignement supérieur, des fournisseurs de services de planification des programmes d'études, des gestionnaires de plateformes pédagogiques en ligne, et des développeurs d'applications, n'est pas autorisée et est soumise au consentement écrit préalable de l'IB par l'intermédiaire d'une licence. Pour plus d'informations sur la procédure à suivre pour demander une licence, rendez-vous à l'adresse <http://www.ibo.org/fr/contact-the-ib/media-inquiries/for-publishers/guidance-for-third-party-publishers-and-providers/how-to-apply-for-a-license>.

No se podrá reproducir ninguna parte de este producto de ninguna forma ni por ningún medio electrónico o mecánico, incluidos los sistemas de almacenamiento y recuperación de información, sin que medie la autorización escrita del IB.

Además, la licencia vinculada a este producto prohíbe el uso con fines comerciales de todo archivo o fragmento seleccionado de este producto. El uso por parte de terceros —lo que incluye, a título enunciativo, editoriales, profesores particulares, servicios de apoyo académico o ayuda para el estudio, colegios preparatorios, desarrolladores de aplicaciones y entidades que presten servicios de planificación curricular u ofrezcan recursos para docentes mediante plataformas digitales— no está permitido y estará sujeto al otorgamiento previo de una licencia escrita por parte del IB. En este enlace encontrará más información sobre cómo solicitar una licencia: <http://www.ibo.org/es/contact-the-ib/media-inquiries/for-publishers/guidance-for-third-party-publishers-and-providers/how-to-apply-for-a-license>.

The markbands and assessment criteria on pages 5–8 should be used where indicated in the markscheme.

Section A			Level descriptor
Q1 (b)	Q2 (b)	Q3 (b)	
Marks			
0			
1–2			<ul style="list-style-type: none"> • Little knowledge and understanding of relevant issues and business management tools (where applicable), techniques and theories. • Little use of business management terminology. • Little reference to the stimulus material.
3–4			<ul style="list-style-type: none"> • A description or partial analysis of some relevant issues with some use of business management tools (where applicable), techniques and theories. • Some use of appropriate terminology. • Some reference to the stimulus material that goes beyond the name of a person(s) and/or the name of the organization. • At the lower end of the markband, responses are mainly theoretical.
5–6			<ul style="list-style-type: none"> • An analysis of the relevant issues with good use of business management tools (where applicable), techniques and theories. • Use of appropriate terminology throughout the response. • Effective use of the stimulus material.

Section B Q4 (d)	Level descriptor
Marks	
0	The work does not reach a standard described by the descriptors below.
1–2	<ul style="list-style-type: none"> • Little understanding of the demands of the question. • Few business management tools (where applicable), techniques and theory are explained or applied and business management terminology is lacking. • Little reference to the stimulus material.
3–4	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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 C, question 5**Criterion A: Knowledge and understanding of tools, techniques and theories**

This criterion addresses the extent to which the candidate demonstrates knowledge and understanding of relevant business management tools, techniques and theories, as stated and/or implied by the question. This includes using appropriate business management terminology.

Marks	Level descriptor
0	The work does not reach a standard described by the descriptors below.
1	Superficial knowledge of relevant tools, techniques and theory is demonstrated.
2	Satisfactory knowledge and understanding of relevant tools, techniques and theories is demonstrated.
3	Good knowledge and understanding of relevant tools, techniques and theories is generally demonstrated, though the explanation may lack some depth or breadth.
4	Good knowledge and understanding of relevant tools, techniques and theories is demonstrated.

Criterion B: Application

This criterion addresses the extent to which the candidate is able to apply the relevant business management tools, techniques and theories to the case study organization.

Marks	Level descriptor
0	The work does not reach a standard described by the descriptors below.
1	The relevant business management tools, techniques and theories are connected to the case study organization, but this connection is inappropriate or superficial.
2	The relevant business management tools, techniques and theories are appropriately connected to the case study organization, but this connection is not developed.
3	The relevant business management tools, techniques and theories are generally well applied to explain the situation and issues of the case study organization, though the explanation may lack some depth or breadth. Examples are provided.
4	The relevant business management tools, techniques and theories are well applied to explain the situation and issues of the case study organization. Examples are appropriate and illustrative.

Criterion C: Reasoned arguments

This criterion assesses the extent to which the candidate makes reasoned arguments. This includes making relevant and balanced arguments by, for example, exploring different practices, weighing up their strengths and weaknesses, comparing and contrasting them or considering their implications, depending on the requirements of the question. It also includes justifying the arguments by presenting evidence for the claims made.

Marks	Level descriptor
0	The work does not reach a standard described by the descriptors below.
1	Statements are made but these are superficial.
2	Relevant arguments are made but these are mostly unjustified.
3	Relevant arguments are made and these are mostly justified.
4	Relevant, balanced arguments are made and these are well justified.

Criterion D: Structure

This criterion assesses the extent to which the candidate organizes his or her ideas with clarity, and presents a structured piece of writing comprised of:

- an introduction
- a body
- a conclusion
- fit-for-purpose paragraphs.

Marks	Level descriptor
0	The work does not reach a standard described by the descriptors below.
1	Two or fewer of the structural elements are present, and few ideas are clearly organized.
2	Three of the structural elements are present, or most ideas are clearly organized.
3	Three or four of the structural elements are present, and most ideas are clearly organized.
4	All of the structural elements are present, and ideas are clearly organized.

Criterion E: Individual and societies

This criterion assesses the extent to which the candidate is able to give balanced consideration to the perspectives of a range of relevant stakeholders, including individuals and groups internal and external to the organization.

Marks	Level descriptor
0	The work does not reach a standard described by the descriptors below.
1	One individual or group perspective is considered superficially or inappropriately.
2	One relevant individual or group perspective is considered appropriately, or two relevant individual or group perspectives are considered superficially or inappropriately.
3	At least two relevant individual or group perspectives are considered appropriately.
4	Balanced consideration is given to relevant individual and group perspectives.

Section A

1. (a) With reference to *RDM*, describe how changes in operations management altered its relationship with **two** other business functions. [4]

The shift in operations management from a traditional industrial manufacturing process to an automated process altered its relationship with the following business functions:

- Human resources: *RDM* changed its recruitment from semi-skilled young people who had just completed their education at a local technical secondary school to university graduates with degrees in engineering or computer science. This shift almost certainly necessitated a shift in approaches to leadership and motivation.
- Marketing: In the process of becoming an automated manufacturing process, *RDM* fundamentally changed its marketing mix. Though the decision to shift from kerosene stoves was market driven (declining demand), the automated process allows *RDM* to customize products and make, as in the case of the aluminum water bottles, wholly new products.
- Accounting and Finance: Prior to automation, *RDM* made uniform products on a large scale. Pricing decisions would have been relatively rare – setting a fixed price for a product. Now that the business is making customized products, pricing decisions have to be made with virtually every order, which involves people from the accounting department. Whereas *RDM* had capital expenditures prior to full automation, it also had substantial revenue expenditures in the form of payroll. With automation, the mix of capital versus revenue expenditures shifted in the direction of more capital expenditures. This shift requires significantly different approaches to finance.

Candidates should name the functions, but they can be implicit.

N.B. *R&D is not a business function.*

Accept any other relevant changes.

Mark as a 2 + 2.

Award [1] for an appropriate business function identified and an additional [1] for some description of changes in context. Award a maximum of [2] for each function described.

- (b) Explain how *RDM*'s transformation of its manufacturing process from traditional mass production to highly automated production affected the interests of internal stakeholders. [6]

- Employees – jobs will change, different skills, highly trained engineers and computer scientists.
- Managers – tasks will change, management role different.
- Shareholders – may have sacrificed dividends for investments but reaped benefits later.

Accept any other relevant internal stakeholders.

Marks should be allocated according to the markbands on page 5.

Award a maximum of [3] for a theoretical answer, or for only considering one internal stakeholder.

Award a maximum of [5] if the answer is mainly descriptive but in context.

Award a maximum of [6].

2. (a) With reference to *RDM*, outline **one** advantage **and one** disadvantage of Jan’s leadership style (lines 88–89).

[4]

Jan’s leadership style is democratic with hints of *laissez faire*. A simple assertion that it is democratic or is *laissez faire* is insufficient for context.

Advantages:

- Employees feel that they have more freedom and more say in the operation of the business.
- Greater sense of autonomy and purpose, which fosters creativity, innovation and teamwork.
- It extends responsibility for decision making to a broader group, increasing the likelihood of employees exercising authority more responsibly. When engineers contact customers to help them with their design, for example, they know that they are representing the business to the outside world and must bear that responsibility.
- Most employees like this leadership style.

Disadvantages:

- It is less orderly than the style of Jan’s father. According to the case, despite an atmosphere of “teamwork, diversity, humour and fun,” sometimes *RDM* now seems a bit chaotic.
- Decision making can take longer. When Kristián ran the business, he made all the decisions, and he could make them as quickly (or take as long) as he wished.
- Some employees want the type of clearer guidance often found in autocratic management.

Accept any other relevant advantage or disadvantage.

Mark as a 2 + 2.

Award [1] for an appropriate advantage and [1] for a disadvantage identified and an additional [1] for application to the points identified. Maximum award: [4].

N.B. *The case study states the leadership style is democratic, but there are hints of *laissez faire*. Mention of either “democratic” or “*laissez faire*” on their own is not enough for an application mark, there needs to be use of the actual context to gain application marks.*

- (b) Explain how innovation at *RDM* may have influenced their marketing practices. [6]

Innovation: introduce something or some process that is new.

Prior to changing to healthcare products, *RDM*'s marketing practices would have been based on:

For SL and HL:

- Product: a consumer-durable product, a product at the end of its life cycle, a standardized product
- Place: presumably distributed/sold through retailers? A country/market emerging from communist rule
- Promotion: little evidence of a formal marketing mix
- Price: fierce competition, low prices.

Additional for HL:

- Process: unclear
- Physical evidence: relevant?
- People: a "conservative" family business

There was little evidence of a marketing strategy so these items are not coordinated.

Post innovation marketing practices based on:

For SL and HL:

- Place: completely different market – the healthcare sector, likely to be sold directly, not through retail
- Product: range of products, customized products, different production processes
- Promotion: now CSR business, implications for marketing. Possibility of marketing using IT
- Price: lower costs, lower prices. Now likely to be individually negotiated. Needs prices for a wider range

Additional for HL:

- People: personal contact with customer
- Process: different way of meeting customer needs, direct contact with customers
- Physical evidence: relevant?

Other issues include change in target market, change in nature of market (growing), creating USP. After innovation, these practices will need to be included in a coordinated marketing mix.

Accept any other relevant explanation.

Marks should be allocated according to the markbands on page 5.

Award a maximum of [3] for a theoretical answer or for limiting answer to only considering one market practice.

Award a maximum of [5] if the answer is mainly descriptive but in context.

Award a maximum of [6].

3. (a) Describe **two** changes in the external environment that have affected *RDM*. **[4]**

A number of changes in the external environment are referred to in the stimulus.

Social:

- Changes in how people heat their homes (declining use of kerosene stoves).
- The aging population of Europe increasing demand for medical care.

Technological:

- The Czech Republic's improvement in the country's IT infrastructure
- Changing use of technology by customers eg smartphones (could also be classed as a social factor).

Economic:

- The change in economic system from communist/command to market.
- The integration of the Czech Republic into the broader economy of central and Western Europe.

Ecological:

- Increased use of renewable sources of energy.

Political:

- The change in Czechoslovakia from communist to democratic.

Legal:

- Compliance with EU regulations.

Ethical:

- Growth in CSR since the 1980s.

N.B. No need for candidates to actually mention *STEEPLE* features by name. There may be some other external factors that are relevant eg competition, changes in demand which can also be included.

Mark as 2 + 2.

Accept any other relevant change in the external environment.

Award [1] for each change in external environment identified, up to [2], and award [1] additional per external factor identified for appropriate description and application to the stimulus.

Maximum award: [4].

- (b) Explain how the methods used to motivate employees could have changed when *RDM* transformed from traditional mass production to highly automated production. [6]

Historically:

- *RDM* was a traditional manufacturing firm.
- It was hierarchical, its leadership was autocratic.
- The business had many workers, who were expected to perform relatively simple functions repeatedly.
- In such an environment, motivation typically relies upon paying workers more for high productivity. Workers can in turn accelerate their work if they want to earn more.
- Its motivational approach was, in all likelihood, Taylorist.

After change (to highly automated):

- *RDM* had to hire different types of “workers”: highly trained engineers and computer scientists.
- Employees of this type are typically less motivated by money and more by what Daniel Pink refers to as autonomy, mastery and purpose.
- Employees want the freedom to do jobs without being micro-managed; they want to develop themselves professionally so that they become experts in their field, and they want to know that they are doing more than just making money, that they are connected to some larger purpose.

In the case of *RDM*:

- The changes in leadership style have given employees more autonomy to work with customers to help them.
- The core competency of *RDM* is cutting edge automation and innovation suggests that the engineers and computer scientists themselves must be masters in their area of expertise to stay on the leading edge.
- Candidates are not bound to mentioning either Taylor, Pink or other theorists. They may refer to other appropriate theorists. In their selection, however, they must convey some understanding that most employees now will not be satisfied with traditional money-based incentives alone.

Accept any other relevant explanation.

Marks should be allocated according to the markbands on page 5.

Award a maximum of [3] for a theoretical answer or for limiting answer to only the traditional situation or to only the highly automated situation.

Award a maximum of [5] if the answer is mainly descriptive but in context.

Award a maximum of [6].

Section B

4. (a) Describe **one** industrial/employee relations method used by employers. **[2]**

Types of industrial/employee method used by **employers** in industrial/employee relations include:

- Collective bargaining/ negotiations: management negotiate with worker representatives /trades unions.
- Threats of redundancies: Such threats can break the will of workers and their representatives, as they consider the effects of permanent loss of position.
- Changes of contract: flexible working, productivity agreements.
- Closure and lockouts: The owners shut down the place of employment so that the workers cannot enter to perform their job. This method is rather extreme.
- Recognising /encouraging unions can help both employees and employers
- Arbitration

Do not allow methods used by employees e.g. creating a union as this is done by employees not employers, strike action. Nor methods used by employers that do not involve direct engagement of workers such as delegation, leadership style, team building etc.

Award [1] for identification of a method and [1] for a description. Candidates do not have to word exactly as above. No application is required but might be helpful. Maximum award: [2].

- (b) (i) Using the information above, calculate the current capacity utilization rate at *RDM's* factory. **[1]**

Capacity utilization rate is $\frac{20000}{21000} \times 100 = 95\%$ (95.2% but allow rounding)

Award [1] for correct answer.

- (ii) Calculate the increase in capacity at *RDM* if the company builds a new production facility (*show all your working*). **[3]**

Capacity utilization is now 50% so $50\% = \frac{20000}{\text{new capacity}} \times 100$

so new capacity = $20000 \times \frac{100}{50} = 40000$ units .

Increase in capacity is 19 000 units

Award [3] for correct answer with working. 'Units' not necessary. Working wrong only award [2].

Award [2] for correct answer without workings or wrong working or good attempt (e.g 40,000, or 40,000 units)

Award [1] for an attempt with workings. 95.2% - 50% =45.2% (allowing for rounding) can be awarded [1]

Do not reward formula only.

- (c) Explain **two** possible reasons for *RDM* employees' resistance to change if *RDM* enters the US market. [4]

Reasons for resistance to change could include:

- new ways of working
- Having to work with new staff in the US
(these first two points are simply lifted from the additional material so would have to be developed for the second mark(s))
- Some employees may have to move to US (disruption, culture clashes etc).
- There could be disruption. (no supporting context)
- There would be newly recruited employees in US, maybe on higher salaries which might cause resentment.
- Newly recruited employees may not fit into the culture which may be difficult for existing employees
- Low level of unionization in US which European employees may not like
- Financial reasons – costs of moving etc

Accept any other relevant reason.

Mark as a 2 + 2.

Award [1] for an appropriate reason [1] for application/context. Award a maximum of [2] for each reason. Maximum award overall: [4].

- (d) Using information from the case study and the additional information above, discuss the opportunities and threats for *RDM* of entering the US market. [10]

Opportunities:

- Massive market.
- US spending on healthcare much higher.
- Strong demand.
- High incomes in US.

Threats:

- Advertising spend in the US is very high
- Availability of suitable people to recruit
- Competition very high in US
- Domination of market by big US companies
- US industrial/employee relations and cultures may cause disruption.

OPPORTUNITIES AND THREATS SHOULD BE EXTERNAL TO RDM

If candidate considers all four elements of SWOT only reward for that part of the answer relevant to opportunities and threats.

Accept any other relevant opportunity or threat.

Marks should be allocated according to the markbands on page 6.

For an answer with no effective use of context (Theoretical answer) award maximum [3].

For an answer that only looks at strengths and weaknesses (internal factors) award a maximum [3]

Award [4] if opportunities and threats are presented as an undeveloped list.

*For an answer that only looks at opportunities or only looks at threats, award up to a maximum of **[5]**. At top end context has to be good.*

Both opportunities and threats considered but descriptively max {6}

*Both opportunities and threats considered, good use of evidence, particularly from section B, but no effective conclusion/evaluation award a maximum of **[8]**.*

*For **[10]** marks a fully supported conclusion/evaluation with good use of evidence, particularly from Section B.*

Section C

5. Using the case study and the additional information on pages 4 and 5, recommend whether *RDM* should choose **Option 1** or **Option 2**.

[20]

Option 1: Market development

Arguments for:

- Good use of capacity.
- Looks good on decision tree. EV US=\$11m; EV UK=\$10m
- US high cost(\$5m), UK lower cost (\$3m), both more than Option 2
- UK market similar to those in other European countries.
- UK market close
- UK market would not need major changes to distribution channels
- Lower risk in Ansoff
- Birth rates high in US, UK so possible aging population

The following points are on page 3 of the question paper so are not necessary for an answer but can be rewarded:

- US is a massive market with wealthy customers.
- Spending on health in US is higher, incomes in US are high.
- Likely long-term decline in Europe.
- Lower union power in US.

Arguments against:

- Fluctuating exchange rates make planning especially pricing difficult
- US likely to discourage imports and prefers direct investment
- No experience of either market.
- Difficult to enter the UK market
- Possible decline in healthcare markets especially US, UK
- There are already established suppliers in the UK market
- Reduced healthcare spending in Europe

The following points are on page 3 so are not necessary for an answer but can be rewarded:

- US is highly competitive, dominated by multinationals.
- Recruiting could be expensive.
- Different rules and regulations in US may mean changes to product designs.

Option 2: Diversification

Arguments for:

- Existing product may go into decline phase of product life cycle.
- Rapidly growing and new market. (Table 2)
- RDM has wide experience.
- Possible reduction in Europe health care markets because of reductions in government spending.
- Importance of service industries, healthcare opportunities likely to decline especially in Europe
- Lowest cost (\$2m) Highest chance of success (0.8)
- Decision tree gives best EV (\$12m)

Arguments against:

- No experience.
- Higher risk in Ansoff.
- Recruitment may be difficult (high skills, experience needed)

Allow discussion of any reasonable related issue. Discussion of Brexit in the UK may help a candidate reach a conclusion but is not to be rewarded as the issue is external to the case.

Use the criteria on page 7.

Criterion A: *Knowledge and understanding of tools, techniques and theories*

Decision tree and data from case, the 7Ps, diversification, interpretation of data, stakeholder differences, pace of change, Ansoff, Risk. Force Field and SWOT, but both often misunderstood in which case not rewarded. Be careful, mention of market development/diversification does not necessarily show knowledge of Ansoff – the candidate could be quoting from the case.

For [4] Good understanding of a range appropriate tools/techniques/theories

For [2] Satisfactory understanding of a limited number of tools/techniques/theories

Criterion B: *Application judged by use of stimulus, in particular the extra material.*

Remember, understanding has been rewarded in Criterion A. So B is about USE

For [4]: relevant tools, techniques and theories are applied well to the case study context and additional stimulus material, the application is convincing and relevant.

For [2]: some limited context/application but not developed. Use of tools limits candidate's ability to make reasoned arguments.

Criterion C *Reasoned arguments*

Options discussed in balanced way, conclusions drawn and recommendation made/supported.

For [4]: There needs to be a clear recommendation supported by the data and analysis.

For [2]: Some limited arguments but not justified. Or limited analysis (e.g. one-sided argument) but candidate arrives/draws a reasoned conclusion.

Criterion D: *Structure: This criterion assesses the extent to which the student organizes his or her ideas with clarity, and presents a structured piece of writing comprised of:*

- *an introduction, which could be scene setting, or an executive summary (e.g. presenting/stating the recommendation)*
- *a concluding paragraph. Please note this can be different from the concept of a conclusion/recommendation shown in Criterion C. Criterion D can be rewarded without a recommendation. Also please note that if there is an executive summary at the beginning (e.g. presenting/stating the recommendation) then the concluding paragraph should be more than simply a repeat of the executive summary (i.e. more than simply re-presenting/restating the recommendation)*
- *fit-for-purpose paragraphs. This means: not too long, each focused on distinct issues,*
- *structure. This means whether there is a clear flow to guide the reader through the discussion, how the paragraphs are sequenced.*

For [4]: all four elements present, clearly organized.

For [2]: No logical structure but other elements present or logical structure with other elements.

Criterion E: *Individuals: Heinrik, Jan, Xi; Groups: Directors; shareholders; employees; customers; competitors. Likely issues include what the individuals want, the impact on employees, whether employees/managers have right skills, etc.*

*For [4] Individual(s) **and** group(s) are named and considered in a balanced way. I.e needs 1 or more of both individuals and groups developed*

For [2]: one individual or one group considered appropriately, or several individuals and/or groups considered superficially.

For [1] one individual and/or one group considered superficially
