

Internal supplies by Kamp Motors¹

Vécu and Kamp

The French company Vécu produces cars and lorries, buses and agricultural machinery. One of Vécu's subsidiaries is Kamp Motors of Roosendonk, the Netherlands. It has more than 2,300 employees and is therefore a relatively small segment of Vécu. However, Kamp's products are important, in that the company is an international leader in the field of engine production. This position is partly due to the fact that Kamp has been closely involved in developing racing car engines for many years.

Several of the components for Kamp's engines are supplied by other businesses. In some cases, they supply standard components, in other cases, components produced according to Kamp's specifications. Together with various essential components produced by Kamp itself, the components supplied by other businesses are used by Kamp in different types of engines.

Table 1 contains some financial information on Kamp relating to 2001.

Kamp produces four main types of car engines. Type 1 is a quite conventional type which is supplied mainly to businesses outside the Vécu concern. The more high-tech types 2, 3, and 4 are supplied only internally.

The reputation of Vécu's car makes has always been based on their powerful and noiseless engines. Not all of the Vécu models are fitted with Kamp engines. A considerable number of engines is purchased externally. Whenever a new car model is being developed for one of the Vécu makes, the company has to decide whether to fit it with a Kamp engine or an engine purchased from an external supplier. Kamp's engines, i.e. the types 2, 3, and 4, are often selected for the more exclusive Vécu models. The fact of the matter is that other manufacturers generally cannot supply attractively priced engines which meet Vécu's specifications.

Kamp has managed to incorporate major new technology into its engines every few years, with the result that they are technically superior to other manufacturers' engines. In fact, Kamp engines are so successful because of their efficient fuel consumption, power and noiselessness.

Table 1. Some financial data on Kamp Motors, 2001; x € million

Sales	361
External costs*)	204
Staff costs	98
Depreciations	20
Number of employees	2,303

*) External costs: costs of raw materials and auxiliary materials, purchased components, contracted work, etc.

Vécu is made up of a number of relatively independent divisions which have been subdivided into business units. Kamp is a business unit and profit centre within the Make A division (MA division). Make A is seen as the showpiece of Vécu; the MA division produces exclusive models only. In addition to this division, the Make B and Make C divisions (MB and MC divisions) are also supplied with quite a lot of engines by Kamp.

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Make A cars are expensive, yet they have held a very strong position in the market for years on end. This is due to their design and their high-quality engines. Like Make A, Vécu's other passenger cars (Make B and Make C) are not intended for customers who are interested mainly in a reliable, safe car that does not cost too much. MB and MC are to project the image of sporty, stylish and fun cars. Although the MB and MC divisions buy a lot of engines externally, the 'glamour' of Kamp engines enhances the image of their cars.

Incentives

At the end of 2000, the board of the Vécu concern decided to give the divisions and business units stronger incentives. Consequently, the incomes of managers at various levels were made more dependent on the profits made by their units. It was expected that this would encourage the divisions and business units to strive more strongly for efficiency and higher sales proceeds. Ultimately, Vécu needed to increase its returns, as the board stated during the big annual meeting of managers of divisions and business units at Lyon.

At the beginning of 2002, the board of Kamp noticed that the management of some segments of Vécu were entitled to considerable bonuses over 2001. The board was very sorry to conclude that the management of Kamp were not in the same position. The board would not take this lying down and started to look for possibilities of increasing the profit of their own business unit. Sadly, they found that there were only limited possibilities. Kamp is obliged to supply certain engines, namely the types 2, 3, and 4, internally at costs per unit plus a small mark-up for profit, as was ordained by the boards of the MA division and Vécu several years ago. Type 1 yields a nice profit, but Kamp cannot increase the numbers of engines sold externally and their prices forever.

Even a reduction in the costs of types 2, 3, and 4 will not result in an increase in Kamp's profit if the decrease is taken into account when the unit costs for those types are calculated. Vécu has strict rules for determining unit costs. Kamp, too, has to determine the basic cost per unit (bcpu) of each type of engine first, as follows:

$$\text{bcpu} = \text{external cost per unit} + (\text{staff and depreciation costs}) : \text{standard capacity.}$$

To arrive at the cost per unit, the basic cost per unit is increased by a mark-up for some other direct and indirect costs. In the formula for basic cost per unit, external cost is the cost of purchased materials and components. This cost is in principle proportionally variable. External cost is based on the cost per unit for average-sized buying orders. Buying large or small amounts can be to Kamp's advantage or disadvantage. Its standard capacity has been set at 90% of its maximum production capacity.

Obviously, the rule for determining cost per unit is clear. However, even the strictest rule has to be interpreted. And the board of Kamp thinks it is safe to assume that, in actual practice, the boards of the MA division and Vécu hardly concern themselves with the level of unit costs. Kamp is wondering whether the top management of the division and concern are really well-informed about Kamp's production process and costs, and whether the senior executives are really interested in Kamp as long as it is run reasonably well. The board of Kamp is therefore considering reducing costs by reorganizing its organization and not reducing the units costs of the types 2, 3, and 4 to the same extent. With a view on this, a reorganization of Kamp's cost information system is also considered. That might result in more profit for Kamp.

In addition, the board is thinking about changing the department of Research and Product Development. It is a large department because Kamp wants to remain a leader in the field of technology. At present most of the departmental staff are employed on a permanent

basis. However, the board of Kamp is contemplating much closer collaboration with technical universities in order to save costs and increase profits.

Besides through cost reductions, profits can also rise if sales proceeds increase. That is why the board of Kamp is wondering whether the company might benefit from supplying the types 2, 3, and 4 externally as well. At present Kamp's mostly very specialized machinery is sometimes operating considerably below maximum capacity, e.g. when the development, production or sale of certain car models is stagnating. External sales might result in fewer fluctuations in Kamp's capacity usage and an increase in its production, profit and profitability. Seeing that other car manufacturers regularly approach Kamp, its board is convinced that there is a sizeable market for Kamp outside Vécu. There are not many engines on the market which are comparable to Kamp's, qualitatively speaking. The board of Kamp is certain that external sale prices will be considerably higher than the prices at which Kamp has to supply engines to Vécu.

An important order

However, even the board of Kamp cannot afford to spend its time daydreaming about Kamp's almost certainly wonderful and profitable future. Although Kamp holds a strong position within Vécu, no order is a certainty.

That proved to be true in March 2002, when Guy Mercier, a senior manager from the MB division, contacted Robert Drover, who is in charge of Commercial Affairs at Kamp. Mercier and Drover discussed whether Kamp could supply engines for a new exclusive car model (model MB99) which was being developed by the MB division. Further consultations showed that Kamp would be able to supply engines for the MB99 and that the MB division would probably need 5,000 of these engines annually. Kamp would have to alter the type 2 engine slightly, i.e. develop type 2a for the MB99. Type 2a is not really an average engine, but it is not a typical Kamp engine either. In other words, it is not a genuinely sophisticated engine. Mercier indicated that the MB division was also talking with two other potential suppliers, namely the British company Black and the Italian company FER. Mercier expected that these two companies would also be able to supply an engine which met most of his requirements. In addition to the technical qualities of the engine, its price was an important criterion for the MB division's decision. 'Now that Vécu wants to increase its returns across the board, the MB division wants to improve its profit figures too', said Mercier. 'We would like to get our engines from Kamp, but only if they are exceptional, technically speaking, and are reasonably priced. Be fair, until now we have had to pay quite high prices for Kamp engines, I think', Mercier added.

Subsequently Robert Drover gave a brief account of his talks with Mercier to the board.

'Well, Robert', said Tracey de Cock, financial manager of Kamp, 'I do not like the sound of it. We have always treated the MB division decently in our business dealings so that they and we would do reasonably well. Of course we hardly made a profit by supplying engines to them, but our costs were adequately covered. They never complained to us about our unit costs. It seems that Mr Mercier is now trying to pressurize us to raise his profit figures and his bonus. But I'm damned if I'm going to do business that way. An order for 5,000 engines is not to be sneezed at, but Kamp's survival does not really depend on it'.

'Wait a minute, Tracey', said Michel Dingman, general manager of Kamp. 'I agree with you that Mercier's way of doing business with us differs from what we were used to, but maybe we should adapt to the new situation. Anyway, we should not turn down a possible order just like that. It is true that 5,000 engines do not amount to much, but how much does each of those engines bring in? Could we increase the degree of capacity utilization for our

current production machinery somewhat? If that new model is a success, the annual figure may increase in the coming years. And what about our specific costs? They may be rather low, because we will only have to adapt an existing type of engine. And if MB develops a relationship with an external supplier of advanced engines, will we not run the risk of losing even more sales in the future? I think we should continue talking with Mercier and should try to do the best possible deal. If necessary, Robert, I will join you in negotiating with Mercier at crucial moments’.

‘Well, you may be right’, said Tracey, ‘but we should always be wary of unprofitable orders. We, too, want to increase our profit. Actually, we cannot supply engines at lower prices until we have cut costs and that will take time. If we really want to make money, we must ask ourselves if we should not supply more engines externally and if we should not stop supplying engines internally at cost per unit plus a small mark-up for profit. But those questions will be dealt with in the long term’.

After that, Robert Drover contacted Mercier, who then sent further details about the MB division’s requirements with regard to the type 2a engine. Next, a few staff members in Kamp’s department of Research and Product Development checked the technical ramifications of an order. And staff from the Production Planning and Finance departments looked at the consequences for the production machinery and the costs involved.

After some calculations, Kamp concluded that its engine meets Mercier’s technical requirements more than adequately. Furthermore, the first 5,000 engines could probably be produced relatively easily with its available production machinery. However, since the demand for cars and engines is expected to rise steeply in the coming years, capacity may become a problem, especially if Kamp is allowed to supply engines of the types 2, 3, and 4 to external customers.² If Kamp is allowed to sell externally, it will probably supply external customers with engines yielding a profit of at least €750 per unit.

If the full cost per unit for the type 2a engine is calculated in the usual way, it will amount to €4,000. In that case, the full cost per unit includes a part of the development costs of the type 2 engine, namely €200 per engine. In fact, these development costs are also covered by the income from the production of the type 2 engine. The relatively low, additional cost of developing type 2a (by adapting type 2) will be covered if some cheaper components for type 2a are not taken into account when the cost per unit is calculated. The variable costs per engine are set at €2,500.

Kamp does not yet know the exact prices of the engines which Black and FER have offered to Mercier, but it suspects that they range between €3,750 and €4,250. Technically speaking, the Black and FER engines are probably not as good as the Kamp engines, but they probably meet Mercier’s requirements.

Now they know all this, Robert Drover and Michel Dingman are preparing themselves for another meeting with Guy Mercier, during which they want to put forward a proposal for the price at which Kamp is willing to supply the type 2 engine. Drover and Dingman want to get a transfer price which will satisfy Kamp in the near as well as the more distant future.

Suggested assignment

Being a consultant, you have been asked to make a report for the board of the Vécu concern in which you are to answer the following questions.

² Each engine that is produced, i.e. type 2, 2a, 3 or 4, takes up the same amount of Kamp’s production capacity.

1. What transfer price should Kamp insist on, in your opinion, if it were to supply the type 2a engine to the MB division now and in the future? Please give arguments for your proposal. You should at least consider the principle 'minimum transfer price = variable cost per unit + opportunity costs for the supplier' and the guidelines Vécu has for transfer prices. Please draw attention to the interests of Kamp Motors as well as those of Vécu as a whole. Taking into consideration Vécu's transfer price policy, what do you think of Guy Mercier's attitude?
2. Please discuss the possibilities of increasing Kamp's profit by using the formula for basic cost per unit and by reorganizing. Please use a concrete example to indicate how the board of Kamp can manipulate the unit costs for the types 2, 3, and 4 by reorganizing its cost information system. How, do you think, can the boards of the Vécu concern and the MB division determine whether Kamp manipulates data on unit costs?
3. Within the Vécu concern, Kamp is obliged to supply engines at cost per unit plus a mark-up for profit. Please compare Vécu's transfer price system with Vécu's system of responsibility centres and with Eccles's theory on transfer pricing.
4. Taking into consideration the product differentiation strategy adopted by Kamp and Vécu, what do you think of Kamp's idea to collaborate more closely with technical universities and to sell the types 2, 3, and 4 externally as well? (See for example Colbert and Spicer, 1995.)