

CGMA AUGUST 2017 EXAM ANSWERS

Variant 5

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SECTION 1

Part 1

Product development

The first point to note is that AutoAuto's existing product range has been developed with a very specific strategic goal in mind, namely the development of a driverless vehicle. AutoAuto has four successful products on the market and the company's vision is that each should be the market leader. The basic business model is that these products should be sold to vehicle manufacturers, who will fit them as drivers' aids in their vehicles. Adding to this product range might displace existing products because there is a limit to the number of features that a vehicle manufacturer can sell to its customers. AutoAuto has clearly identified a small number of niche products that manufacturers are willing to buy in bulk and that they do not wish to make for themselves. There may be very few products that can be categorised in that way and so there may be little point in attempting to develop new products.

It should be noted that AutoAuto employs 250 design engineers and that the company spent U\$178.2/2,073.0 = 9% of last year's revenue on research and development. The company is already applying significant levels of resources to product development and may be unable to afford to spend any more. The development work appears to be striking a balance between developing a driverless vehicle system and maintaining the existing products so that they remain relevant to manufacturers. Developing whole new ideas just for the sake of doing so would probably divert funds and expertise from existing projects and would be counterproductive.

The crucial thing is for AutoAuto to ensure that the product range remains attractive and that existing products never become out of date. AutoAuto's design staff could address James' point by developing updates that incorporate new ideas and new technologies. For example, new technologies may become available that could lead to improvements in, say, satellite navigation. AutoAuto must ensure that it is always working on such developments so that it does not lose market share. Remaining at the forefront of the market with existing products may be the way forward for AutoAuto because vehicle manufacturers will always wish to be able to offer their customers the latest and the best technology.

There could be a variety of new products that could be developed easily if AutoAuto was prepared to consider new markets. For example, boat builders may be open to adding devices to assist in navigation and control of small boats that would require little more than a revision of existing products. It may also be possible for AutoAuto to develop some commercially viable products using the technology that it has already developed, such as industrial controls based on ParkSpace. These are really relatively minor extensions of existing products, though, and as such would not really address James' concerns.

Part 2

Dysfunctional behaviour

The first thing that we need to do is to commission a detailed report on the reasons for the delays and overspends. This is not intended to allocate blame or hold anyone directly accountable because these are sunk costs. The management team does, however, have to understand the factors that have held the project up so far in order to make a sensible decision about its future. It will also be helpful to see whether the research and development project team can prepare a clear and concise statement of the problems. If they cannot then we will have to consider whether they understand the problems themselves.

We need to develop a new budget for the project, covering time and cost. There is no point in continuing to report adverse variances because they will mask whether the project is slipping even further behind. The budgets should be evaluated in order to establish whether the completion of the project constitutes a positive net present value investment. We should hold the project team accountable to these new budgets.

The project team should be asked to produce detailed and frequent reports on progress, possibly monthly and at least quarterly. The need to report on progress will ensure that the project team is aware of the need for transparency and also the need to justify the project's continuation. The constant updates may be a distraction, but they will also send the message that the project is under review and that it may be curtailed in the event that progress stalls again. The project team will also be far more accountable for the assurances that they give if they are being asked to revise and update themselves on an ongoing basis.

The Board might also establish a small team of senior managers to provide oversight of the project. This team would not have any decision making powers or other authority, but it would attend project team meetings and would receive all reports circulated to project managers. The oversight team would be there to ensure that the project team was confident that any technical problems could be overcome. It would also enable these managers to brief the Board independently of the project's management team.

SECTION 2

Part 1

Valuing IP

As with much intellectual property, the assets owned by AutoAuto are unique. There are no market prices against which to compare them. There are different models that might be used, but each will yield its own figures and so none can be regarded as objective. AutoAuto does have competitors, but their products differ and they are sold to different markets, which could render any comparison misleading. In any case, competitors will not publish objective values for their IP.

It could be argued that AutoAuto is a virtual company that exists to create and exploit IP. This would mean that IP accounts for much of the company's market capitalisation. That leaves room for confusion, though, between the IP inherent in existing products and the market's expectations of future developments. The company also generates some added value through contracting out the manufacture of products sold to the OEM market, which is also an element of the market capitalisation.

It may be possible to estimate the value of IP in terms of cash flows from the revenues that it creates. This would require some complicated assumptions. Firstly, AutoAuto generates about 10% of its revenue from licensing agreements. The individual agreements are unlikely to be set by full, arms' length market forces. There is no observable market to show whether the fees charged for the licences are the "correct" prices. The licence fees charged to vehicle manufacturers is determined by negotiation and the negotiated prices may be less than the manufacturer would be willing to pay. At least that suggests that any valuation based on those revenues will be conservative.

There will undoubtedly be an element of economic rent on AutoAuto's IP in the prices charged for OEM sales. Valuing this rent will be almost impossible because it has to be separated from the intrinsic value of the physical goods. The vehicle manufacturers are paying something for the basic components and the assembly work. There is also an element of IP in AutoAuto's ability to manufacture goods overseas and manage the logistics and quality control.

Part 2

Founders' role

The biggest concern is that the founders may be more concerned with their ambition to create driverless vehicles than with the maximisation of shareholder wealth. They were once the sole owners of AutoAuto and they may continue to take the attitude that the company belongs to them even though they are now minority shareholders. The fact that they created the company and developed the basic business model is likely to make that attitude even more of a worry. That possibility could depress the share price if the stock market believes that there are governance issues, even if that is not the case.

The three founders have a longstanding relationship and so they may not be open to discussion with the other board members. This could compromise the Board's overall accountability because some board members may struggle to influence strategic decisions. If that is the case, AutoAuto may be at risk of losing board members who feel that their reputations are at risk or simply that they are not allowed to participate fully. It may be more difficult to attract the very best candidates to serve on AutoAuto's Board, even if the concerns that the founders are dominant are unfounded.

The three founders all come from an engineering background, which may lead to an unacceptable focus on engineering and design. AutoAuto exists to make and sell high quality products that lead their markets, but there is no point in developing the very best

products if there are problems with marketing or finance. There could, for example, be pressures to enhance products simply because the board members enjoy the engineering challenge or because they wish to maintain their technical superiority for the sake of being the first to introduce a new technology. This over emphasis on engineering may not be intentional because the founders' views will be affected by their backgrounds and they may not fully appreciate the inputs from other disciplines.

The stock market may exaggerate the strategic importance of the three founders to AutoAuto's ongoing development because their vision has been crucial to the development of the product range. Succession issues will be a worry because the founders will eventually decide to retire and the markets may view the departure of any of them as a serious loss. Paradoxically, there may also be concerns that the presence of the founders is holding the company back because they may be reluctant to deviate from the basic business model that they developed. They may be unduly risk averse because of their sense of identification with the company and their emotional and financial investment in it.

SECTION 3

Part 1

Identify stakeholders

Vehicle manufacturers will be key stakeholders because they will have to agree to install these computers. There will be financial costs associated with the development of this system, particularly with regard to agreeing a standard across the whole industry. There could also be marketing costs because cars are often promoted on the basis of having the freedom of the open road, but now motorists will be concerned that their on-board computers will make them far more accountable. The upside is that this technology will lend itself to improvements such as the development of viable driverless systems, more efficient monitoring of roads and the ability to summon assistance in the event of a breakdown or collision.

The government will be a major stakeholder because these computers will create a host of possibilities that will have to be exploited responsibly. For example, law enforcement will be far easier if cars are constantly broadcasting their speed and location, with speeding motorists and stolen cars becoming easy to identify. The danger is that this technology could be viewed as a breach of privacy and could lead to protests. The public may be unwilling to permit the authorities to be able to track their movements constantly.

Part 2

Persuade stakeholders

The easiest way to persuade the vehicle manufacturers would be to develop worthwhile applications for this technology that would make vehicles more attractive to customers. For example, it would be possible to simplify the purchase of fuel if the computer could authorise a payment from the driver's bank card after the tank had been filled. It may also be possible for manufacturers to gather far more information about the driving habits of their customers, thereby enabling them to develop new models and market them. For example, if vehicle manufacturers know that specific customers drove their vehicles frequently on short, urban journeys then they might focus on economy in targeting them for repeat sales.

The public will have to be reassured that their privacy will not be compromised. One possibility would be to transmit the data concerning speed and location anonymously. That would avoid concerns that the authorities were tracking movements and possibly levying fines and other penalties on the basis of constant surveillance. It might be possible to develop applications that would enable these computers to save motorists money. The insurance industry might be prepared to offer much lower premiums to motorists who permit their driving style to be monitored and then drive responsibly.

Part 3

Surplus funds

As with any decision, the focus should be on the maximisation of shareholder wealth. The simplest argument would be to repay the more expensive source of finance, namely equity, which should have the greater positive impact on shareholder wealth. This may not necessarily be the case for AutoAuto because the company is highly geared and the repayment of equity will increase gearing still further. That could undermine the confidence of both lenders and shareholders and could see a decrease in shareholder wealth.

There may also be questions about market perceptions of the background to this reduction. The company is effectively receiving a windfall. Using it to repay equity would seem like a rather permanent reduction in long term finance. If the cash is used to repay loans then the

market may perceive that as a temporary measure, with funding reduced until new product ideas can be developed to the stage where development funds are required. At that stage, taking out fresh loans will be cheaper and easier than raising fresh equity because equity involves significant issue costs. The markets may perceive this as an admission by AutoAuto's Board that it has run out of ideas and that it does not anticipate any further expansion to reverse this contraction. That concern could lead to a fall in the share price.

Part 4

Share repurchase

A repurchase would be an alternative to a large dividend. Arguably, both would have the same impact on shareholder wealth because both would see a reduction in both assets and equity by the same amount.

A repurchase would have the artificial advantage of leaving the share price relatively unaffected because the number of shares in issue will be reduced and the company will buy the shares back at their market price. A large dividend would leave all the shares in place but would decrease assets and so the share price would fall.

A repurchase might allow for a more flexible pattern of reduction. For example, some shareholders may have the option of refusing the buyback. It may be that the founders would wish to leave their equity in place and use the repurchase to increase the proportion of the shares that they hold.

A large dividend may lead to questions of perception. It may be viewed as a reward for poor performance by the founders, who own a sizeable minority shareholding. There may be suggestions that the dividend has fallen if the artificially large dividend prompts suggestions that dividend levels will increase in future years.