A WALKTHROUGH OF A REAL ANSWER TO THE OPERATIONAL CASE STUDY EXAM (VARIANT 4) FROM FEBRUARY 2016

As part of an ongoing drive to improve support to CIMA students, we have published a new exam resource. The following document takes you through a real student script from the February 2016 case study examination; the answer has been transcribed, anonymized and annotated with observations on strong performance and some areas where performance could be improved upon.

PASSING STANDARD ILLUSTRATED

The script was selected to demonstrate a comfortable passing standard, having earned a score closer to 120. It shows one of many ways in which a candidate would demonstrate sufficient competence to earn such a pass. Please note it is not a perfect answer nor the only one which would have achieved a passing standard. However, the walkthrough will provide an idea of what a strong answer looks like and some examples of where answers might have fallen short and could have been improved upon.

HOW TO USE THE RESOURCE

To get the full benefit of this resource, you should download the February case study pre-seen materials and the test variant (4) this candidate was answering so that you have the context for the script. You could also review the examiner’s report, the marking guide and grade descriptors for the OCS which might give you a greater appreciation of the comments on the script.

Links to all five of these documents are provided below.

You may also benefit from reading CIMA’s published answer to the variant. This gives you an alternative approach to achieving a pass from the same requirements. It is useful to understand how different approaches can earn credit and that the markers are not looking for a model answer.

INTRODUCTION

Before looking at the real answer script in depth, it’s worth reviewing the key features required to produce a good answer of passing standard.

A clear passing answer will demonstrate various features such as evidence of planning; a good layout and structure which make it easy to follow the discussion; an answer which responds appropriately to the task in the format required and from the perspective of the persona described for the Operational case study.

Follow this link, Case study roles and responsibilities to find out more about the persona used in OCR.

The length of your answer will vary, depending on various aspects but remember, the examiner is looking for quality rather than quantity. A long answer does not necessarily equate to a better answer. However, if your answer is too brief, you may not be providing enough detail for the examiner to give you marks.

Use the time given for each task as a guide to how much you might write. For example, in section 1 of our sample script, there are 17 marks available, which equates to one sixth of the exam or 30 minutes.

As you will see from the commentary below, you must answer all parts of all requirements to be sure of securing a pass.

ADDITIONAL SUPPORT RESOURCES

The following documents are referenced at various stages within this feedback which will enhance your understanding:

Feb 2016 Variant 4 Exam
Feb 2016 Variant 4 Answers
Feb 2016 Variant 4 Marking guide
Feb 2016 pre-seen material
Feb 2016 Examiner’s Report

For each level of the case study exam (Operational, Management and Strategic), we have developed a set of grade descriptors to map the performance ratings (Fail, Moderate and Strong) against each competency and Integration. Click here for Grade descriptors for Operational case study exams.

REVIEW OF OPERATIONAL CASE STUDY SCRIPT FOR VARIANT 4 FEBRUARY 2016

OVERALL COMMENTS

At first glance, the overall answers have good paragraph layout to suggest comprehensive coverage of each area of the tasks and subsequent requirements. Overall grading may have been stronger if the script had more structure and persuasive language. In addition, at operational level, to achieve a “strong” rating for the competencies, you need to demonstrate strong technical knowledge that includes a thorough understanding of the knowledge piece in the syllabus. There have been areas where candidates seemed to have missed out on the technical marks.

In terms of writing style, our candidate has kept their replies professional with a good layout. They have used headings to clearly indicate which task they are addressing, which also provides structure to their response. Each idea has a separate paragraph which makes it easy for the marker to follow the train of thought and award marks. You will notice that the candidate has not used bullet points in the sample script; it is better to write in small paragraphs with sub-headings to give clarity.

The candidate has made some errors in spelling and grammar. The examiners have made it clear that candidates will not be penalised for this. The key element the examiner is looking for is the ability to address the requirements of the tasks and communicate them effectively within a time constrained environment. Therefore, you will not earn marks unless the examiner can understand what you are trying to say. If communication is not your natural strength, you need to start working on it as soon as possible. Ask friends or colleagues to read your answer for you and see if they can understand what you are trying to say.
**TASK 1**

Requirements:

I would like you to prepare a briefing note which,

- Interprets the linear programming graph prepared by the senior accountant.
- Explain the usefulness of this graph for us.

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Dear Walker

I’ve received your email and I’m going to explain the line graph and how we can use it in the following content Line graph.

Better Quality Foods has asked for two flavours of desserts being supplied. This graph shows information about different product mix about those two flavours under our current capacity. As you said, different flavours ask for different labour hours, machine hours and sugar, and we can only afford limited number of those materials in three months limit. Therefore it is necessary to have a plan about how much dessert of each flavour we should produce.

The line below which we call the ‘X’ line shows the number of batches of chocolate desserts and the line on the left we call ‘Y’ indicates the number of batches of coffee flavour. There is a line A at the location of 200 on the Y line which means every spot on this line indicates a product mix of 200 batches of coffee dessert. This is because BTF has told us they will need no more than 200 batches of coffee flavour.

**Line A**

The line A indicated the possible product mix of different flavours under the possible supply of sugar. We are told by our supplier that they can afford a maximum number of 18000 kg of sugar during the three months period. We also know that per batch of chocolate dessert will need 40kg while per batch of coffee dessert need 30kg. Therefore the mathematic presentation for line A is 40x+30y=18000kg which tells us the relationship of different flavours under the limit of sugar supply.

**Line B**

The line B indicated the possible product mix of different flavours under the possible labour hours. Our production department said they can afford a maximum number of 2000 labour hours during the three months period. We also know that per batch of chocolate dessert will need 180 minutes while per batch of coffee dessert need 240 minutes. Therefore the mathematic presentation for line B is 180x+240y=12000min which tells us the possible mix of different desserts under the limit of labour hours.

**Line C**

The line C indicated the possible product mix of different flavours under the machine hours. Our production department said they can afford a maximum number of 280 machine hours during the three months period. We also know that per batch of chocolate dessert will need 50 minutes while per batch of coffee dessert need 40 minutes. Therefore the mathematic presentation for line C is 50x+40y=168000min which tells us the possible mix of different desserts under the limit of machine hours.

**OVERALL**

Overall the graph gives us possible mix of different products under our capacity. We have bottleneck at different need materials and capacities. Therefore we have to locate the most profitable production mix under our capacity mix.

**USEFULNESS**

**Capacity management**

Capacity is used to measure how much product operation can produce under a period of time. Capacity management aims to maximise the possible return of an organization under its asset and facilities. Capacity is defined as the maximum value added activity can be operated under a period of time through a process or unit of production.

The graph you sent me has indicated different types of our capacity and its limits while producing different products. The different amount of different production be produced is called product mix. This graph has offered us information on deciding product mixes.

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Reading the requirements carefully is a starting point for any good answer. This task has clearly defined two requirements, this is helpful for answer planning and time management.

The candidate has started the answer by opening it with an acknowledgement of the task, this provides a nice introduction but the level of detail provided is unnecessary; it repeats information already provided and therefore won’t gain marks. The important point is to address the requirement directly by interpreting the linear programming graph for your senior management team.

The candidate has clearly explained what each of these lines represent, again the mathematical representation is something which is provided as part of the unseen material hence a rephrasing of that was not enough to secure a mark, there are some key features missing such as:

- The identification of line C and D as the binding constraints.
- Identification of the feasible region for the identification of the optimum solution.
- Demonstration of a clear understating of the objective line function.

All of the above is classified as technical knowledge and would have helped the candidate to secure a higher mark.

The candidate has demonstrated a moderate level of understanding of linear programming. A candidate with strong knowledge should have been able to comment on the objective function line on the graph. Overall it would appear that the candidate did have a good understanding and was able to demonstrate the meaningfulness of it and identify the optimal point with maximum contribution.

This explains one of the advantages of linear programming.

In the absence of reference to the objective line function, the answer seems rather superficial, a reference to the scenario such as "required number of batches for coffee flavour" demonstrates business skills.
Bottleneck

As you said there are bottlenecks at our capacity such as the limited supplier of sugar and the limited machine hours and labour hours supplied. Therefore this graph has shown us our bottlenecks.

Possible choices

Our customer has said that they will want no more than 200 batches of coffee desserts therefore there is a line shows the boundary of our possible choices. We may only choose product mix that are showed on the graph.

The area under line D because otherwise it would be a waste since we will be producing more than 200 batches of coffee desserts and it will not be needed by our suppliers.

Hope this all helps please contact me if you have any further questions.
Dear Walker,

I’ve received your request on the issues of our new customers’ impact on us and the measures to deal with potential risks. Hope these thoughts could be useful.

Impacts

As you said our new customers will be mainly focusing on small scale customers since we have been dealing with. I agree retailers mostly till now, this kind of change will have impacts on our finance function as well as our credit issues and our brand.

Finance function Order process

Since we have been dealing with 41 large retailers who usually order products in a big scale, bringing in new customers means we have to change our method to deal with orders. These small scale customers are more likely to give orders in a small scale and often rate, therefore our finance staffs should change their way of dealing with orders and speed up their reaction.

Staffs

We now have plenty of staffs work under financial function. However if we are to focus on these small scale customers we may have to recruit more staffs since we will have more order to process. Also, we have to spare some staff on maintaining relationships with these customers.

Supply management

We now using a single sourcing strategy which may also need to be changed. Single supplier assures our quality of materials however it may be undependable sometimes.

Recoverability risks

Currently we are suffering from our credit control problem. Having this new customers will likely to reduce our liquidity risks. As mentioned before, these small scale customers often make small scale orders and are more likely to pay by cash or in a shorter period. This will improve our cash flow and reduce our liquidity risks.

However, we might also be careful if we are to offer these new customers credit periods, we now give an average credit period of 30 days to our customers and it often takes them 6 days longer to pay their debts. Small scale customers, unlike our other customers may operate under a less stable condition and therefore may have more possibility to pay over the period they have been given.

Brand

Brand is the name, slogan, principles etc. that we stand for. Our brand now, however, is not very famous among the public since we mostly sell cakes to retailers and allow them to put their own brand on the products. This new way of selling products to new customers under our own label will enable us to make our brand more familiar to the public.

We have always stand for our competitive advantage of high quality. If our label is printed on our products and then sold to customers among these coffee shops and hotels, we will be able to connect ourselves with the stand of high quality. And this will also help us to introduce our new product and entering new markets in the future.

Measures to mitigate

I understand your concern of recoverability risks. Here are some approaches I have been thinking about Debt collection.

Debt collection is the most common way dealing with receivables. This method however, needs experienced staffs on debt collecting which we do not have in our company. Therefore we could recruit some talented staff on debt collecting.

The key to this approach is to achieve a balance between maintaining relationships with customers and collect debts in time. This needs our staff to look at those debts that are overdue and send follow ups to the customers which could remind them that their credit period is passed and they need to pay our debts.
After a set amount of follow ups are sent staffs may send a final notice letting customers know that their debt has been long overdue and needs to be paid immediately. We might also indicate that legal approach may be issued if they refuse to pay.

**Background check on customers**

As mentioned, small scale customers are often asked to pay their invoices at the time the deal has been made. However, if we want to give them some credit to maintain customer relationship we need to check their background in advance in order to make a proper decision on their credit worthiness.

We may look into their statement of cash flow and their cash flow forecast to see their performance on cash and if they have any commitment in the future period. If it shows they have a healthy cash flow which means they have enough cash to pay us, then we may give them a longer credit period or vice versa.

**Outsourcing our debt collection function**

We may also consider outsourcing our debt collection function to a 3rd party who has more expertise on credit control and receivable management since we currently don’t have much experienced staff on this function and it is not our competitive advantage, we may consider to outsource this function to other companies. This can help us maintaining good customer relationships as well as receiving cash at a shorter period.

**Other approaches**

There are many other approaches such as factoring, credit insurance and invoices discounting we can also give a settlement discount or charge interests for late payment.

Hope this all helps please contact me if you have any questions.
Dear Walker

I have received your request on the issues about our brand value and variance approach,

**Brand value**

I understand the reason Rajiv wants to include our brand value as part of our financial statements however it is not allowed under the international Financing Reporting Standards the specific rule regarding to this issue is IAS38. The intangible assets. Under that rule our brand value can't be reflected in our financial statements.

The IAS38 defines intangible assets as an identifiable non-monetary asset without physical appearance that is controlled by the entity as a result of past events and is expected to bring future economic value to the entity.

To some extent our brand value satisfies several characteristics of the definition of intangible assets. It is indeed controlled by our company since we have the right use such as print labels on our products it also a result of past events of our company and we can expect future economic value from our brand For example if our brand is famous we might be able to charge a premium price for our product.

However, to be reflected in the financial statement the asset need to be identifiable and reliably measured. It is impossible for our brand value to be reliably measured for a proper value. One may argue that there are many brand evaluation companies who can evaluate the value of a brand. However the price they evaluated is objective and hence is not reliable.

For our brand value to be reliable measured there need to be a successful sale. Which means we have to locate a buyer for our brand and settle a price to sell our brand. However, we cannot sell our brand and if we sold it we cannot control it, therefore, our brand value cannot be reflected in the financial statement.

**Planning and operational components**

This is an approach there we reflect our variances in the form of components on our planning and operational processes. We are a company producing products with different ingredients and the amount of ingredients can be changed Change' made in the usage of different ingredients may have an impact on the quality of our outputs. Therefore it is useful for us to use a variance to measure the relationship between ingredients and quality of outputs. Also we may use different kind of workforce in our production process. For example to run our company we use skilled workers in the process of baking and mixing while we use semi-workers on delivering and packaging. If we make some changes on these works such as we put more semi workers on the baking process, we may lower our labour rate while reduce our labour efficiency and have more labour hours. The difference in the arrangement of workforces can also influence quality of products.

**SPLITTING VARIANCES INTO PLANNING BENEFITS**

**Understandable**

The variance statement you attached may be easy to understand for people who has financial knowledge, however it may be difficult to understand for our stakeholders. Splitting it into components may make it easier for stakeholders to understand and therefore can have a wider use.

**Information**

The statement of variance is simply a set of figures. Planning and operational components can reflect the meaning of these figures and can indicate the problems might appear during our planning process and operational system. It will provide more information and will be more useful for us to improve our internal process.
Encourage staff participation

If we translate the figures into components of planning and operational, we will be able to hand it out to related staffs. For example, staffs working in the producing line will have a better understanding on their job from a different angle and will improve their work. That is also true for managers of production line. It will help them to realize the connection between ingredients, labours and quality of products.

PROBLEMS

Objective

The figure is accurate. However, different people viewing these figures may have different understanding upon it.

Splitting these variances into planning and operational components may reflect an objective view and may mislead people who are using the table.

Reasons

We can see from the table that there are significant variances in many items. However the reason of these variances are uncertain. It could be either the problem with planning or the probably with the operational process. A component without reason pointed will not be much useful. Besides it will be difficult for us to look for solutions.

Standard

The standard we used to use have lasted for two years. It might be outdated but must still have its own aspect. The standard we are using now have just been updated. Therefore, there are no guarantee that it is reasonable and practical. The variance statement based on these new standards need to be inspected thoroughly before we have any comments about it.

Reputation risk

If we split these variances into planning and operational components, there must be some problems with our process that need to be pointed out. However if we cannot guarantee the accurate of these problems, it might affect our reputation and have negative impacts on our stakeholders. They may be concerned over problems that doesn’t even exist.

Recommendation

Therefore, I suggest we inspect the standards we set up through. Also we need to locate the variance and the reasons why these variances have accrued before we split into planning and operational components.

VARIANCES

Overall

We can see that our original budget contribution is B$1350 while our revised budget contribution is B$1390. This means we have a favourable variance in terms of contribution.

There are significant changes in many items so we may also consider if there is any problem within our standards. Since we have just update the standards, they may not suitable for our current situation and result in such dramatic variances among all these items.

Ingredients price

There is a B$40 adverse variance in ingredients price. This means we pay B$40 more for every unit of ingredients we bought. This could be resulted from one is angle sourcing strategy we are currently using a single sourcing approach. That give our supplier more power than us and we may lose our power to negotiate the price with them.

There may also be a reason that we may order less ingredients. Therefore the price for each unit of ingredient may have been raised since we have lost the economy of scale.

Ingredients usage

There is 20 units’ variances in terms of ingredients usage. This means we are using 2J units less ingredients when producing per unit of output. This could be resulted from the price variance mentioned above since the ingredients are more expensive we may have to reduce the amount of ingredients we use for production.
There could be another reason for this. We may succeed to improve our producing process and more it more efficient or we may have choose to use more skilled workers to produce and hence there are less defects the is reason can also result in the reduce of ingredients usage.

Labour rate

There is a 10 adverse variance in labour rate which means we pay more to each workers on average than planned this could be resulted from the change of workforce. As mentioned before, we managed to reduce our ingredients usage therefore we may have chosen to use more skilled workers instead of semi-workers. These skilled workers are more expensive to use.

Labour efficiency

There is 20 favourable variance in labour efficiency which means we use less labour hours for per units’ produced. Connected with what have been mentioned above, we may be certain to say that we have changed our work force into more experienced workers. They are more expensive, however more efficient.

Labour idle time

There is a significant favourable variance in labour idle time at 50 per unit This mean; 50 hours less of ideal time are used when producing per unit of output. This may also have connection with our change in the workforce. As mentioned before, skilled workers are tuned to have more experience and therefore more efficient.

Hope this all could be helpful Please contact me if you have any more questions.
**TASK 4**

**Requirements**

Prepare a brief document that to go to senior management which covers each of the following.

- A brief explanation of each of the different classification of quality of cost. Please include an example relevant to our business for each of these classifications.
- How the use of a cost of quality report could benefit our business.
- The major contributions in the implementation of quality circles, in order to achieve operational improvements in our business.
- The implications for First Class Bakery of a total quality management focus on human resource management.

Please prepare the first draft for me.

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Dear Walker

Here is the report about the issues you have asked for. Hope it has covered everything you needed.

**Quality costs**

There are two kinds of quality causes one is incurred as a result of procedure to produce quality products which is called contention costs. The other type is incurred as a result of not producing quality products which is referred as non-contention costs. Contention costs can be divided into prevention costs and appraisal costs. Non contention costs includes internal costs and external costs.

**Prevent on costs**

This are the costs incurred to prevent quality problems before operation. It is related with the design of product and producing process, staff training and selection of the ingredients, etc. For example, the costs we spend to design our producing process and the expense spent on training our staffs in producing functions are prevent cost.

**Appraisal costs**

These are the costs incurred to inspect if the operation process is operating in a proper way. These are the costs related to monitoring and meaning our internal process to produce quality products. For example the costs for inspection on the ingredients we purchased and the costs for supervising the producing line are appraisal costs.

**Internal Costs**

These are the costs spent on inspecting and dealing with defects in the products before they are delivered to the customers. In other words these costs deal with the problems of products we found inside our organization. These include the cost of wasted ingredients and the dispose of products which failed to pass the quality inspection.

**External costs**

These are the costs spent on dealing with the problems of products’ qualities that are found by customers. Sometimes we fail to inspect the products’ defects and may result in bad products being delivered to the customers. This includes the cost for receiving the bad products and making up to customers. Costs related to customer service may also be included in this aspect.

**BENEFIT**

**Improve our performance**

A quality report can identify the problems and advantages we may have during our operation process. Starting a quality cost report therefore enables us to have a clearer view of our operating process and we may enhance our advantages while correct problems. Through which we may be able to achieve a better performance.

**Form competitive advantage**

Our company currently is achieving high quality products as our competitive advantage. A quality report may prevent us from producing problem products from the design stage to final inspection. Therefore it may help us to improve our products' quality and enhance our competitive advantage.
Encourage proper investments

A quality report is able to identify which activities in our process are profitable as well as which are unprofitable forming a quality report can identify value-added activities and we may invest our working capitals into these areas.

For those non value added activities we can reduce them or even eliminate them.

This could help us to make more proper investments on more appropriate areas.

Employee participation in quality management

A quality report covers activities from designing a product to producing it to the final inspection. This is a wide range which includes all employees. By understanding this reports employee’s working in different functions can have a better understanding at where their work needs to be improved in order to improve the quality of our products. Therefore it could encourage staffs be a part of our quality management.

CSR

As a company who always stands for our cooperation social responsibilities. It is our duty to care for our stakeholders which include our customers. Producing products with high quality is our way of caring our customers. Stating a quality cost report enables us to identify potential problems in our producing line and enables us to correct them in order to produce more reliable products.

Considerations in quality circles

Quality circles is an approach under the total quality management. This approach make connections among different functions and departments in our organization and make quality management a responsibility of the entire organization. Under this approach different roles are being assigned to different departments and each possible problem of quality would have a charger.

Responsibilities

To imply quality circle we have to identify responsibilities of different functions and different departments at first. As we all know different functions are responsible for different parts of our organization. Under the demand of total quality management, each department has to be clear about the role they are playing in terms of quality control. They have to understand that if there is problem happening under there charge, they will be asked to give an explanation.

Links

To imply a quality circle we have to think about building proper links through the entire organization. Quality circle requires our company to work as a whole piece instead of separately. Therefore we have to connect different departments with their responsibility and their role in the producing process of a product.

Costs

Costs that may occur with the implementation of quality circles should also be taken into consideration we have to build the system under an acceptable cost or it may bring less benefit than costs.

Understanding and participation

To achieve a fully use of quality circle staffs have to understand this approach. Trial means they have to understand their job and the connection between themselves and the quality of ourselves. They have to understand that it is robust production worker’s responsibility to produce quality products.

For example staffs responsible for purchasing raw material should understand their role and inspect the quality of ingredients thoroughly. That is the same for staffs at marketing departments. They have to make sure customers’ need be fulfilled at the first time if a customer finds the product he or she purchased may have a quality problem.

Implications on human resource management Job descriptions.

HR might have to write the job descriptions for different positions. Job description is an instruction on the duty of different positions and their expected contribution to our company. Since we are now running a total quality management with the approach of quality circle, many positions’ duty may need to be connected to quality issues. Therefore HR may need to enhance the conduction to quality in their job descriptions.
Changing for the situation

Currently our HR function is rather weak since our HR manager reports to financial director instead of workings separately implementation of quality circles need different functions to have their unique responsibility. Not to mention that human resource management is an important in this circle. Therefore we should separate the HR function and enhance it by recruiting more staffs.

Team working

Working as teams has always been a positive way to enhance the connection between staffs inside a cooperation. Implementation of quality circles may push our HR function encouraging staffs to start team working Responsibilities may be assigned to different teams inside different departments or functions. This could enhance the relationship between staffs as well as more being more efficient for HR to manage.

Easier evaluating staffs.

Under the quality circle responsibilities are being assigned to different departments’ clearly. If anything goes wrong in the production process the staff responsible for this may be easily located. On the other hand, those function has always acted well will be noticed. Therefore it will be easier for HR to evaluate the staffs for their performance.

Hope this all helps please contact me if you have any further questions.