Nanyang Business School

NTU 南洋 NBS

Case Report: Berlin Toyota

B6012 Managerial Accounting (Group 1)

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1 CURRENT SYSTEM EVALUATION

1.1 Current Profit Centre Concept Application

The rationale behind the application of the profit centre concept is that each department should be viewed as a separate entity and should maximize its own profit.

The key advantage of the profit centre concept is that it brings the manager's incentives into congruence with those of top-management: to improve the firm's profitability. Hence, it will help to achieve the strategic goal of the company. Moreover, the profit centre concept also encourages the internal competition among all profit centres using the comparison of the departmental profitability measures.

Based on the above advantages, the profit centre concept is suitable for dealership if each department operates independently and the goal is to maximize the departmental profit which is directly attributable to the firm's profit. However, for those interrelated businesses which cross over several departments such as trade-in car deal, the profit centre concept will cause the clashes of interests among different departments and, furthermore, the conflicts between the department own interest and the overall firm's interests.

1.2 Current Performance Measures and Compensation Plans

Currently, the gross profit is used as the only indicator to measure each department performance. And consistently, the total compensation of managers is determined as a percentage of their department's gross profit. The salesperson compensation is also based on the profit made on the sale and the past performance. Compared with turnover, the profit indicator is more balanced measurement, taking the cost factor into consideration.

The current performance measures and compensation plans can benefit the company in several ways:

- They can help to account for each department performance and determine individually the rewards earned by each manager for his efforts and effectiveness of the decision making.
- They can motivate managers to exert a high level of effort to achieve the goal. Ultimately, these profit measures and compensation plans will meet the top management objective to improve profitability.
- They can also encourage the managers to be more innovative to develop new ways to make profit from their product and services.

However, there are several shortcomings for the current performance measures and compensation plans used.

- Since the profit is the only performance indicator, it is highly possible that the managers focus on the short-term profitability instead of the long-term well-being of the firm. To overcome this problem, other financial indicators and non-financial indicators can also be incorporated in the performance measurement. For example, customer satisfaction, the customer retention and acquisition rates, quality level, process efficiency are some of the important indicators that can help to better gauge the performance.
- Due to separate accountability of each department profit, the departments will seek for their own interests. In the cases of interrelated deals, the conflicts among the different departments will eventually harm the firm’s overall well-being. How to avoid interdepartmental conflicts and align department interest with the firm’s overall interest will be critical for our recommendation.

1.3 Interdepartmental Conflicts

Given the above profit centre structure and the performance measures and compensation plans in place, it is not surprising that interdepartmental strives will occur. In particular, conflicts exist between the New Car Department and the Used Car Department; and between the Service Department and the Used Car Department.

1.3.1 Interdepartmental conflicts between the new car and the Used Car Department

The conflicts between the new car and the Used Car Department centre on the appraisal of Actual Cash Value (ACV) of the trade-in car.

The new car and the Used Car Departments are very much inter-related in terms of trade-in car business. In these cases, the New Car Department sells the new car and takes in the customer's old car, and then passes this old car to the Used Car Department. According to Anthony Kennedy, manager of New Car Department, he has to work with Sandy Hill, manager of Used Car Department, on an appropriate strategy. He also has to ultimately accept Sandy's appraisal of the ACV as well as persuading Sandy to take over the used car after the trade.

These inter-relations mean that cooperation and teamwork between the new car and the Used Car Departments are very important to the overall profitability of the dealership. Taking the long-term well-being of the company as their priority consideration, both Anthony and Sandy should try to avoid internal strife and work together as a team. However, due to the current performance measures and compensation plans in place, the desired cooperation and teamwork are hard to achieve. Since the two departments are treated as separate profit centres, they have distinct goals and responsibilities, and most importantly, they are compensated based on each department's own gross profit. Hence there is this strong incentive for both Anthony and Sandy to maximize their own department's profit, placing its self interest well ahead of the overall well-being of the dealership.

Since profit is the result of two elements, revenue minus cost, we can tell that these two departments will both strive to maximize its revenue and in the meantime, minimize its cost. To see the conflicts between them more clearly, we know that ACV of the trade-in car is a revenue element to the New Car Department but a cost element to the Used Car Department. So naturally, Sandy, in an effort to minimize her department's cost, wants a **low trade-in ACV** but Anthony, who desires to maximize his department's revenue, would negotiates a **higher ACV**. If they fail to reach an agreement in their negotiation, conflicts will arise.

Conflicts may also arise because the New Car Department feels that the way their profit is determined is unfair. The profit from the sales of a new car is determined by three factors: cash received from the customer for the new car, ACV of the trade-in car, and cost of the new car. Clearly, the New Car Department has no control over the cost of new car, as Danny Bogard voiced out during the 'debate'. They also have no say on the evaluation of ACV since it is determined by Sandy of the Used Car Department. What they can do at most is to negotiate a higher trade-in ACV with Sandy, but ultimately, they have to accept Sandy's appraisal. In terms of the cash portion, it is the list price of new car minus away the trade-in allowance. Since the list price is pretty fixed, the only flexibility the salespersons have in order to achieve a higher profit is to use their selling skills and 'personal charms' to negotiate a lower trade-in allowance with the customer. But again, customer can simply refuse because the market is very competitive.

In view of the above, salespersons in the New Car Department may feel that their efforts are not duly rewarded because no matter how hard they sell the new car, their department's profit margin is still pretty low.

1.3.2 <u>Interdepartmental conflicts between the service and the Used Car Department</u>

The conflicts between the service and the Used Car Departments arise because of two things: the priority given to internal work and the lower charges for internal work. The conflicts are manifested when service people voice their concerns.

From a departmental level, these concerns are valid, because the current practice put the Service Department into a dilemma. On one hand, the service people have to be responsible for their profitability and are motivated to maximize the Service Department's own profit to which their personal benefits are closely linked. This means that they have every reason to favour the external work which pays much more. On the other hand, they are required to give priority to internal work with much lower charges. What aggravates the problem is that the Service Department has been operating at almost full capacity. Taking on internal job not only means that they have to forgo higher outside revenue with a short-term profit impact, more importantly, it threatens the Service Department's long-term profitability as well because once the retail customers are turned down, they may go to a competitor and never come back again.

However, the Service Department should also take into consideration the overall profitability of the dealership, instead of being overly concerned with their own profit figure. Especially considering that the overall profit earned from a trade-in business (i.e. the combined profits from the New Car Department, the Used Car Department, and the Service Department on the same deal) can be much higher than the forgone profit from a single retail service work, the service people's concerns are no longer valid, because taking on the internal job in this case enables the dealership to earn much higher profits as a whole.

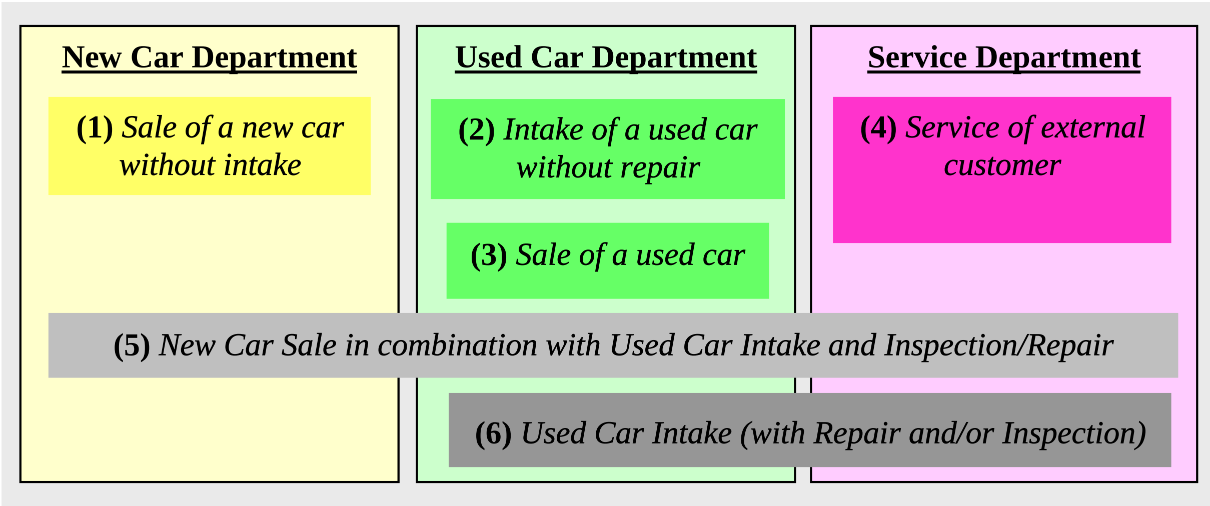
If the Service Department doesn't want to accept internal job during busy period, a natural outcome is that the Used Car Department has to outsource the service job. In this case, issues like customer requirements, cost, quality and lead time of outsourced service job should also be considered.

2 Solution Proposal

2.1 Different Business Transactions

The three departments (*New Car Department*, *Used Cars Department* and the *Service Department*) are involved in individual and in cross-departmental businesses which are listed in Figure 1. Our view is that business transactions that only involve one department (1-4) should remain in the sole responsibility and accountability of the respective department. Since no neighbouring departments are affected, no problems will arise, and the purchase and sales prices are either fixed or lie completely in the sphere of influence of the respective department. Problems only arise when cross-departmental business transactions occur (5-6). In that case, questions about the transfer price of goods and services arise.

Figure 1: Business Transactions at Berlin Toyota



Although it may be feasible to establish a transfer pricing scheme according to the rules given in Blocher et *al* (2002), this approach would be incongruous with the required team building that is stated as a major goal in the case study. Therefore, we propose the following solutions to the two cross-departmental business transactions:

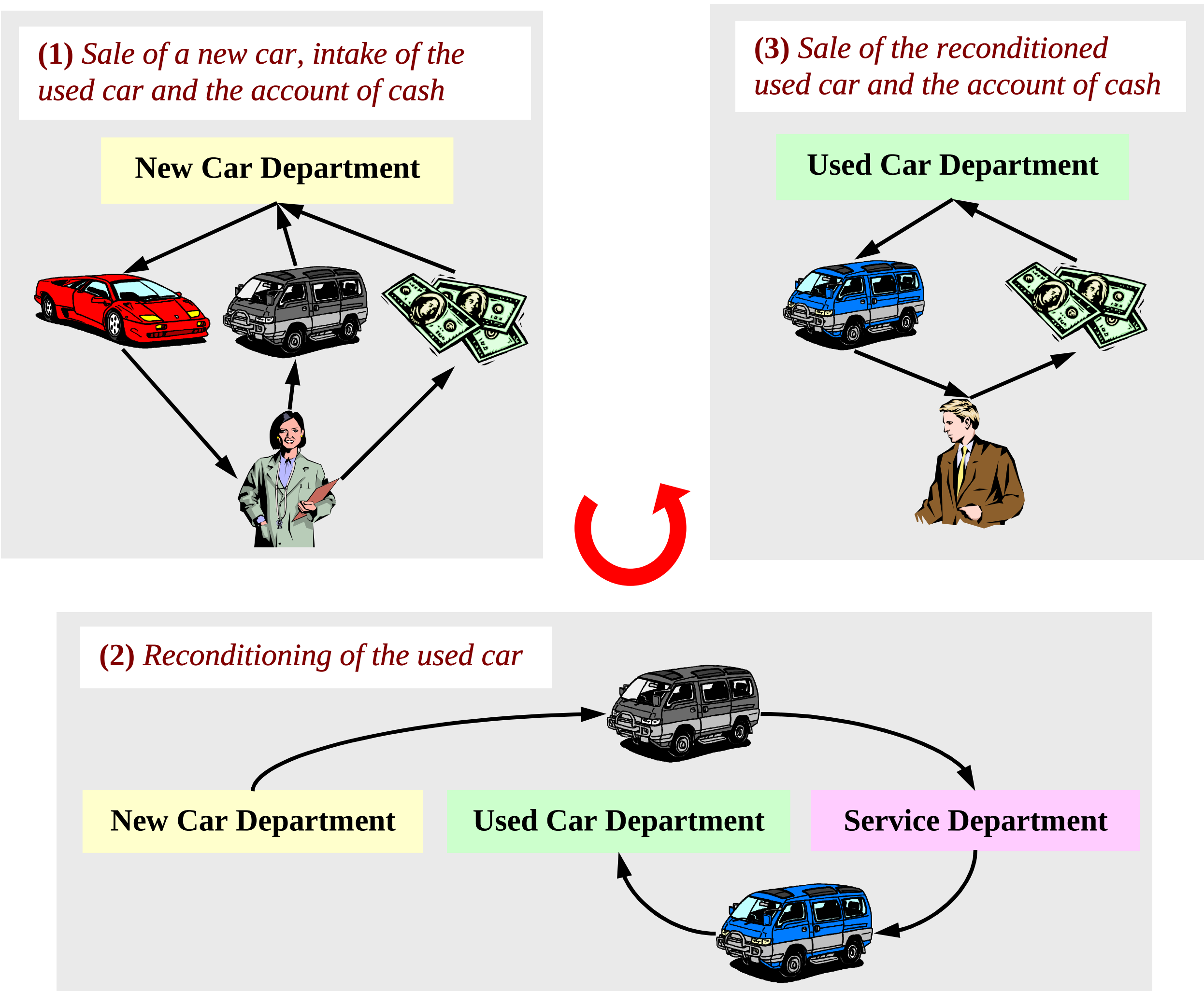
2.2 Independent Transactions (1-4)

The incentives for individual businesses (transactions 1-4) provide an efficient stimulus for the respective managers to engage in activities that increase profits. The definition of gross profit as key performance indicator for individual businesses is the right approach therefore. Additionally, the Used Car Department also can engage in individual businesses by enlarging its scope of businesses. It can, for example, look into the business of an exchange of used car with other Toyota dealers. Sometimes, several dealers who otherwise would be competitors, engage in a common used car pool which can decrease the amount of inventory that every single dealer otherwise has to provide or help each other out if there happens to be a shortage. As long as the added activities of one department do not cannibalize the business of another department at Berlin Toyota, they should be encouraged if they make economic sense.

2.3 Sale of new Car & Intake of old Car (5)

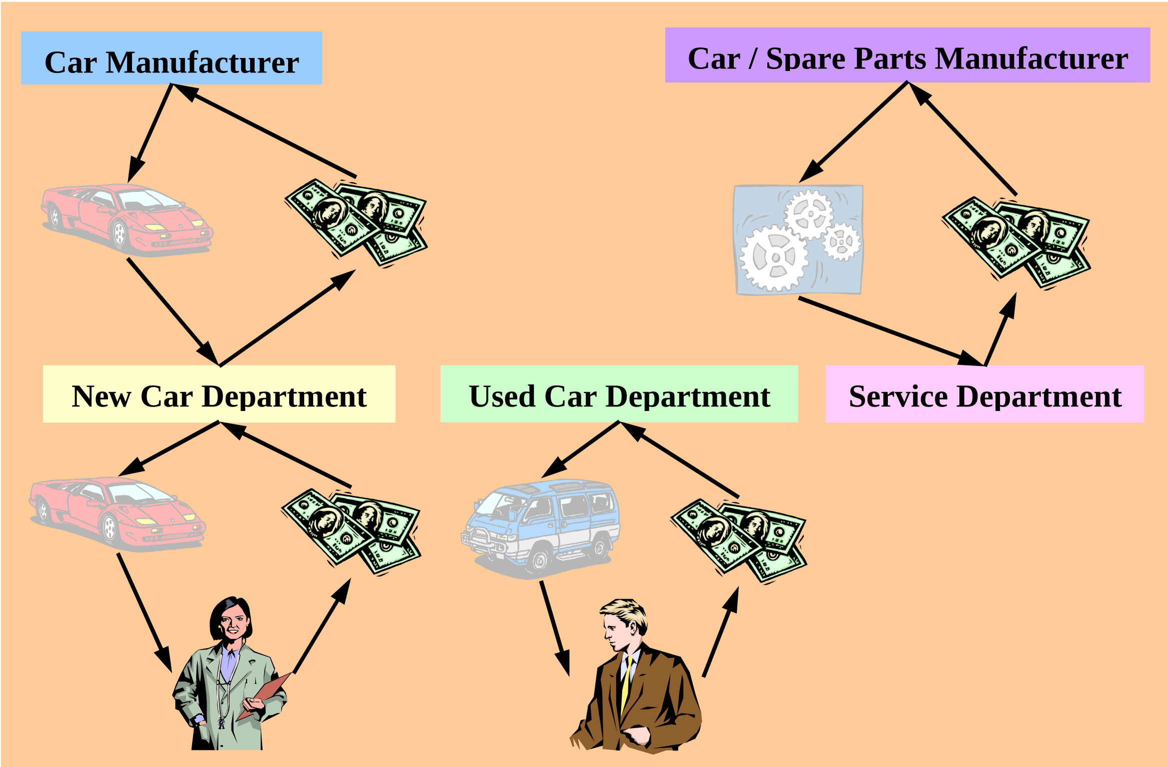
When a customer approaches Berlin Toyota and wants to buy a new car under the condition that Berlin Toyota accepts the used car, *the profits from all the resulting transactions shall be shared.* In this approach, we omit the inter-departmental business transactions and the respective fixing of a transfer price for goods and services. This makes sense because it is practically impossible to account exactly the involvement (e.g. amount of labour) of each of the three departments in the combined transaction. The three transactions are shown in Figure 2. If we examine the total adjusted and simplified flow of capital and goods without accounting for labour, we can see that there are essentially two inflows of money and two outflows of money for goods and spare parts.

Figure 2: Transaction (5)



The inflows of money result from the sale of the new car and from the sale of the used car, and the outflows result from the purchase of the new car from the manufacturer and the necessary spare parts for the reconditioning of the old car. The resulting cash flow is shown in Figure 3.

Figure 3: Cash Flow Diagram for Transaction (5)



We can calculate the gross profit therefore to:

$$\text{Gross Profit} = \text{Revenue}_{\textit{New Car}} + \text{Revenue}_{\textit{Used Car}} - \text{Costs}_{\textit{New Car from Factory}} - \text{Costs}_{\textit{Spare Parts}}$$

The transaction must satisfy a minimum gross profit margin:

$$\text{Gross Profit Margin} = \frac{\text{Gross Profit}}{\text{Revenue}_{\text{New Car}} + \text{Revenue}_{\text{Used Car}}} > \text{Minimum Margin}$$

Leaving aside the costs for the involved labour of all three departments, we suggest using a different (and *higher*) minimum margin for the transaction that would be required under normal circumstances. Sharing the profit between the three departments still motivates each of the departments to maximize this profit, by either trying to enhance the sales prices for the new or used car or by minimizing the costs of spare parts. In order to be able to estimate the gross profit quickly when a customer approaches the New Car Department with the intention to engage in transaction type (5), it is mandatory to establish a defined *process* which highlights all necessary steps in that transaction. We will call this process subsequently the “Car Sale/Car Intake” process. This process is triggered when the customer approaches the New Car Department and offers his used car.

Description 1: Car Sale/Car Intake Process

Predefined Values:	Minimum Margin must be established.
Process Trigger:	A customer comes and wants to buy a car in exchange for money and his (old) used car.
Process Step #1:	The ***New Car Department*** sends the used car to an ***inspection*** in the ***Service Department***. The result from the inspection is the knowledge of necessary repairs and hence the knowledge of the item $\textbf{\textit{Costs}}_{\textbf{\textit{Spare Parts}}}$.
Process Step #2:	With the help of a database or a spreadsheet, the ***New Car Department*** or the ***Used Car Department*** retrieve the probable sales price of the used and reconditioned car. This leads to the knowledge of the item $\textbf{\textit{Revenue}}_{\textbf{\textit{Used Car}}}$.
Process Step #3:	The ***New Car Department*** retrieves the purchase price of the new car which determines the item $\textbf{\textit{Costs}}_{\textbf{\textit{New Car from Factory}}}$.
Process Step #4:	The ***New Car Department*** tries to sell the new car at a discounted[1] price which is as high as possible. Negotiation skills are involved. This leads to a maximization of $\textbf{\textit{Revenue}}_{\textbf{\textit{New Car}}}$.
Process Step #5:	A short analysis with the help of a database or a spreadsheet indicates the salesperson in the ***New Car Department*** whether they should ***proceed*** with the business transaction or not.
Positive Outcome:	The salesperson agrees to the transaction and sells the new car. The used car is reconditioned and sold by the Used Car Department. All estimated and realized values for the revenue and cost items are recorded in a database.
Negative Outcome:	The sales person refuses the transaction and the resulting loss is limited to the time that the New Car Department spends with the customer and the Used Car Department and the Service Department spend with the inspection of the used car.
Extensions:	A database which records all estimated and realized revenue and cost items enables feedback to all departments referring to the exactness of their initial estimates and can increase the future precision in estimates. It also can be used to do a risk analysis as to the costs of reconditioning that initially were estimated and that finally materialized during the reconditioning of the used car.

[1] “discounted“ because the price is reduced due to the intake of the used car

2.4 *Used Car Intake (with Repair and/or Inspection) (6)*

In transaction (6), we are dealing with a temporary capacity constraint that detains the Service Department from accepting lucrative orders from external clients. Blocher et *al* (2002) suggest that the transfer price between goods and services between departments should be the market price if accepting an internal offer would outplace an external order which is the case during the peak periods. In times of a light work load from external clients, the Service Department should take either take variable cost or market price. The periods of peak load cannot be predicted, however, and so we suggest the following approach:

The Service Department offers two price models, a *Standard Service Job* which is done within six days and which is settled with the Used Car Department at cost, and an *Express Service Job* which is executed within two days and which is settled at market price. The Standard Service Job will usually be invoked for cars for which there is no immediate customer or cars which are anyway expected to remain more than one week on the sales area for used cars.

The Express Service Job will be chosen for cars for which there is a customer at hand immediately or which have to be reconditioned due to other reasons within two days. The Service Department then can execute this job even at peak times without incurring losses due to outplacements of fully paying external customers.

3 Literature

Blocher, E.J. et al., “Cost Management”, McGraw-Hill Irwin, Boston (USA), 2nd edition, 2002.