Markscheme

November 2024

Business management

Higher level

Paper 2

The markbands 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 descriptor.
1–2	• Little understanding of the demands of the question. • Little use of business management tools and theories; any tools and theories that are used are irrelevant or used inaccurately. • Little or no reference to the stimulus material. • No arguments are made.
3–4	• Some understanding of the demands of the question. • Some use of business management tools and theories, but these are mostly lacking in accuracy and relevance. • Superficial use of information from the stimulus material, often not going beyond the name of the person(s) or name of the organization. • Any arguments made are mostly unsubstantiated.
5–6	• The response indicates an understanding of the demands of the question, but these demands are only partially addressed. • Some relevant and accurate use of business management tools and theories. • Some relevant use of information from the stimulus material that goes beyond the name of the person(s) or name of the organization but does not effectively support the argument. • Arguments are substantiated but are mostly one-sided.
7–8	• Mostly addresses the demands of the question. • Mostly relevant and accurate use of business management tools and theories. • Information from the stimulus material is generally used to support the argument, although there is some lack of clarity or relevance in some places. • Arguments are substantiated and have some balance.
9–10	• Clear focus on addressing the demands of the question. • Relevant and accurate use of business management tools and theories. • Relevant information from the stimulus material is integrated effectively to support the argument. • Arguments are substantiated and balanced, with an explanation of the limitations of the case study or stimulus material.

Section A

1. (a) State **two** features of a publicly held company. **[2]**

- the **shareholders** have **limited liability**;
- **shares** can be **bought** and sold on the **stock exchange**;
- a **board of directors** is **elected by** the **shareholders** to run the company;
- **financial documents must be published** and are **transparent**;
- is a **legal entity** that has **separate identity** from its shareholders/members (incorporated);
- in the private sector owned by private individuals.

Accept any other relevant feature of a publicly held company.

N.B. *no description required.*

Award [1] for each feature stated, up to a maximum of [2].

Do not reward features that are essentially the same e.g. limited liability is the same as separate legal entity or incorporated.

(b) Using information from **Table 1**, as at 31 December 2023:

(i) calculate *FCT*'s current ratio (*show all your working*); **[2]**

Current ratio = current assets / current liabilities

Current assets = cash + debtors + stock

$200 + $150 + $150 = $500
Current liabilities = bank overdraft + trade creditors

$100 + 100 = $200
500/200 = 2.5 The current ratio is 2.50

Award [1] for correct working and [1] for the correct answer, up to a maximum of [2].

Accept the current ratio is 2.5:1

Do not accept the addition of an incorrect unit such as $2.50

(ii) calculate *FCT*'s working capital (*show all your working*). **[2]**

Working capital = current assets - current liabilities. Therefore, working capital equals $500 – $200 = $300

Award [1] for correct working and [1] for the correct answer, up to a maximum of [2].

Allow candidate own figure rule (OFR).

(c)   Using the units of production method, calculate the expected depreciation expense of the new machine for year 1 (*show all your working*).   **[2]**

Depreciation per unit = purchase cost / expected number of units over lifetime

Depreciation per unit = $2 000 000 / 80 000 computers = $25 per computer

Depreciation expense = depreciation per unit × number of units produced (expected output)

Depreciation expense = $25 × 12 000 computers = **$300 000**

*Award **[1]** for the correct answer, and **[1]** for correct working up to a maximum of **[2]**.*

*Award **[1]** for correct calculation of the depreciation per unit with working.*

(d)   Explain the impact of purchasing the new machine on *FCT*'s statement of financial position (balance sheet).   **[2]**

- **Non-current assets** will **increase** significantly by $2 million;
- **non-current liabilities or share capital**, or a combination thereof will **increase** by the same amount.

Accept any other relevant impact. For example:
- **depreciation** will be **accounted** for in the **statement** of **profit or loss** as an expense **and** will subsequently **reduce retained earnings in** the **statement** of **financial position (balance sheet)**;
- the **depreciation** figure will be **added to** the **accumulated depreciation** figure, **reducing** the **non-current asset value**.

*Award **[1]** for identification of an effect (or demonstration of some understanding).*
The candidate has to correctly identify an impact on the statement of financial position (balance sheet).

*Award an additional **[1]** if there is a further explanation of how the statement of financial position can still balance.*

*Accept a single impact on just one account such as non-current asset will increase for **[1]**.*

2. (a) State **two** features of a sole trader. **[2]**

As a sole trader, an individual
- has **full control/decision making** leading to faster decision making;
- sole **ownership** of the **business**;
- it is **not a separate legal entity** and/or has unlimited liability (and /or unincorporated) (assumes full legal responsibility for all business debts);
- has **minimal admin** and filing **requirements**;
- enjoys a greater level of privacy.

Accept any other relevant feature.

N.B. *no description required. Award **[1]** for each relevant feature stated, up to a maximum of **[2]**.*

Do not reward features that are essentially the same eg. unlimited liability is the same as no separate legal identity or unincorporated.

(b) Using the information in **Table 2** and **Table 3**, complete the following cash-flow forecast, all figures in $, for Daniel's new garden design business for the first four months of operation in 2025. **[4]**

Cash-flow forecast for Daniel Moon new garden design business for the first four months of 2025

	January	February	March	April
Opening balance	**5000**	**400**	**1775**	**2375**
Cash inflows:				
Cash sales revenue	2000	2100	2000	2500
Total cash inflows	**2000**	**2100**	**2000**	**2500**
Cash outflows:				
Tools and equipment	4000			
Loan	200	200	200	200
Daniel's salary			800	800
Van purchase	2000			
Expenses	400	400	400	400
Advertising		125		125
Total cash outflows	**6600**	**725**	**1400**	**1525**
Net cash flow	**(4600)**	**1375**	**600**	**975**
Closing balance	**400**	**1775**	**2375**	**3350**

*Award **[1]** if the candidate shows some understanding of a cashflow and has some of the cashflow completed correctly.*

*Award **[2]** if the candidate completes the cashflow but has two errors.*

Award [3] if the candidate completes the cashflow but has one error.

Award [4] if the candidate completes the cashflow correctly.

N.B. *Allow candidate own figure rule (OFR): if a candidate makes an error and then carries it through, that is only one error. Opening balance is 5000 do not accept if included in January cash inflow.*

One or more labels missing for inflows/outflows is one error.

(c) Using **Figure 1**:

  (i) determine the critical path and write the activities of the critical path in the boxes below; **[1]**

Design the garden and order materials (5 days)	→	Prepare the garden grounds (8 days)	→	Complete work on garden (10 days)
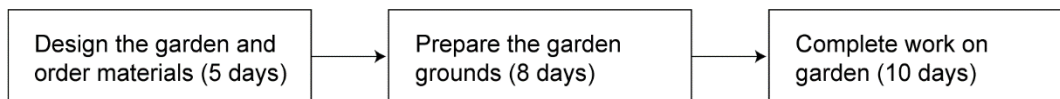
Award [1] for determining the critical path by writing the activities in the boxes correctly.

  (ii) calculate the minimum amount of time required for Daniel to finish a garden design project (*no working required*). **[1]**

  Minimum amount of time = 5 days + 8 days + 10 days = **23 days**

  Award [1] for the correct answer no working required. Do not penalize if "days" missing.

  N.B. *do not apply OFR if incorrect days used in (c)(i) since number of days is NOT actually required in (c)(i).*

(d)   Explain **one** advantage for Daniel of using critical path analysis for a garden design project. **[2]**

Award [1] for any of the following:

- CPA will **allow** Daniel to **budget time, allocate resources**, and **prioritize** for the **3 tasks** that are **part of** the **project** *[1]*.
- clear **identification** of **critical tasks** (prepare the garden grounds) *[1]*
- accurate **determination** of **project length** (5 days + 8 days + 10 days = **23 days**) *[1]*
- **precise scheduling** (5 days designing the garden; 8 days preparing the garden grounds; 10 days working on the garden) *[1]*
- only by **finding ways** to **shorten jobs** along the critical path (for **example, 8 days of the ground preparations**) can the overall project **time be reduced** *[1]*.

Accept any other relevant advantage and explanation.

Award [1] for each advantage stated and an additional [1] for application to the stimulus and explanation.

N.B. *do not allow the use of "garden design project" as an example of application as this simply repeats the wording in the question.*

3. (a) State **one** advantage **and one** disadvantage of operating as a privately held company. **[2]**

Advantages of operating as a privately held company include:
- typically, **better access** to **finance**, **at least compared to a sole trader;**
- **legal continuity**;
- though laws vary from country to country, in general privately held companies **are allowed to keep most or all of their financial information confidential**
- **incorporated, therefore a separate legal entity whose owners have limited liability;**

Disadvantages of operating as a privately held company include:
- typically, **lesser access to finance**, **at least compared to a publicly held company;**
- **restricted number of shareholders, at least compared to a publicly company;**
- **higher costs/legal requirements than unincorporated entities**

Accept any other relevant advantage/disadvantage.

N.B. no description required.

Award [1] for stating an advantage of operating as a privately held company.

Award [1] for stating a disadvantage of operating as a privately held company.

Award a maximum of [2].

N.B. do not accept "owned by shareholders" as it is a feature and not an advantage or disadvantage.

(b) Using **Table 4**, calculate the expected outcome, **X**, for **Option 2** (*show all your working*). **[2]**

$0.3 \times \$4\,000\,000 = \$1\,200\,000$
$0.4 \times \$3\,375\,000 = \$1\,350\,000$
$0.3 \times (\$1\,000\,000) = \$\,(300\,000)$

Expected outcome for option 2: $\$1\,200\,000 + \$1\,350\,000 - \$300\,000 = $ **$2 250 000.**

Award [1] for the correct working and [1] for the correct answer.

N.B. do not penalize for missing $ or millions as these are already given in the table.

(c)   Assuming that *ME*'s **annual** profits are the same each year:

    (i)   calculate the average rate of return (ARR) for **Option 1** (*show all your working*);   **[2]**

ARR = (total returns – capital costs) / years of use) × 100
                                  capital costs

ARR = [($1 650 000 – $1 000 000)/3] × 100 =
                    $1 000 000

ARR = ($650 000/3) × 100 =
          $1 000 000

ARR = $216 666.67/$1 000 000 × 100 =

ARR = 0.20 × 100 = **21.67%**

The average rate of return for Option 1 is 21.67 % / 21.7%.

Award [1] for following the correct method and [1] for producing the correct answer, which must be expressed as a percentage.

*If a candidate gives the answer as 0.2167 or as 0.2167%, their answer is incorrect, and they could only receive a maximum of [1] if they provide the correct working. A correct answer must include the **percentage sign %.***

Allow for rounding, provided the candidate rounds in a mathematically correct fashion.

Do not allow OFR as the numbers used are not derived from candidates' answers.

(ii)   calculate the net present value (NPV) for **Option 2** (*show all your working*).   **[2]**

Method 1:
Expected outcome per year = total Expected outcome / years usage
$2 250 000/3 = $750 000 per year

The net present value equals the present value of the three years' $750 000 annual return minus capital cost of $2 000 000.

PV of the present value of the three years' $750 000 annual profit =

Expected outcome per year × [1 − 1 / (1 + discount rate) $^{\text{years usage}}$] / discount rate

$750 000 × [1 − 1 / (1 + .04)^3] / .04 = $2 081 318.27 (allow rounding $2 081 318)
$2 081 318 − $2 000 000 = **$ 81 318.**

Method 2:
NPV= <u>Exp outcome year 1</u> + <u>Exp outcome year 2</u> + <u>Exp outcome year 3</u> − capital cost
         (1 + discount rate)   (1 + discount rate)^2 (1 + discount rate)^3

NPV = $750 000/1.04 + $750 000/1.04^2 + $750 000/1.04^3 − $2 000 000 =
        $721 153.85 + $693 417.16 + $666 747.30 − $2 000 000 = **$ 81 318.31**

Method 3:
(Expected outcome year 1 × Discount factor at 4% year 1 + Expected outcome year 2 × Discount factor at 4% year 2 + Expected outcome year 3 × Discount factor at 4% year 3) − capital cost

$750 000 × .9615 + $750 000/.9246 + $750 000/.8890 − $2 000 000 =
$721 125 + $693 450 + $666 750 − $2 000 000 = **$ 81 325.**

Method 4:
[Total Expected outcome × (Discount factor at 4% year 1 + Discount factor at 4% year 2 + Discount factor at 4% year) / years usage] − capital cost
$2 250 000 × (.9615 + .9246 **+** .8890)/3 − $2 000 000 =
$2 250 000 × .9250 − $2 000 000 = **$ 81 250**

The **net present value** of Option 2 is **between $ 81 250 and $81 318.31**.

Award *[1]* for correct method and *[1]* for the correct answer. Each of the above four methods is acceptable. If the candidates have followed a correct method and arrived at an answer that is very slightly different than the range above, award *[1]* for method and *[1]* for the correct answer, as the figures that the candidates produce could vary slightly depending on how and if they rounded during their calculations. (**Allow rounding**)

If there is some logical attempt to calculate NPV but there is an error, award *[1]*.

(d)   Explain **one** reason why the net present value (NPV) for **Option 2** may be inaccurate.   **[2]**

We could mention two reasons to explain why the NPV calculated in (c)(ii), for Option 2, may be inaccurate: 1) inaccurate interest rate predictions and 2) if capital costs changes.

If the **discount rate goes up**, the **net present value will decrease**. This decrease in net present value stems from the fact that future income **streams will be discounted at a higher rate**. The fact that its NPV at 4% is only $81 318, **an increase in the discount rate from 4% to 6%** would **mean** that **Option 2** would have a **negative NVP**.

Even **if** the **discount rate** for Option 2 **remains at 4%**, **if** the actual **capital cost** of Option 2 **turns** out to be **$2 081 319 or higher**, the **NPV** of Option 2 **would be negative**. **If both** negative outcomes **occur** (discount rate rises and capital costs turn out to be $2 200 000 rather than $2 000 000), **Option 2 would be a bad investment**, at least **on a three-year investment horizon**.

Other generic answers include:
- The initial cash outflow in the NPV calculation should be higher than initially projected.
- Underestimating the cost inflates the NPV, making the project appear more attractive than it actually is.

*Award **[1]** for stating that the change in discount rate or the increase in capital cost will reduce the NPV. Award an additional **[1]** if the candidate states that under either scenario the NPV will be negative.*

Do not award marks for answers that explains why the revenue is subject to change as it is a generic reason that applies to various investment appraisal methods.

Section B

4.   (a)   Describe **one** disadvantage of an autocratic leadership style.   **[2]**

Autocratic leadership is characterised by **individuals having control over all decisions** with **little or no** delegation of responsibility and limited one-way communication.

Disadvantages include:
- it **discourages group input helping to isolate group members with subsequent lack of motivation**;
- it **creates a workforce dependency** on decision making by the leader;
- it **ignores creative** solutions to problems and expertise from members of the group.

N.B. Application not required.

*Award [1] for a partial description (e.g. **someone who takes all the decisions**) with an additional [1] to include a full description highlighting aspects of the actual disadvantage of autocratic leadership, similar but confined to the disadvantages above.*

(b)   Using **Figure 2** and **Table 6**, comment on the survey carried out by Eunju.   **[2]**

The survey involved a relatively simple 'scoring' system with marks out of ten.

Comments may focus on:
- the differences in the **number** of **responses** between the **different countries**; E.g. Thailand has 63 organizations participating in the survey compared to South Korea that has only 11;
- the **mix** of **results** in different countries (considering average marks included in **Table 6**);
- the **variations** in the trainer **enthusiasm score** (Thailand 9.5 out of 10 and South Korea 6.8 out of 10);
- the **usefulness** of the **survey to Eunju**;
  - it gives a **general impression** of what is going well and what isn't;
  - it may be **based** on **flawed** collection **methods**;
  - it could be used to **compare scores** in different countries.

Accept any other relevant comment.

Award [1] for a comment in context. An additional [1] if there is some mention of the actual data in terms of a figure from the data.

(c)   Explain **two** methods/techniques of primary market research, **other than** surveys, that Eunju could use to gather information to help her assess the training provided by *CLX*.   **[4]**

Eunju could have carried out:
- interviews; allows for more open-ended questions about training experience for participants
- focus groups; similar to above
- observations; would allow Eunju to observe directly and avoid potential cultural bias in surveys.

***N.B.** Use of "training" as application is acceptable for any method/technique.*

Mark as 2 + 2

*Award up to **[1]** for some explanation of each method and further **[1]** for showing context related to how Eunju could have used the method. Award a maximum of **[2]**.*

E.g. Focus groups could be used to gather information from a selection of previous customers. Such as the quality of the trainer's enthusiasm. A round table discussion (could be virtual) might allow Eunju to ask direct questions (qualitative questions) and get a range of responses that go beyond a simple score out of ten. The information might be more useful to Eunju.

*Award a maximum of **[4]** in total.*

(d)   Explain **one** advantage of sales forecasting for *CLX*.   **[2]**

Sales forecasting is the process of **estimating future revenue** by predicting the **amount** of **units** that the business might sell in the coming time periods. The technique makes use of previous sales data plus other information to make the predictions.

Advantages include:
- helps to **set targets** (allows the sales team at *CLX* to assess how many courses they need to put on to meet the target);
- **aids planning** of **resources** (number of trainers required etc.);
- **aids strategic planning** (*CLX* can make future strategic decisions e.g. the decision to pull out of a particular country/region *eg*. South Korea is the smallest market with relatively low marks in the **Table 6** survey
- allows *CLX* to **learn from past mistakes**.

*Award **[1]** for stating an advantage of sales forecasting or for giving a broad definition.*

*Award **[2]** if the candidate provides an accurate advantage and makes contextual references to CLX related to training courses, etc.*

(e) Using the information provided in the stimulus and in **Figure 2** and **Table 6,** recommend whether *CLX* should engage in contingency planning. **[10]**

Contingency planning is where an organization **tries to be ready to respond effectively** in the event of an **emergency or unexpected event**.

In the case of *CLX* the following is contextual relevance as follows:

- What can be taken from **Figure 2** and **Table 6**?;
- **Eunju** is an **autocratic manager**. She will want **everything fully planned** where she can;
- there are **issues** with their market/**customers** in **South Korea**. Eunju may want to **plan** for possible **problems** before they fully arise;
- the success of contingency planning depends on communicating and delegating key tasks which could be a problem for Eunjus autocratic style;
- conversely her autocratic style could be advantageous where quick decisions need to be taken in an emergency;
- **contingency planning** is often **costly** and **time consuming for problems that may never arise**. Does *CLX* have the available resources to spend time doing this?;
- *CLX* **sell** their **services** in a range of **different countries** (throughout South East Asia). It is possible that **cultural differences** may lead to **sales reducing**. **Different expectations** and **rules**/**laws** (gaining visas etc.) could make the continued operation in other countries difficult;
- **political instability** in the region **may result** in a **sudden loss** of sales;
- changes in **technology and** a switch to **online learning** may have a **significant impact** on *CLX*.

As a **possible solution** to the problem, *CLX* **might accept** Eunju's contingency planning argument **if they are keen to plan for any possible outcome of risky situations**. The **issues** that exist in South Korea **could involve damage** to the **reputation** of *CLX*; **loss** of **staff**; loss of future **sales**/profits; **damage** to the **objective** of developing their services etc.

A counter view might be to **simply deal with situations as they arise**, in the knowledge that the **associated risk is not that great**.

Allow any reasonable developed solution.

Marks should be allocated according to the markbands on page 3 with further guidance below:

*If the candidate makes no reference to **Figure 2** or **Table 6** then the maximum mark to be awarded is **[6]** even if there is some balance.*

N.B. Candidates cannot reach the top marks if there is no relevant reference/application to the stimulus. They must also show some awareness/explain the limitations of the stimulus material.

Candidates are expected to present an advisable course of action with appropriate supporting evidence/reasons. This recommendation may be presented as a conclusion.

5. (a) State **one** advantage **and one** disadvantage to a franchiser of retailing through franchises. **[2]**

Advantages of franchising include:
- requires less **capital** than owning retail outlet;
- **reduces costs**: each franchisee finances their own franchise outlet;
- **increases brand awareness**;
- most **supervisory** responsibility falls to **franchisee**;
- **reduces risk**;
- relatively **simple** and easy way to **grow quickly**.

Disadvantages of franchising include:
- **complexities** of following **regulations** and laws across **multiple jurisdictions**;
- each time someone applies to be a franchisee, the **franchiser spends** some **money** with **no guarantee** that the applicant will be approved;
- increased **chances** for **legal disputes**;
- **loss** of complete **brand control** (potential quality issues).

Accept any other relevant advantage/disadvantage.

N.B. no description required.

Award [1] for an advantage stated and [1] for a disadvantage stated. Award a maximum of [2].

N.B. the candidate must answer this question from the perspective of the franchiser.

(b) Explain how *DSP*'s collection of big data could impact **two** of *DSP*'s stakeholder groups **other than** employees, management, and shareholders. **[4]**

Affected relevant stakeholders include:

Competitors: With information on the paints sold (colour, size, location, customer, even time of day sold), *DSP* can more effectively **anticipate** its **customers' wants and needs**. Almost immediately, *DSP*'s management felt that the company was **more competitive**.

Suppliers: Gathering of big data is done in **real time**, which allows suppliers' management to **know** in an **instantaneous fashion what pigment and other supplies** are needed by *DSP* Thus, suppliers will need to arrange for smaller but possibly more frequent deliveries of supplies to *DSP*.

Franchisees: As *DSP* gets better at **identifying** and **anticipating consumer trends**, it will be able to **encourage franchisees to stock colours** and paints that are **in fashion**, boosting franchisees' sales and, in turn, *DSP*'s sales.

Customers: As *DSP* gets **more efficient** and more **effective** at marketing, *DSP*'s customers (franchisees) and franchisees' customers **will get more desirable products and better service**. *DSP* noticed quite quickly that **retail sales of its paint increased after** it began collecting **big data**.

Table 7 shows that there are famous companies who are using big data to boost revenue.

Mark as 2 + 2.

Award [1] for stating one of the four stakeholder groups above and an additional [1] for an explanation and application to the stimulus up to two stakeholder groups.

Award a maximum of [4] in total.

N.B. Candidates may state other stakeholders which have some relevance but no opportunity for application to the stimulus. For example, environment pressure or watch dog groups would probably be pleased that DSP has improved its efficiency, which would reduce waste and disposal of old paint.

*If a candidate states a relevant stakeholder **other than** employees, management, shareholders, competitors, suppliers, franchisees, and customers, award **[1]** provided the candidate explains the relevance.*

(c)   With reference to *DSP*, distinguish between a cost centre and a profit centre.   ***[4]***

A **cost centre** is a **section** of a business where **costs** are **incurred** and **recorded**.

A **profit centre** is a **section** of a business where both **costs and revenues** are **identified** and **recorded**.

When *DSP* **first hired the data mining** expert, the **intention** was that they work in **support** of operations and marketing. While the data mining would presumably help *DSP* become more profitable, by itself the data mining office **generated no revenue**. **Only costs were associated** with them and their staff.

However, when the data mining expert **suggested** that *DSP* **start selling** the **data** that that their office collected and analysed, the **data mining office would now generate revenue**. Thus, the **data mining office could now become a profit centre** and would start **exploring** other types of **information** to gather as well as **identify** potential **customers** other than those just in the construction and decorating industries.

Mark as 2 + 2

*Award **[1]** for correct explanation of what a cost centre is and an additional **[1]** for application to the stimulus.*

*Award **[1]** for correct explanation of what a profit centre is and an additional **[1]** for application to the stimulus.*

*Award a maximum of **[4]** in total.*

(d) Using information in the stimulus and **Table 7**, discuss the impact on *DSP* of its use of data mining to inform decision making **and** its use of data to monitor and manage employees.

[10]

The use of data mining appears to have had a **positive impact** on *DSP*'s operations. Almost immediately after collecting and mining data, *DSP* saw **its operations become more efficient** and **marketing more effective**. Table 7 shows that there are famous companies who are using big data to boost revenue. The CFO is keen to follow suit. **Sales** to retail customers by the franchisees and sales to franchisees by *DSP* **increased**. The **shift from JIC to JIT would have reduced stock** levels **and working capital** requirements. **By identifying trends in real time** through sales data, *DSP*'s **brand identity** probably **improved**. Because all these **improvements** probably **led to improved profits**, **management** and **shareholders** were surely **pleased. And**, because the **company had** a **profit-related pay scheme, increased profits would mean greater pay for employees**.

However, the decision to make the data mining office a profit centre presents potential **risks**. One, whenever a "**collector" of data sells** the **information** on the open market, they run the **risk** of being **accused** of **unethical** practices, as many people view the sale of data, especially on customers, as a **violation of their right to privacy**, and thus exposes *DSP* to **potential legal risks**. Further, once the data has been sold, even if the buyer has agreed not to resell it, *DSP* **has lost control of the information**. *DSP*'s big data customers might resell the data anyway, thinking that DSP will never find out. Finally, **if** *DSP*'s **competitors ever got the information,** they could use it to **erode** *DSP*'s competitive **advantages**.

The decision to use **data to manage and monitor employees** has both potential benefits and risks. On the one hand, perhaps *DSP* has some **employees who do not work as hard** as they should and the Digital Taylorism methods **could help the company identify them**. Workers, just knowing that they are watched, might nudge them to work harder and faster. The data mining expert promised major **improvements** to **operations** because of this approach. Time will tell whether those improvements materialize.

However, *DSP* is also **bearing costs** for this approach. There was some **expenditure for the chips** to go into employee identification badges and for the **hardware and software** needed to monitor the employees. Some **people** had to be **hired to evaluate** the data produced. Further, because **many employees disapproved of the Digital Taylorism, labour turnover increased**, which would lead to the **increased recruitment** and **training costs**.

The impact on *DSP* of its use of data-mining to inform decision-making and its use of data to manage and monitor employees together appear to be having an **impact on the organizational culture**. The founder and one-time 100% **owner had** a **paternalistic leadership style** that came to permeate *DSP*'s culture and endure long-after the company grew and went public. The founder was **committed to CSR, which employees typically find inviting and motivating. Before Digital Taylorism arrived, labour turnover at** *DSP* **was low.** This paternalistic culture might aid acceptance by the majority of workers. *DSP* might be willing to accept an increase in labour turnover in the short term as a way to re-align the workforce around a new common goal. Furthermore, those of the younger generation are more accepting of the reality that individual data is regularly shared outside the workplace so why not within.

All decision making appeared to have **reoriented** the company toward a **pure profit motive**. The company started **selling big data**, which is **ethically** and, in some cases, **legally questionable. Digital Taylorism fosters a completely different corporate ethic** than was the paternalistic leadership style of the founder and subsequent management. Labour turnover increased, suggesting that the "social contract" between *DSP*'s employees and *DSP* began to crack.

Marks should be allocated according to the markbands on page 3 with further guidance below:

*If there is no balance, then for a one-sided response where only one impact is considered then award a maximum of **[3]**.*

*If the candidate makes no reference to **Table 7** then this only partially addresses the demands of the question, then the maximum mark to be awarded is **[6]** even if there is some balance.*

*If the candidate discusses one impact only (with balanced and substantiated arguments) then award a maximum of **[5]**.*

A balanced response is one that provides at least one argument for and one argument against each impact.

Candidates may contrast one option with another for a balance as long as at least two arguments are given for each impact.

***N.B.** candidates cannot reach the top marks if there is no relevant reference/application to the stimulus. They must also show awareness/explain the limitations of the stimulus material.*