CGMA AUGUST 2017 EXAM ANSWERS

Variant 2

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CIMA will not accept challenges to these answers on the basis of academic judgement.

SECTION 1

Part 1

Switch to Lokwurk

The first question that needs to be addressed is whether there is a cost-effective way to work on Lokwurk files using our existing Spinweev software. It may, for example, be in the best interest of the publisher of Spinweev to create a conversion program that converts and verifies files to and from Lokwurk to prevent potential buyers from switching to a different package. It would probably save a great deal of money, even if we have to employ computer technicians to manage the conversion process. We might also double check the timing and the implementation process at Grant Motors because it would be inconvenient if we switched ahead of them.

We need to establish the intentions of other vehicle manufacturers with regard to their CAD software. Grant Motors is an important customer, but it accounts for only 30% of our revenue. Ideally, we would wish to see all vehicle manufacturers standardise on the same software and ideally at the same time, otherwise we will have to use different packages for different customers and that will mean that we have less flexibility in assigning staff to different projects. Hopefully, the fact that Grant Motors can see a commercial advantage will mean that other manufacturers will follow this lead.

Many of our existing drawings will have to be adapted and converted to Lokwurk. Any drawings of existing products will have to be converted and checked for accuracy, with any amendments made before we use them in any work for customers. We will also have to establish who will be held responsible for any deviations in Lokwurk drawings supplied by customers. We should consider confirming the dimensions for ourselves in order to avoid any problems because there is a risk that a sensor will be slightly out of alignment which could affect the reliability of a safety device.

We will have to ensure that AutoAuto's engineers are properly trained in the new software. Ideally, we should design a training course that will focus on the differences between Spinweev and Lokwurk. This will enable them to adapt more quickly and will also reduce the risk of errors arising because of any misunderstandings about the use of the new software. It may be sensible to appoint some super-users who will be trained first and who will act as mentors to colleagues.

Part 2

Currency movements

The software will cost U$6,750,000 for 250 copies if the exchange rate remains unchanged. The simplest way to avoid any movement would be to buy all 250 licences immediately. That would set the price in terms of the current exchange rate and would be a form of natural hedging that did not involve costs associated with hedging or protecting the rate. The payments will be otherwise spread over the next year, which complicates matters because paying such a substantial sum immediately will involve either an opportunity cost or an actual cost in terms of interest receivable or payable. There is also some doubt as to whether we will proceed with this purchase, which makes it even more unattractive to buy immediately.

Another possibility would be to agree to buy 250 copies at a price of U$27,000 per copy, with delivery at our convenience. That would eliminate the currency risks and would also give us the advantage of a natural hedge. The only real problem is that the vendor might feel that this is unacceptable because it would involve taking on the risk. We would have relatively little bargaining power if Lokwurk is becoming a popular standard CAD package and the vendor is aware that we need to buy from them.

We might attempt to arrange our purchases to coincide with sales that are to be made in W$. We sell to many major vehicle manufacturers around the world and it is to be hoped that one or more of them will have the W$ as their preferred currency. It should be possible to predict when we will receive large receipts in W$ and buy licences on credit so that these can be paid for from the expected proceeds. This may actually serve to hedge against currency losses that could be incurred with regard to the receipts from the W$ sales.

The final possibility would be to open a W$ bank account and deposit 250 x W$36,000 = W$9m. That would mean that we would have sufficient W$ to buy the full consignment of licences, timed to suit business needs. We would not suffer any lost interest. Indeed the International Fisher Effect should mean that we will receive the same amount of interest regardless of where our money is banked. The only downside might be the possible currency losses on any residual if our needs change and we buy fewer than 250 copies.

SECTION 2

Part 1

Organisational culture

The first cultural issue is the team's willingness to collude in breaking the law and, undoubtedly, the company's formal rules and regulations. Large companies such as AutoAuto generally have rules that prohibit the use of illegal software. It is safe to assume that the team leader was acting in contravention of those rules. The fact that the team leader was prepared to take such an action is a worrying sign in itself because it shows that managers do not necessarily care about breaking the rules in order to achieve their objectives. The team leader's justification appears to be that he thought that he would not get caught. This attitude implies a lack of respect for the rules by AutoAuto's managers and staff.

The team leader's attitude is clearly shared by the remainder of his team. The unauthorised software was being used by a whole department of engineers, who knew that this was not their usual CAD package. None of those individuals reported this abuse of unlicensed software. This means that the staff were either intimidated by the manager or that they were willing to abuse this package. Either of those possibilities would confirm that the manager's motivation is shared by others.

The fact that the manager chose not to seek authorisation to buy legitimate copies of the software suggests that the culture places greater emphasis on individual success than the good of the company. It would have been legitimate for the manager to request a licensed copy of the software in order to complete this project, but he chose not to do so. This suggests that the manager believed either that the request would have been refused by senior management or that it was better to cut a corner than to incur all of the costs necessary in order to complete the contract properly. Either belief suggests that AutoAuto's culture has an unhealthy emphasis on the immediate goal of making a profit from a project, even if that means breaking the law or risking AutoAuto's reputation.

The Board needs to decide whether it wishes to send a message to the company that it does not wish to condone the team leader's behaviour, because the organisational culture is often set by the "tone at the top". If the Board takes appropriate disciplinary action against the manager then the "shared story" that will become part of AutoAuto's culture is that the law should be obeyed. Realistically, a formal reprimand would be sufficient to demonstrate the Board's displeasure and would reduce the risk of creating the impression that staff could be subject to harsh discipline without good reason. This should be followed up by a company-wide reminder that only licensed software should be used and that there is a procedure for requesting additional packages.

Part 2

Share price following apology

Firstly, it is unlikely that the capital markets will be aware of this piracy because it would not be in Wynter's interests to make its concerns public knowledge until AutoAuto has admitted to this wrongdoing. Even though Wynter has sufficient confidence to confront AutoAuto in writing, it is unlikely to be able to prove that AutoAuto is directly responsible for this piracy. The admission is, therefore, likely to be fresh information that the markets will have to process in order to decide whether it will have a significant impact on cash flow. AutoAuto's Board will have to be careful to minimise the impact on the company's reputation because the announcement is likely to take the market by surprise and there could be an overreaction in the short term until the market can reflect.

The most immediate concern for the share price is that the apology may be linked to the possibility of a fine, civil compensation or both. If AutoAuto is guilty of software piracy then it has broken a number of laws, for which there may be a punitive fine. Wynter may also be able to seek compensation from AutoAuto through the civil courts and, again, there is a possibility that the damages awarded will be intended to deter other companies from piracy. The company's market capitalisation will fall by the expected value of the penalties that will be suffered, which may be significant because the knowledge that nine copies have been made does not preclude the possibility that the software has been copied elsewhere in the company.

The markets may be concerned about the governance implications of this admission. There has clearly been a major shortcoming in internal control, in the critical area of IT systems relating to development. The maintenance of a sound control system is a major element of governance and this incident implies a weakness in the control environment. The markets may be concerned that the Board is unable to exert full control over the entity and that there are wider implications to the apology than just a lack of control over software. There could also be concerns that the IT system itself may have been compromised by the use of illegal software. It should not have been possible to install unauthorised software and the engineers may have disabled or circumvented some of the environmental controls.

The capital markets might be nervous that this apology could affect AutoAuto's ability to do business from a social responsibility basis. Many companies require their suppliers to meet high ethical standards and the apology implies that AutoAuto has behaved unethically. AutoAuto has, albeit unwittingly, profited through the theft of intellectual property and many vehicle manufacturers may regard that as a reason to award contracts to other companies. The fact that AutoAuto exists to sell intellectual property probably makes this failure even more significant.

SECTION 3

Part 1

Debt covenants

The borrowing of U$10m will have relatively little effect on the gearing ratio because AutoAuto has already got U$800m in debt. The fact that the company will be in breach suggests that it is already at the very limit or, more probably, a little beyond and is already in default. In that case, even a minor request for the relaxation of the covenant may prove difficult because the lenders will not wish to see the company pushing further into default. IT projects are notorious for overrunning and so there is a severe risk that AutoAuto will require more than the U$10m that has been budgeted and even more funds will be requested.

AutoAuto might argue that this investment has to be funded, otherwise it will be difficult for the company to continue to generate revenues. If the lack of this new IT system will threaten AutoAuto's ability to continue in business then the lenders may start to feel concerned that they will be faced with a default. There will undoubtedly be losses if the lenders are forced to foreclose, even if it is only because of the administrative issues. The loan is relatively small and so the additional risk is relatively small.

Part 2

Value of collateral

Computer workstations will have very limited value on the second hand market. The machines may be configured to optimise them for AutoAuto's needs and so they will have little value to other potential users. The technology is always evolving and so their second hand value may decline within a few months if newer and better components are introduced. The fact that the machines have been used may mean that they will require significant maintenance before they can be used by anyone else. For example, they may have been loaded with software that has to be deleted for copyright reasons or they may have been corrupted with viruses that will be difficult to detect and remove.

The software will have very little value as collateral because it is licensed to AutoAuto. Those licences may have no transfer value if they do not permit their sale to a third party. Buyers may also be concerned about their ability to receive updates and support from Wynter. Overall, there is probably very little point in buying second-hand software, if such a purchase is possible at all, and so AutoAuto's creditors would have to offer a significant discount to find a buyer.

Part 3

Internal audit

The starting point would be to identify the risks and the associated controls that are intended to address them. For example, departments that have older systems are more likely to have staff who wish to use newer and better software and so they are more likely to have unlicensed software. The internal audit department will then consider the safeguards that are in place to prevent the installation of unauthorised software. For example, computer operating systems can have settings that restrict the rights of users to make changes without having additional administrator rights.

The internal audit department should conduct some tests and inspections in order to send a clear message that AutoAuto's Board takes the question of piracy very seriously. One possibility would be to look for a network tool that can inventory the software on every workstation and PC on the system. Internal audit could then feed back to the head of each department as to whether there are problems with the results of that inventory. This would

also be a suitable time to check on basic administrative issues, such as ensure that the company has an adequate register of its licensed software, so that it can deal with, say, a verification visit by one of the external agencies who monitor software compliance.

Part 4

Director of IS

The company has six executive directors, so adding a seventh would involve a significant shift in the perceived importance of IS. That would certainly demonstrate the Board's commitment to addressing the piracy problem and also to ensuring that the investments in new systems were managed at a strategic level. A new board appointment would imply that there would be more systematic monitoring and evaluation of the systems and that opportunities were properly evaluated. The present Board does not really appear to have a champion for IT or IS in place and that could be a partial explanation for the piracy scandal.

The danger is that AutoAuto is not really an IT company. IT is a tool that is used in the development process. A board appointment might lead to an excessive focus on the systems side, which could distract from more basic but more relevant matters. The newly appointed director might struggle to keep fully occupied after the initial settling in period and the investigation of the recent problems. AutoAuto might find itself investing heavily in updates and new systems simply because the new board member wishes to appear relevant.