

MANAGEMENT CASE STUDY MAY 2015 EXAM ANSWERS

Variant 1

The May 2015 Exam can be viewed at

<https://connect.cimaglobal.com/resources/management-case-study-exam/may-2015-management-level-case-study-exam---flote-variant-number-1>

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Trigger (a)

Report on anticipated running costs of new ships

As requested, I have pulled together some thoughts.

Broad comparison

The most obvious point of comparison is with the annual running costs of the Post-Panamax Plus ships. There are two reasons for that. Firstly, those ships are the most modern in our fleet and, secondly, they fulfil a similar role to the new class.

Comparing the running costs of the existing classes shows that some costs appear to have a fixed component and a variable element. For example, bunker fuel costs increase as we move from a Panamax to a Post-Panamax ship, but the increase is only 38%, despite a 50% increase in capacity. Other costs are not necessarily related to the size of the ship, with crew costs being an obvious example.

There may be relatively little increase in the cost of running the new ship compared to a Post-Panamax Plus ship because the new ships are more modern and the technology may be more efficient. The designers have had the benefit of observing the operation of the Post-Panamax Plus class of ships and have been able to incorporate that into the latest design.

A direct comparison of the running costs is complicated by the fact that the new ships have some significant technological differences. In particular, the twin screw may mean that the propulsion system requires two engines or a more complicated transmission system. That may change several variables, such as fuel consumption, the consumption of lubricants and the number of crew members in the engineering department. There could be more subtle differences also, such as a need to employ more experienced crew members, at a higher annual salary, to sail and maintain the ships.

The capacity of the ships also affects the manner in which they will be operated in comparison to the existing fleet. For example, the ships may make fewer port calls if there are fewer container ports that can accommodate ships of this size. Presumably, each port

call will be longer because each visit will require more containers to be on loaded, offloaded or reorganised in preparation for the next port call. This will also affect the average port charges per ship.

Maintenance costs could be difficult to predict. The large ships will be unable to fit into many dry docks and so only the very largest facilities will be suitable. They may be more expensive in any case and shipyards will have little reason to compete because new large ships will be launched and there may be more demand than supply.

Market environment

The new ships will increase our capacity by $10 \times 19,000 \text{ TEU} = 190,000 \text{ TEU}$, which is almost a 10% increase. This is at a time when our competitors are shedding capacity and are still being forced to cut costs.

It would appear that we have faced some setbacks in the past year. Our activity levels have declined by roughly 16%, in terms of reported revenue from shipping when comparing 2015 to the previous year. We also appear to have invested in additional capacity, over and above the new ship for which we took delivery just before the year end.

We have made only a very small reduction in capacity through the disposal of ships, but we have significantly increased the amount that we spend on ship storage. That implies that we are unable to use our existing capacity and have been forced to pay to have ships sit idle. The fact that we have been forced to write down the value of our port plant and equipment because of impairment implies that the market for shipping is unlikely to recover in the short term.

It may be that the new ships will offer us some advantages beyond a simple increase in capacity. For example, we have enjoyed a modest growth in revenues from the Asian market. The new ships will be ideally suited to transport large cargoes between Asian ports and from Asia to Europe. Our average ship has a capacity of just under 5,600 TEU, which implies a tendency towards smaller ships. We have already noted that larger ships tend to have relatively small operating costs when their capacity is taken into account and so the new ships may offer us a pricing advantage over competitors for these routes.

The fact that demand has declined across the industry does not mean that we cannot aim to take business from our competition. If we are at an advantage because of pricing or the publicity attracted by the launch of the new ship then we may be able to at least offset some of the lost demand.

We have also been spending quite heavily on our port facilities. The new ships may enable us to offer a better service in terms of links between hub ports. If we are forced to use our own ports then we will obtain some synergy because we will pay less for berthing outside of the group. Expanding demand at our own ports will lead to further economies of scale at the ports and may enable them to compete for other services.

Trigger (b)

Project management issues

The most immediate challenge is completing the ships on time and on budget. The fact that the designs are being modified as the ships are constructed could create a number of problems, particularly in terms of the introduction of untried modifications once work has already started.

Delays could also be a problem if there are only two yards building the ships then any delay at either yard could make it difficult to start work on the next ship and so the delays will become cumulative. The contract will undoubtedly contain penalty clauses for delays, but Flote should also monitor progress to ensure that any delays are factored into planning. Flote should aim to work with the shipyard in order to alleviate any delay. It may be possible to agree that a penalty payment will be set aside because a short delay will not be catastrophic or because the shipyard could use the funds more effectively to accelerate progress on the remaining ships.

Major projects like this often fail because of unnecessary changes. Changes could be motivated by the shipyards trying to sell more work or by Flote's engineers being keen to try something new. Flote should have any proposals to modify or improve the design evaluated by experts in naval architecture or marine engineering to verify that they are likely to add value.

It may be possible to reduce the risks by negotiating a specific adjustment to the contract with the shipyard for each modification. That will give the shipyard an incentive to review the requested change very carefully and to keep the overall cost of making the change within the agreed limits.

The fact that there are two shipyards providing the work means that there could be very little incentive for either yard to share information with the other. Each yard could regard the information obtained from working on its assigned ships to be proprietary. That would lead to Flote losing some of the benefits of the potential improvements to the design. Flote should have its own staff at the shipyards monitoring progress and discussing changes to the design. Those employees can then take the initiative to pass on information to their counterparts at the other yard.

Relationship management

Flote has a complex relationship with the two shipyards and it is important to manage it carefully in order to protect Flote's interests. There are three main aspects to this relationship: the completion of the remaining nine of the first ten ships, the option to build ten further ships and the prospect of further work after that.

Flote can use the fact that there are two shipyards to exert some subtle pressure on both in terms of meeting deadlines and the overall quality of the work being done. Flote may decide to commission further ships and neither yard is guaranteed a share of the resulting work.

Flote should take care to avoid taking excessive advantage of the pressures associated with using competing yards because it could lead to dysfunctional behaviour. For example, the yards could be tempted to cut corners rather than risk a delay in completion or an overrun on cost.

The fact that there are two yards means that Flote has to take care to avoid the creation of an unhealthy rivalry. For example, the first two ships will be built by the Hanjun Yard and so the Keppel Yard has already lost the publicity associated with building the world's largest container ship. Flote may attempt to redress that by playing down the launch of the second

ship and publicising the launch of the third ship as the largest container ship ever built in Europe.

Flote should attempt to give the yards as much notice as possible concerning the likelihood of the options for further ships being exercised. In theory, Flote could prevent the yards from accepting work from other clients by insisting that the capacity be kept available until the options expire. If Flote reaches a definite decision then it should make that clear as soon as possible so that the yards have the longest possible period to schedule any additional ships being commissioned or to release the capacity for other projects. Clearly, Flote should retain the option for as long as it needs to because it has paid for this right and the shipyards have taken that risk in return for the option fee.

Trigger (c)

Estimated useful life

Estimating the useful life of any tangible asset is potentially difficult because of the need to predict the asset's physical life span as well as its commercial viability. The fact that the useful life is the shorter of the two means that both estimates are material when setting the depreciation rate.

Determining the physical life expectancy of the new ships is a relatively straightforward matter because Flote has considerable experience in managing a fleet of ships. The physical life of the hull is essentially a matter of maintenance so that corrosion is kept under control. The engines and electronics are also fairly generic assets that can be maintained and whose maximum physical lifespan can be determined on the basis of our past experience. We can confirm those expectations by seeking expert advice from independent experts.

The bigger challenge is with respect to the commercial lifespan of the new ships. We have still to determine whether there is an ongoing need for ships of this size. The sheer size of the ships means that their operating costs are still to be determined. There could, for example, be problems with managing the cargoes on ships of this size during port stops because docks may not have sufficient cranes to handle the ships efficiently. There is also the fact that the ships will be limited in terms of the ports that they can use and so they may prove less flexible in operations. In particular, the fact that most ports in the USA are too small may limit the value of the ships.

The commercial life expectancy of the new ships will require Flote to gather information from opinion formers in the shipping industry. The fact that other shipping lines are buying these ships may stimulate demand for ports that can service ships of this size, thus guaranteeing the long-term commercial future of this class. We also need to consider the outlook for the global economy. Any long-term decline could leave many ships redundant and that could affect the viability of the ships.

Response to post

The ethical issues could be structured in various ways, but the CIMA Code of Ethics provides us with the fundamental principles of Integrity, Objectivity, Professional Competence and Due Care, Confidentiality and Professional Behaviour.

The basic dilemma that we face in responding to this post is that we cannot really answer the shareholder's post without either appearing ineffective or being dishonest. If we respond with an agreement that the disclosures are vague and claim that we cannot be more definite then we will confirm the shareholder's criticism, which could reduce the share price and harm the shareholders. We cannot make a definite statement about the life expectancy of the ships because that is an estimate and so we cannot offer a guarantee of accuracy.

In resolving this dilemma, we could focus on the most relevant principles from the CIMA ethical guide.

Integrity suggests that we should be straightforward and honest, which suggests that we should not claim to be capable of predicting an asset's life accurately when we are forced to estimate figures.

Objectivity implies that we should not bias the disclosures in the financial statements. We are uncertain about the life expectancy of the ships and so we presently disclose a range of possible useful life figures to communicate that uncertainty.

Professional behaviour implies that we should not discredit the accountancy profession by provoking a potential accounting scandal. If we claim to be able to predict the ships' lives with precision and then have to correct that estimate then we will undermine the credibility of financial reporting.

We should be prepared to state the facts as we understand them in responding to the shareholder. The shareholder has misrepresented the facts by claiming that we have been dishonest. In fact, we have stated the asset lives in a realistic and responsible manner.

Trigger (d)

Negotiating strategy

The first issue that we need to address is communication. The nature of our working environment is that the ships' crews are spread over a considerable distance and cannot be brought together for a meeting. We have to make sure that we keep the crews well informed of management's position throughout the negotiations, otherwise the union representatives may force a strike that could have been avoided.

A successful negotiation will align our interests with those of the crew members. Given the technological changes that have been occurring at sea, we cannot agree to maintain the status quo in terms of the numbers of crew members and the skills required of them. One possible compromise would be to provide all crew members with training that will equip them to pursue worthwhile careers after spending some time at sea. For example, Flote could ensure that distance learning opportunities offered to staff are directly relevant to a wide range of career opportunities, both with Flote and in seeking land-based jobs. The courses could stress transferrable skills, such as junior officers' managerial skills.

Flote may also be able to restructure the bonus scheme so that crews do not suffer an overall loss in terms of bonuses. The fact that there will be fewer sailors overall means that if the payments to individual sailors were enhanced to maintain previous levels the cost to Flote would be acceptable because it would still offer a significant overall saving.

Change management

The first step will be to adequately define the need for change. It sounds as if changes in technology are making it possible to employ less qualified and less experienced crew members. There is nothing that necessarily forces us to do so, although there may be an opportunity to reduce recruitment and salary costs.

If there are potential savings to be made then we should reconsider our job descriptions and person specifications. Even if staff need fewer qualifications, there will still be desirable traits that we can identify in order to ensure the safe and efficient operation of our ships.

The HR department will have to be briefed on the new and reduced requirements. Staff will have to be trained to ensure that shortlists reflect the revised needs, without risking employing candidates who would be unsuitable.

Care will have to be taken in presenting these changes to existing staff. We will have to take care not to alienate long-serving crew members, who may feel that their qualifications are being belittled. They may also be concerned that their jobs are at risk if Flote believes that it would be cost-effective to make them redundant and replace them with less qualified individuals.